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Cryptocurrency and the Stock Market, Can We Trust Them?

Natalie Snead

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Murray State University Honors College

HONORS THESIS

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Cryptocurrency and the Stock Market, Can We Trust Them?

Natalie Snead

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requirements of HON 437 or 438

Dr. Wayne Tervo, Advisor
Accounting

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Dr. Warren Edminster,
Honors College

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Cryptocurrency and the Stock Market, Can We Trust Them?

Submitted in partial fulfillment
of the requirements

for the Murray State University Honors Diploma

Natalie C. Snead
April/2023

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Abstract

Cryptocurrency is a relatively new investment method and currency. Daily, the news media reports about its instability and the perceptions surrounding it. To provide a measure of its perceived stability and trustworthiness, I have conducted a survey of undergraduate and graduate students in various accounting courses. The questions asked in this survey are used to gauge the overall perceptions and opinions of students concerning the stock market and cryptocurrency. The survey uses a five-point opinion ranking system, ranging in opinions from 1-5 (strongly disagree, disagree, neutral, agree, and strongly agree). This survey is also used in conjunction with questions about ownership of these investment methods to see if there is statistical significance between the perception of trustworthiness of cryptocurrency and the stock market and ownership of these investment methods.

Introduction

Cryptocurrency and stocks are only two forms of investment methods. Throughout their existence there have been a plethora of issues with these investment methods. One major contrast between the US/global stock markets and cryptocurrency is their respective periods of existence. Cryptocurrency is a new and rapidly changing investment method. Conversely, the stock market in the US has been around for hundreds of years. Many tend to use investment methods with which they are most familiar even though it may not be the correct choice for them. Important questions regarding choosing the best investment method are, 'What is the longevity of this method?' and 'How do others view this method?' as this can greatly impact the market value of the investment. As a section of this research I look at each investment's definition and some current events that might influence perceptions. To further this analysis, a survey was administered to students taking accounting courses to gauge their perceptions of these investment methods and their ownership of stock and cryptocurrency. Using this data, an analysis was performed to see if ownership is statistically significant when answering the opinion related questions.

Cryptocurrency and Blockchain Defined

Cryptocurrency is defined by Investopedia as, “a digital or virtual currency secured by cryptography, which makes it nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on blockchain technology—a distributed ledger enforced by a disparate network of computers (Frankenfield, 2023).” An essential piece of the technology used by cryptocurrency is blockchain. It is defined as follows, “a distributed database or ledger that is shared among the nodes of a computer network (Hayes, 2022).” Blockchain differs from traditional databases in many ways. Blockchain is the construction of a data group called blocks. Blocks have limitations on the amount of storage they have and when they become full a new block is connected to the full block. As a result the data is kept in an unchangeable timeline which creates greater security for items of financial data and lends greater security when used as supporting data. It essentially creates an in alterable ledger which can serve as an internal control and prevent fraud and tampering with the financial data (Kaspersky, 2022). Cryptocurrency is used in a variety of ways. The two most prominent uses are as investments and as a currency. For the purpose of the research covered in this paper, cryptocurrency as mentioned refers to its investment usage. Viewing cryptocurrency as an investment method allows it to be readily compared to the stock market. This research is concerning the trust and perceptions of investment methods, not their individual technologies.

Stock Market Defined

The stock market and some of its major sections of investments are defined as follows, “A stock market index tracks the performance of a group of stocks that represents a particular industry or segment of the stock market, like the technology, energy and transportation sectors (Tretina, 2023).” Some examples of large stock exchanges used to describe large parts of the

market are Standards and Poors (S&P), Dow Jones Industrial Average (DJIA), and NYSE Composite Index. The words stock market and stock exchange have become synonymous, but there are differences between them. “Although the terms are used interchangeably, the stock market is not the same as a stock exchange. Think of a stock exchange as a part of a whole—the stock market comprises many stock exchanges, such as the Nasdaq or New York Stock Exchange (NYSE) in the U.S (Tretina, 2023).”

