### Chapter 3 Research Methodology

### 3.1 Development of Hypotheses:

The general scope of this study is to gauge the public's desire to learn more about the investment tools available to them and if that increase in knowledge leads to a stronger willingness to invest. To determine this the following hypotheses were developed:

H1-Knowledge based barriers are strong even for those with investment knowledge

H2-Knowledge based barriers are stronger the younger someone is

H3-Knowledge based barriers are stronger the less general education someone has

(\*In terms of H3 the idea of general education refers to the current education level of a person, irrelevant of their investment education.)

H1 would look to test the relationship between knowledge of the investment markets and a person's willingness to invest. The hypothesis seeks to determine if maintaining the current status quo in the industry that puts little emphasis on investor knowledge and substantial resources into broad based brand marketing and building relationships with investors should continue. Or, if H1 were supported then it would support a possible shift in how investment firms should focus their efforts, or at the very least a possible area that could work in conjunction with current marketing efforts. Support for H1 would mean that investment firms should start to consider placing additional emphasis on educating the general public, therefore empowering them to make their own educated decisions about how their investment

dollars should be placed in the market. Proving H1 would have a very different impact on dictating how investment companies should focus their marketing dollars. If H1 is proven correct it will mean that there is a correlation between an investor's knowledge and their willingness to invest dollars into the market. A proven H1 will place the emphasis on increasing an investor's knowledge of how the market and various investment products work. This increased knowledge would then increase the willingness of the investors to purchase the various investment instruments available to them. A positive correlation between knowledge and willingness to invest would mean that investment firms should focus some attention on the idea of increasing the overall awareness of investment terms, available technology, risks and costs so that the general public becomes more informed and therefore more willing to invest. Investment firms looking to capture these additional dollars would then need to review how to best educate the public instead of simply selling them various financial products.

Lack of support for H1 would mean that investment companies would not benefit from shifting their focus to a more knowledge based, informative campaign aimed at making investors more knowledgeable about the world of investments. This would simply mean that for most investment firms, it would be important to continue as they currently operate by looking to market their company without any specific information on how investments work. Basically, continue to take the power of the investment market (investors and the dollars they look to invest) and keep it in the hands of the fund managers, bank employees and financial advisors. If H1 were incorrect this would also mean that there is less room for growth in the industry or the availability of new

investment dollars. Disagreement with the hypothesis means that the current marketing strategy is efficient in getting the public to purchase the various investment products and that very little new money is available for companies to try and attract. Instead, investment companies should continue to battle for the current investors and their investment dollars.

### 3.2 Age:

Age has been identified as a variable because if one chooses to invest or not to, and how they choose to invest their money is influenced by age. Younger investors may be more willing to forgo investing, while older investors may tend to pursue more investments because they are closer to their retirement years, which is the primary reason most people choose to invest in the United States. This investment cycle is one accepted by most investment professionals as the majority of investment marketing is aimed at those people nearing their retirement age as they are most likely to have accumulated assets which can immediately be invested and they are likely to be the most willing to listen to investment ideas. This is important when looking at what impact the age variable may have on investor knowledge. What type of knowledge each person obtains may be reflective of their current age and subsequently their current investment tendencies.

Support for H2 would allow investment firms to focus their educational marketing efforts should there appear to be a connection between investment knowledge and the willingness to invest. Providing some age guidelines would allow marketers to see where best to dedicate their advertising dollars as different marketing communications have different avenues for marketing

based on age. This can be seen in the readership of periodicals, viewership of television and other types of advertisements often used by investment firms. What will be different about H2 and other studies that have looked at the relationship between age and willingness to invest is that current knowledge and desire to gain knowledge will also be reviewed. Traditionally, investment firms have looked to a population that is nearing retirement as a focus for their advertisements. This was generally considered to be the primary target market because those nearing retirement are more likely to be receptive to the message of an investment firm because they have started to think about their current investments and if they are substantial enough to carry them through retirement. In addition, generally speaking, the older a person is the more likely they have more money to invest. For financial firms it is more cost efficient to gain high net worth individuals since the majority of firms earn their money by charging fees that are based on the amount of money that is invested. So if H2 shows a link between age and willingness to invest that skews towards the older respondents than it would support the current marketing efforts of investment firms. If H2 shows that those younger are more susceptible to increasing their investing activity with an increase of investment knowledge than that could influence how investment firms spend their marketing dollars. Skewing the marketing focus to a younger age group would even allow the increase in investment knowledge to take hold at a younger age, and if proven an effective marketing tool, could lead to a longer time horizon that investment firms could potentially expect to gain assets from individual investors. Instead of investors looking to invest late in their working

years, they may now look to invest at a younger age, therefore investing a larger amount of money over their lifetime.

