The stock market participation rate is the fraction of people who invest in the stock market, as defined by Hong [6] and others. The stock market (or equity market) is a public entity for the trading of company stock. A share of stock is one type of negotiable financial instrument representing financial value, or security. Other types of securities include bonds and derivatives. Stocks and bonds are the two main types of securities for common investors. Generally, stocks are riskier than bonds (but usually come with a higher return to compensate for the added risk). Anyone can choose to invest in the stock market, but not everyone chooses to do so. In 2008, one third of U.S. households owned stock directly (excluding those who only participated through various retirement vehicles) [3]. The literature in this area concerns itself with why or why not people choose to invest in the stock market.

There are some costs associated with stock investments that should be taken into consideration. First, there are monetary costs. In order to participate in the stock market, an investor must have money to initially set aside for the investment. Second, participating in the stock market takes some time and effort, particularly for gaining knowledge. Since there is little that can be done about the monetary costs, the literature in stock market participation is mostly concerned with figuring out why non-participating households which have the available funds do not participate in the stock market, and why participating households choose to participate.

Stock market participation is important for a number of reasons. First, personal investment decisions are important because they include accumulating funds for a home, car, education, and things pertaining to other personal goals and dreams. A household benefits greatly if their finances are managed well, especially when it comes to investment decisions. It can be argued that owning shares of stock can be an essential part of a person's investment portfolio. The more people that participate in the stock market, the more people that are better equipped when it comes to personal investment decisions.
Also, as described by Abel (2000) [1], certain policy debates hinge on the reason why so few households participate in the stock market. Is it because those households do not think the return on stock is worth the risk or because they lack money or knowledge? Depending on the answer to this question, certain policies such as letting the government invest some of its proceeds from social security tax in the stock market could be viable.

Furthermore, Mankiw and Zeldes (1991) [7] and Heaton and Lucas (2000) [5] have found that the stock market participation rate has an effect on the equity premium. The equity premium is the return earned by a risky security (e.g. stock) in excess of that earned by a relatively risk-free security (e.g. bond). Numerous financial models use the equity premium, but the model-predicted values of equity premium are usually lower than the real equity premium. Understanding what causes the stock market participation rate can help us understand the equity premium puzzle as described by [8]: why the equity premium is usually higher than neo-classical financial models predict. For these reasons, people are interested in what influences the stock market participation rate. By understanding these influences, efforts toward raising the participation rate can be better directed.

Based on past literature, the main determinants in stock market participation are wealth, education, and social interaction. Bertaut and Starr (2000) [2], Vissing-Jorgensen (2002) [9], and others have found that the wealthier a household is, the more likely they are to participate in the stock market. This is understood to be because wealthier households are less likely to be deterred by the monetary cost of investing since they have more money to invest.

As found by Mankiw and Zeldes (1991) [7], Bertaut and Starr (2000) [2], and others, participation increases with household education. Particularly, people with college degrees are more likely to invest in stock. Christiansen and Joensen (2008) [4] go further and find that economists are more likely to participate in the stock market. These findings conclude that when people are better educated about the stock market and investment opportunities, their cost of participation is lower and thus they are more likely to participate in the stock market.

The determinants involving social interaction are more recently discovered, predominantly through the work of Hong et al (2004) [6] and Brown et al [3]. Hong et al [6] find that sociable people are more likely to invest in the stock market than are non-sociable people. They measure sociability by whether or not a person attends church or knows their neighbors. They also
find that sociable people are more attracted to the stock market when participation rates among their peers are higher. They propose two reasons for why social interaction has an effect on participation. First, it could be because people gain knowledge through word-of-mouth and observational learning, thus a person who socializes more is presented with more opportunities to learn from their peers. Second, it could be because people get enjoyment out of talking with their peers about common interests and hobbies; a person is more likely to participate in the stock market if they get the added benefit of sharing the interest with peers. Christiansen and Joensen (2008) [4] also made a contribution to this area in finding that an economist is more likely to participate in the stock market when he or she moves into a household with someone who already invests in the stock market.

The findings associated with education and social interaction give insight as to why households with adequate funds do not participate in the stock market. Mainly, people who have better access to knowledge about the stock market (whether through formal education or social interaction) are more likely to participate. Further research is needed in order to better understand what actions should be taken in an effort to help raise the stock market participation rate. Looking more closely at college determinants of stock market participation could help answer this question.

There are a number of reasons why looking at college education will be helpful in better understanding the determinants of stock market participation. For example, the previous work done on education determinants have concluded that people with an economics education are more likely to invest in the stock market, but by looking at more specific determinants we can better understand which pieces of undergraduate education result in stock market participation. That is, it would help answer the question of why exactly an economics education is positively correlated with a person’s likelihood of investing in the stock market.

I plan to survey college students (at least Union College students) by asking them various questions. In addition to asking whether or not they participate in the stock market, the survey will get information about their major, year, wealth, financial courses taken, financial internships, when/why they started participating (if they participate), participation in the Union College Student Investment Fund, etc. From these results I will be able to use econometric techniques to run meaningful regressions.

I also plan on finding out which pertinent financial material can be best integrated into educational software and what effects that software may have
on stock market participation of users. From this, I plan on developing educational software aimed at 1.) giving people an easy and fast way of learning the basics of the stock market and 2.) convincing people of the benefits of participating in the stock market.

Currently, there are several programs that are aimed at educating people about the stock market. One such program is through Protrader, which is a 6- to 12-week course for members. This course is aimed at teaching people the specifics of the stock market. While this program may be very educational, the program is too long and involved to be compared to the software that I want to make. There are also existing programs that are designed to be simulations of the stock market, such as games that use real market data. These programs are good practice for the stock market, but they do not offer brief preliminary knowledge of the stock market that my software will have. Another existing program for stock market education is EduStock, which is a webpage full of text about the stock market. The problem with EduStock is that it is not interactive; it does not engage the user.

The software that I plan on creating will be different from all of the aforementioned existing programs. My software will be informative, short, interactive, unintimidating and encouraging. The software will be aimed at getting users more interested in participating in the stock market by communicating the benefits while explaining the concept of its risk and return. To measure the results, I will survey users. I plan on asking them whether or not they are more interested in participating in the stock market after using the software. I also plan on asking them things such as whether they feel like they need more practice or more knowledge. I will also look at results of economists vs. non-economists. By looking at such survey results, I will be able to gauge how effective the software is.

References