Additional Discussion of Current Events of Cryptocurrency

Throughout history there has been a common trend throughout the world and this is the gathering of wealth. Money and investment methods have come in different forms from beads to silver and gold to the stock market. There is a newcomer to this, cryptocurrency. It seems every other news story is about cryptocurrency and how it is rapidly growing and at some points failing. Something important to consider when choosing an investment method is what is the longevity of this method compared to other methods. There are many opinions, scandals and successes that play an important role in shaping the future of the investment avenues. The perceptions about cryptocurrency vary among people of socio economic status and knowledge levels. Current events could influence the decisions of the survey participants. A major leader in business, JP Morgans’ CEO, Jamie Dimon, said, “I think all that’s been a waste of time and why you guys waste any breath on it is totally beyond me,” and “Bitcoin itself is a hyped up fraud. It’s a pet rock (Daniel, 2023).” Many can see this as a contrary statement as his company uses its own in house cryptocurrency called JPM Coin and it is used to carry out intraday repurchase agreements. Another large scandal that recently occurred was the fall of FTX (Futures Exchange). FTX was one of the world’s largest cryptocurrency exchanges (Smith, 2023). The exchange, based in the Bahamas, filed for bankruptcy in November 2022 and its former Chief Executive Officer Sam Bankman-Fried resigned. The collapse of this exchange revealed

embezzlement, fraud and various other infractions. The FTX collapse impacted many people and had about 8 billion of liabilities, they cannot pay to as many as 1 million creditors. The collapse of this exchange may impact views of cryptocurrency.

Additional Discussion of Current Events of the Stock Market

Another major difference between the stock market and cryptocurrency is the familiarity of people with the companies/technologies in which they are investing in. Many stocks sold are those of companies we use in our everyday lives such as Amazon, Netflix, Southwest Airlines, etc. Consumers feel more confident in their purchases because they feel they understand some portion of the business and therefore believe they can predict its share prices. Represented in the following is an example of the success of stocks of brands we know and use frequently.

Additionally, the stock market is affected by the supply and demand of goods available in the market. An example is the stock of Boeing. Boeing is currently working on the Boeing 737 MAX. Production news that was announced by their CEO Dave Calhoun surrounding the 737 MAX was released and the stock increased in value by almost two percent (Root, 2023). This is just one example of how production of consumer goods influences the stock market. Though people regard cryptocurrency as being understood, the stock market is considered less volatile, but it still has its ups and downs.

Survey Methodology, Analysis and Results

Methodology

The current events presented above show that there are significant differences in what people know about cryptocurrency, the stock market, and how they perceive them. College students will become tomorrow's professionals. I have chosen to survey business students as a proxy for investors in an attempt to understand perceptions of and the general knowledge level of the aforementioned investment methods. In the following paragraphs, the methodology and

analysis for this research is outlined. Additionally, it contains potential limitations of this survey and its methodology, and some possibilities of future research.

Seventeen questions were asked of the survey participants, with two hundred thirty two usable responses received (Two of those responses were not included in the analysis or results of this survey as the participants elected not to answer questions pertaining to investment ownership). Additionally, four demographic questions were asked at the end of the survey. This survey was reviewed and approved by the Murray State University Institutional Review Board. This survey was broken down into two sections, the first section having to do with ownership:

1. Have you ever held stock?
2. Have you ever held cryptocurrency?

For the second section, I asked the following questions pertaining to opinions of the stock market and cryptocurrency:

3. I feel that I am knowledgeable on the topic of cryptocurrency?
4. I feel that I am knowledgeable on the topic of the stock market?
5. I trust the stock market?
6. I trust cryptocurrency?
7. I feel like cryptocurrency will still exist in 10 years?
8. I feel like cryptocurrency will still exist in 50 years?
9. I feel like the stock market will still exist in 10 years?
10. I feel like the stock market will still exist in 50 years?
11. I feel cryptocurrency is unstable?
12. I feel the stock market is unstable?
13. I believe the prices of the stock market will rise significantly in the next 5 years?

14. I believe prices of the stock market will significantly decrease in the next 5 years?
15. I believe prices of cryptocurrency will rise significantly in the next 5 years?
16. I believe prices of cryptocurrency will significantly decrease in the next 5 years?
17. If given the choice I would invest in cryptocurrency over investing in the stock market.