#### 3.3 Education Level

H3 is a focus on the current education level of the respondents and how that can influence their willingness to invest. If H3 were supported then it would be a confirmation that the more highly educated a person, the more likely they are to be responsive to increasing their investment knowledge. Similar to H2 this would help investment firms focus their marketing efforts, especially if H1 was proven correct and the investment firms decided to focus on increasing the knowledge of investors. It is likely that a higher educated person may be able to better understand the basic knowledge increase that an investment firm might undertake should H1 be proven correct. Confirmation of H3 would allow investment firms to focus their efforts on a more highly educated public. This could influence where they market their products and even what the focus should be. The focus could change to be more technical in nature if it is found that a more highly educated person is more likely to respond positively to an increase in investor knowledge. If H3 is found to skew towards a less educated public this would likely be a signal that investment firms should continue their current focus in terms of branding and selling a lifestyle not the actual products as a complex message would likely turn off a less educated public.

Education is an important variable to determine because it can impact the potential investor's ability to learn the investment topics. If the study found that only those with limited education are willing to learn more about investment related topics, then it may be difficult to show that this would be an effective tool in the marketing of financial products. Investment firms would doubt that someone with a limited education would be worth the resources it would take to educate them in order to obtain additional investment dollars from them. Conversely, if the research shows that those with higher education are more likely to become regular investors with increased investment knowledge then it could prove very useful for investment companies to determine if their marketing dollars would be wisely spent on educating this population concerning investment topics. A mixture of all ages that would be more willing to invest with increased investor knowledge would allow investment companies to eliminate any need to discriminate in their marketing efforts based on age.

#### 3.4 Questionnaire Development:

The questionnaire was developed electronically using the website surveymonkey.com. The website allows the researcher to write their own questions and answers and provides several safeguards to make sure that the responses are returned in a usable format. Questions on the survey can be made to allow one or multiple answers, to display a customized message if an incorrect amount of answers were given and to tell the respondents that their survey was not complete. Because of these safeguards in place the number of usable surveys received was 99 out of 100. The only survey that was disallowed was because the respondent was not an American citizen as required by the parameters of the study. So in total there were 99 usable surveys returned.

The website allows the questionnaire to be saved as a direct web link that can easily be cut and pasted into an e-mail, website or other type of electronic medium. This format allows for ease of use by the respondent and is generally believed to at least equal the number of responses in relation to the number of people contacted in addition to making the analysis of the data easier and more reliable. In a population in which each member has Web access, a Web survey application can achieve a comparable response rate to a questionnaire delivered by surface mail if the Web version is preceded by a surface mail notification (Kaplowitz, Hadlock, Levine 2004). The data was easily exported to an Excel spreadsheet and then uploaded directly into SPSS for analysis. Current web survey products and services have greatly facilitated the process of creating and conducting online surveys (Wright 2005).

#### 3.5 Distribution of Questionnaire:

To determine what affect the various factors have on determining one's interest in investing the framework will first look at the three factors hypothesized to influence investment intentions. All of the information was obtained using a 24-question survey that was sent electronically to possible participants on an already established personal e-mail list. The questionnaire was also posted on the social networking site Facebook were people were asked to complete the questionnaire and/or post it to their web page to solicit responses. This type of information gathering would largely be considered a convenience sample as many of the recipients will be personally connected. However, with the inclusion of a social networking site the scope of the respondents is grown. Not only are those "friends" allowed and asked to take

the questionnaire, but they are also asked to post the questionnaire on their home page and ask their "friends" to take it. This increases the number of respondents and decreases the connection to the researcher.

This type of sampling can be referred to as snowball sampling. Snowball sampling is defined by Goodman (1961) as sampling where a random sample of individuals is drawn from a given finite population. Goodman discusses the technique in terms of respondents being asked to identify and recommend additional respondents in terms of "best friend" or "individual whose opinions he often seeks." This is similar to the effect of asking respondents to post the questionnaire on their Facebook page in hopes of soliciting responses from outside the researchers social circle.