Questions 1 and 2 were answered by answering yes or no. 3-17 were answered on a one to five Likert scale:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

These increments allow me to have a numerical value by which to gauge the participants' opinions and perceptions. The participants were also given a survey disclosure form which further explained what the possible risks were concerning the survey. There was no other data given to the survey participants. Explanations regarding why these questions were chosen and what role they play in the results of this survey are in the following paragraph, please note that all figures referenced are in the Figures section.

Survey questions, their results and purposes

Question 1- This question is used to gauge if the survey participants have or currently own stock. The purpose of this question is to see if ownership is statistically significant when compared with certain opinions of the following questions. The results show that about 33.48% of the participants have owned stock. This result was found from taking an average of the results,

0 represented the population that haven't owned stock and 1 represented those who have owned stock.

[Insert Figure 1-Ownership of Investment Methods]

Question 2- Similar to question 1, this question is used to gauge if the survey participants have or currently own cryptocurrency. The purpose of this question is to see if ownership is statistically significant when compared with certain opinions of the following questions. The results show that 17.83% of participants have owned cryptocurrency. This result was found from taking an average of the results, 0 represented the population that haven't owned cryptocurrency and 1 represented those who have owned cryptocurrency.

[Insert Figure 1-Ownership of Investment Methods]

Question 3- This question is used for the purpose of gauging the level of knowledge and confidence of the survey participants in their knowledge of cryptocurrency. The levels of knowledge are ranked on the following chart in five points from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants disagree that they are knowledgeable about cryptocurrency. The results of this were 2.17 and this was found by taking an average of the results.

[Insert Figure 2- Knowledge Level of Investment Methods]

[Insert Figure 3- Knowledge Level of Investment Methods (Cryptocurrency)]

Question 4- This question is used for the same purpose of gauging the level of knowledge level of the survey participants as in question 3, but concerns their knowledge of the stock market. The levels of knowledge are ranked on the following chart in five points from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants feel neutral on their knowledge about cryptocurrency. The results of this were 2.96 and this was found by taking an average of the results.

[Insert Figure 2- Knowledge Level of Investment Methods]

[Insert Figure 4- Knowledge Level of Investment Methods (Stock Market)]

Question 5- This question is used to gauge the level of the participants' trust in the stock market. A ranking of trust of the survey participants measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants feel neutral on their level of trust in the stock market. The results of this were 3.29 and this was found by taking an average of the results.

[Insert Figure 5- Perceived Level of Trust in Investment Methods]

[Insert Figure 6- Opinions of Trust in the Stock Market]

Question-6 - This question is used to gauge the level of the survey participant's trust in cryptocurrency. Shown below is a ranking of trust of the survey participants measured in five

increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants feel moderately distrustful in cryptocurrency. The results of this were 2.26 and this was found by taking an average of the results.

[Insert Figure 5- Perceived Level of Trust in Investment Methods]

[Insert Figure 7- Opinions of Trust in Cryptocurrency]

Question 7- This question is to gauge the broad perceived faith and trustworthiness of cryptocurrency over a relatively long period of time. 10 years was chosen as a marker of time as is readily comparable to other measurements of time. A ranking of trust of the survey participants measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that the participants lean towards agreeing that cryptocurrency will exist in 10 years. The results of this were 3.54 and this was found by taking an average of the results.

[Insert Figure 8- Perceived Level of Longevity of Cryptocurrency]

[Insert Figure 9- Perceptions of Longevity of Cryptocurrency (10 years)]

Question 8- This question is to gauge the broad perceived faith and trustworthiness of cryptocurrency over a relatively long period of time. 50 years was chosen as a marker of time as is readily comparable to other measurements of time. A ranking of trust of the survey

participants measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants feel neutral regarding cryptocurrency existing in 50 years. The results of this were 3.05 and this was found by taking an average of the results.

[Insert Figure 8- Perceived Level of Longevity of Cryptocurrency]

[Insert Figure 10- Perceptions of Longevity of Cryptocurrency (50 years)]

Question 9- This question is to gauge the broad perceived faith and trustworthiness of the stock market over a relatively long period of time. 10 years was chosen as a marker of time as is readily comparable to other measurements of time. A ranking of trust of the survey participants measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that the participants feel somewhat strongly in their opinion that the stock market will exist in 10 years. The results of this were 4.49 and this was found by taking an average of the results. The result is higher than the results for cryptocurrency showing that the participants agree more with this statement.

[Insert Figure 11- Perceived Level of Longevity of the Stock Market]

[Insert Figure 12- Perceptions of Longevity of the Stock Market (10 years)]

Question 10- This question is to gauge the broad perceived faith and trustworthiness of

the stock market over a relatively long period of time. 50 years was chosen as a marker of time as is readily comparable to other measurements of time. Additionally, this data serves as a measure of trust in correlation with the survey participants either currently or in the past having ownership of stocks to determine if the ownership is statistically significant when determining the level of trust. A ranking of trust of the survey participants measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that the participants feel that the stock market will exist in 50 years. The results of this were 4.22 and this was found by taking an average of the results.

[Insert Figure 11- Perceived Level of Longevity of the Stock Market]

[Insert Figure 13 Perceptions of Longevity of the Stock Market (50 years)]

Question 11- This question is used to gain an overall perception of stability of cryptocurrency. Shown below is a ranking of stability of the survey participants measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants agree that cryptocurrency is unstable. The results of this were 3.62 and this was found by taking an average of the results.

[Insert Figure 14- Perceived Level of Instability of Investment Methods]

[Insert Figure 15- Opinions of Instability of Investment Method (Cryptocurrency)]

Question 12- This question is used to gain an overall perception of stability of the stock market. Shown below is a ranking of instability of the survey participants measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants feel neutral in their opinion of the instability of the stock market. The results of this were 2.98 and this was found by taking an average of the results.

[Insert Figure 14-Perceived Level of Instability of Investment Methods]

[Insert Figure 16- Opinions of Instability of Investment Method (Stock Market)]

Question 13- A large part of determining longevity of a product or investment method is the price. This question is used to see how the students who are going into a business-related field perceive the prices of the stock market. In this case it is a determination if the participants think the price will significantly rise in the near future (5 years). Five years was chosen as an increment of time as most people and businesses tend to plan at least 5 years into the future. Shown below is a ranking of the survey participants concerning the price of the stock market as a whole. This is measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants feel neutral about the feeling of prices of the stock market rising significantly in 5 years. The results of this were 3.38 and this was found by taking an average of the results.

[Insert Figure 17-Perceptions About Prices in the Stock Market]

[Insert Fig. 18-Perception of Significant Increase of Price in the Stock Market (5 years)]

Question 14- Similar to the previous question, this question is used to see how the students who are going into a business related field perceive the prices of the stock market. In this case it is a determination if the participants think the price will significantly decrease in the near future (5 years). Five years was chosen as an increment of time as most people and businesses tend to plan at least 5 years into the future. Shown below is a ranking of the survey participants concerning the price of the stock market as a whole. This is measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants feel neutral about the feeling of prices of the stock market decreasing significantly in 5 years. The results of this were 2.7 and this was found by taking an average of the results.

[Insert Figure 17-Perceptions About Prices in the Stock Market]

[Insert Fig 19-Perception of Significant Decrease of Price in the Stock Market (5 Years)]

Question 15- Similar to the preceding question this question is used to see how the students who are going into a business related field perceive the prices of cryptocurrency. In this case it is a determination if the participants think the price will significantly rise in the near future (5 years). Five years was chosen as an increment of time as most people and businesses tend to plan at least 5 years into the future. Shown below is a ranking of the survey participants concerning the price of cryptocurrency. This is measured in five increments from strongly

disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results of this were 2.99 and this was found by taking an average of the results. This shows that the participants feel neutral in their opinion of the significant increase in price of cryptocurrency.

[Insert Figure 20-Perceptions About the Price of Cryptocurrency]

[Insert Figure 21-Perception of Significant Increase of Price of Cryptocurrency (5 Years)]

Question 16- A large part of determining longevity of a product or investment method is the price. This question is used to see how the students who are going into a business related field perceive the prices of cryptocurrency. In this case it is a determination if the participants think the price will significantly decrease in the near future (5 years). Five years was chosen as an increment of time as most people and businesses tend to plan at least 5 years into the future. Shown below is a ranking of the survey participants concerning the price of cryptocurrency. This is measured in five increments from strongly disagree to strongly agree. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. This shows that the participants feel neutral in their opinion of the significant decrease in price of cryptocurrency. The results of this were 2.94 and this was found by taking an average of the results.