# 3.6 Testing:

The determinants were tested against investment barriers to see what type of correlation, if any, existed. Both age and education were determined using one basic straightforward question, while investment knowledge consisted of five questions all asking about the respondent's beliefs in their current investment knowledge. The five questions used to determine knowledge were asked so that the respondent had to make their own determination about their investment knowledge. An alternative method for asking this knowledge question would have been to give the respondents a set standard of knowledge or asked them specific investment related questions so the researcher could have determined the investment knowledge. It was chosen to ask the question in a way that allows the respondent to determine their own knowledge because it is believed to be a more effective way of corresponding

to a person's willingness to invest. Someone's willingness to invest, if investment knowledge is a factor, is going to be largely based on his or her perception of their investment knowledge. It will not be based on a third party (researcher) evaluation of their investment knowledge. For this reasons the questions were asked in a way that allowed the respondents to determine their level of knowledge. Although it is the experience of this researcher after having worked as a financial advisor and in the financial industry for five years that many people do not have a good view of their investment knowledge, their desire to invest is going to be more reflective of their view and not that of an outsider. To better illustrate the point one of the questions used was:

"Financial terms and products generally are:"

- Very easy for me to understand
- Easy for me to understand
- Somewhat easy for me to understand
- Complicated for me to understand
- Impossible for me to understand

Asking the question in this way allows the respondent to gauge their own investment knowledge that is similar to the process they might use when determining if they have enough knowledge to make investment decisions. The question was also based on a five-point Likert Scale that was generally used throughout the questionnaire.

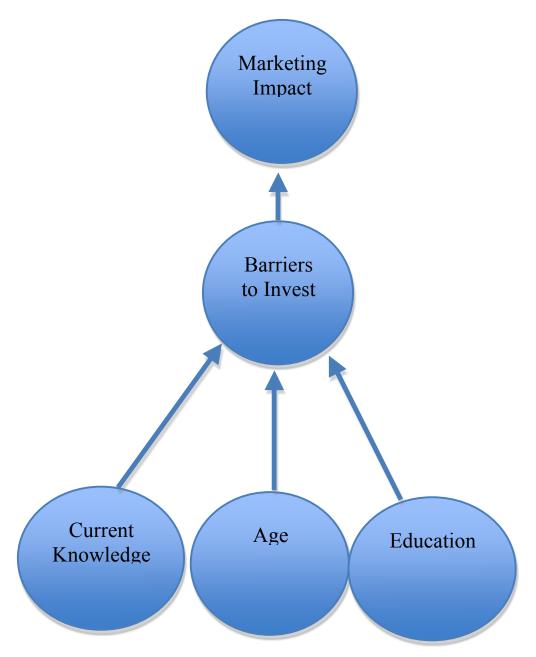
The respondents were then asked ten questions related to their feelings toward barriers to entry. The questions were focused on current investment knowledge and how that knowledge impacts their desire to invest. The questions paired their current knowledge belief to what desire they may

have to invest or what might keep them from investing. The respondents were given statements and then asked how strongly they agreed or disagreed with the statement. Some examples of the questions asked were:

- Even if I had expert knowledge of the financial markets I would still not invest any more money than I currently do
- I will not make future investments because I do not understand my current investments
- If I had greater knowledge about the investment market I would be more likely to increase my current investment amounts

Each of the question areas was first tested using the Cronbach Alpha to determine their validity. This is important to determine if there is any variance to the answers so that they can then be compared to the other variables. To determine the impact that the areas of age, general education and current investment knowledge have on one's interest in investing, they were each compared with the barriers to investing questions using regression analysis to see if any significant correlations could be determined. The framework for the testing is diagramed below. The barriers to investing served as the dependent variable while age, education and current knowledge served as the independent variables.

# 3.1 Figure-Framework



The framework as pictured above shows current knowledge, age and education as dependent variables to test how they react to the independent variable of barriers to invest. The correlation between the variables, or lack of, will act as an indicator of the respondent's desire to invest. Current knowledge, age and education were each individually tested against the 10 questions related to barriers to invest to determine if there is any significance. Both age and education involved comparing one response to each of the

barrier questions, whereas the five questions related to current knowledge were tested individually against each of the barriers to invest questions. A further breakdown of the questions answered and the responses are provided below in the findings section.