[Insert Figure 20-Perceptions About the Price of Cryptocurrency]

[Insert Fig. 22-Perception of Significant Decrease of Price of Cryptocurrency (5 Years)]

Question 17- This question is used to serve as background information for multiple opinions. The main one being that if a participant is most likely to invest in one investment over another it gives an implied basis of profitability and longevity for that investment method. For the purpose of this study the following numbers relate to the five states of opinion. 1 relates to strongly disagree, 2 relates to disagree, 3 relates to neutral, 4 relates to agree, and 5 relates to strongly agree. The results show that on average the participants would rather invest in the stock market than cryptocurrency. The results of this were 1.97 and lean towards disagreeing. This was found by taking an average of the results.

[Insert Fig. 23-Perceptions Concerning Investing in Cryptocurrency over Stock Market]

[Insert Figure 24-Opinion on Investing in Cryptocurrency over Stock Market]

Demographic Results

Additionally, participants were asked to give some non-identifying information: age, years of work experience, country of residence, and a question pertaining to the academic major of the participants and if it is housed in the College of Business. The sample consisted entirely of students and was conducted through means of paper responses. Survey Participants were asked to anonymously participate in this voluntary data collection. The student participants were from the following five classes: principles of accounting, principles of accounting 2, intermediate accounting 1, intermediate accounting 2, and advanced accounting. This method was chosen in part because of convenience and the perceived possibility of having a higher response rate when compared to methods such as emailing the survey electronically to students for a response. The classes in which these surveys were conducted were chosen due to the diversity of the population as well as the range of class status classification.

[Insert Figure 25- Demographic Data]

The lower level accounting class provided diversity as it is an elective chosen by many non-business major students and the upper level accounting courses were chosen to represent part of the student population that is mostly business majors that are further in their education as undergraduate and graduate students. The results show that 76.09% of the students who took the survey were business majors. Additionally, 97.38% of the participants were American citizens and the average age was 20 years.

Statistical analysis

The following section will show the results if ownership of the investment methods is statistically significant by the following questions: ‘I trust cryptocurrency?’, ‘I feel cryptocurrency is unstable?’, and ‘I feel the stock market is unstable?’.

[Insert Figure 26- Between Subject Factors 1]

[Insert Figure 27- Descriptive Statistics 1]

[Insert Figure 28- Test of Between Subject Effects 1]

The results are displayed in the figure above. An ANOVA was conducted, with two independent variables, whether the participant ever held stock or not, and whether the participant ever held cryptocurrency or not. The dependent variable was “I trust cryptocurrency.” The ANOVA showed significant result ($F(1, 225) = 4.605, p = .033$ for those students who have ever held cryptocurrency (mean = 2.49), as opposed to those students who never held cryptocurrency (mean = 2.21). This is interpreted as those who have purchased cryptocurrency have more trust in it. There was no statistical significance of stock ownership or ownership of both investment

methods concerning this question: ANOVA test: Dependent variable: I feel cryptocurrency is unstable?

[Insert Figure 29- Between Subject Factors 2]

[Insert Figure 30- Descriptive Statistics 2]

[Insert Figure 31- Test of Between Subject Effects 2]

An ANOVA was conducted, with two independent variables, whether the participant ever held stock or not, and whether the participant ever held cryptocurrency or not. The dependent variable was “I feel cryptocurrency is unstable.” The results are displayed in the figures above. There were no significant effects in the following test using the dependent variable “I feel cryptocurrency is unstable.” This is interpreted as ownership of either or both investment methods is not statistically significant concerning the opinions of cryptocurrency instability. It should also be considered that the comparison is somewhat uneven as only 41 participants hold crypto versus 188 never owning crypto.

[Insert Figure 32- Between Subject Factors 3]

[Insert Figure 33- Descriptive Statistics 3]

[Insert Figure 34- Test of Between Subject Effects 3]

An ANOVA was conducted, with two independent variables, whether the participant ever held stock or not, and whether the participant ever held cryptocurrency or not. The dependent variable was “I feel the stock market is unstable.” The results are displayed in the figures above. There were no significant effects in the following test using the dependent variable “I feel the stock market is unstable” This is interpreted as ownership of either or both investment methods is not statistically significant concerning the opinions of stock market instability.

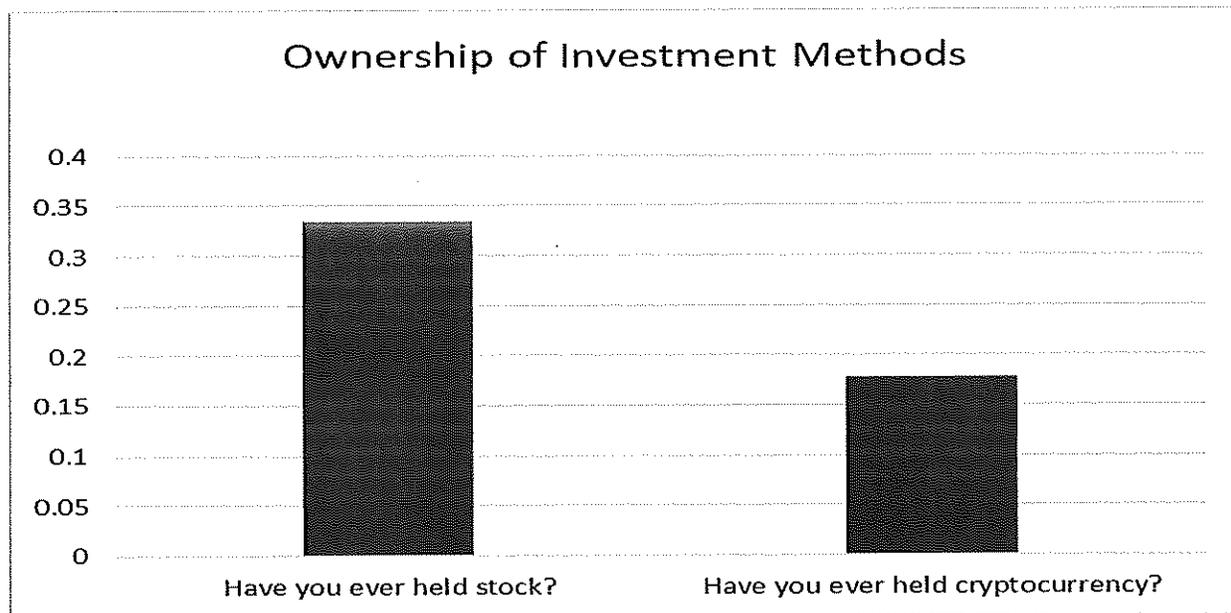
Limitations and future research

This study is limited to being administered in only one country, the United States of

America. It is also limited by the sample participants as the participants were from accounting classes only and the results could have been altered if participants of classes of non-business related topics or other courses of study were interviewed. Despite only interviewing students in accounting classes, it could be assumed that students that have a major course of study in business are more likely to be familiar with and more knowledgeable on these topics. Results were also limited by the method in which the survey was conducted. The medium used was printed forms which excluded a marginal portion of the possible total population due to it not being available to those who did not come to class. The surveying method was chosen to make it available to all students in the classes as none of these classes were taught in a computer lab and not all students had access to the necessary technology at the time. Additionally, the fall of FTX and other cryptocurrency scandals might have impacted the opinions of the survey participants causing abnormalities in the data. In regards to future research the survey could be expanded in terms of more detailed questions and surveying a population of a greater range of ages and experience levels. Also, more investment methods could be considered such as bonds, real estate, etc. to analyze if other investment methods have the same or similar impact concerning statistical significance.

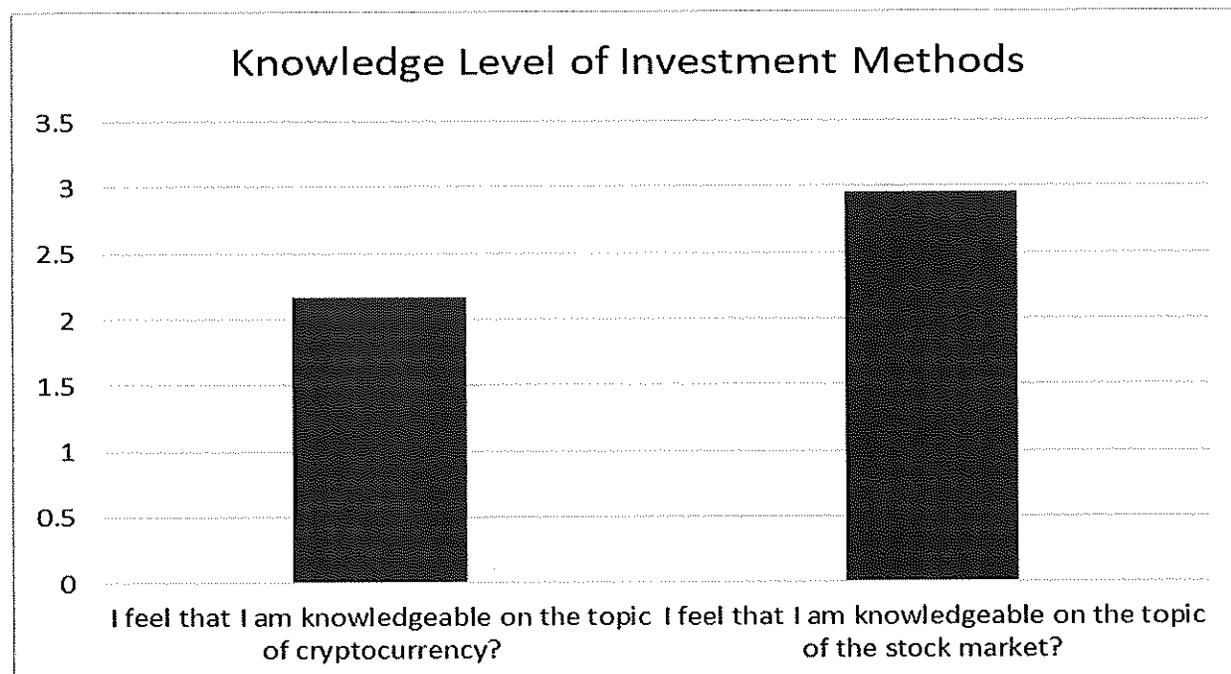
Figures

Figure 1- Ownership of Investment Methods



Note: This figure is described using a percentage.

Figure 2- Knowledge Level of Investment Methods



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 3-Knowledge Level of Investment Methods (Cryptocurrency)

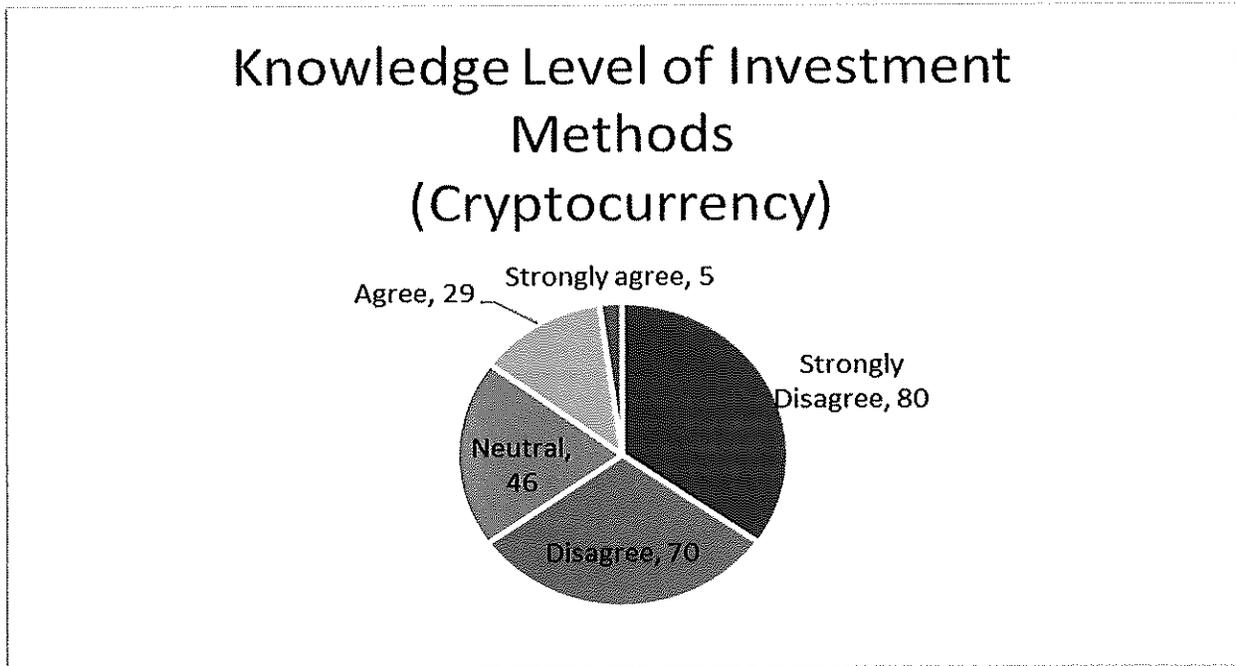


Figure 4- Knowledge Level of Investment Methods (Stock Market)

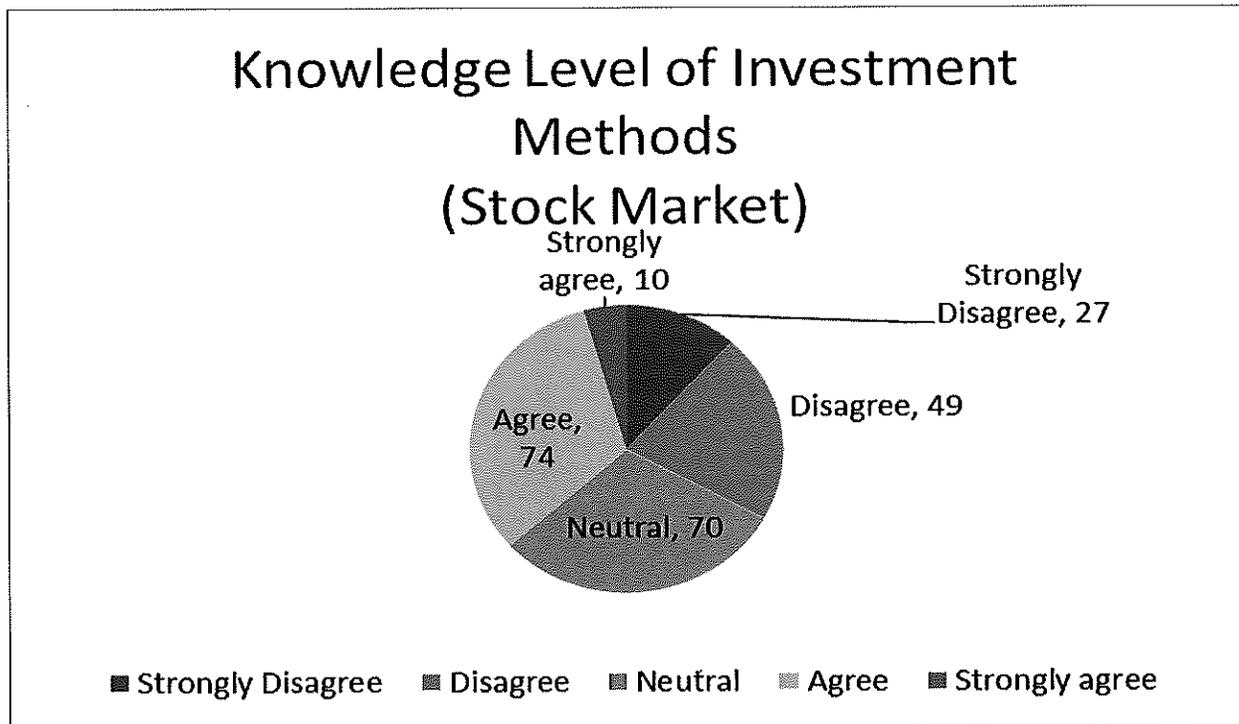
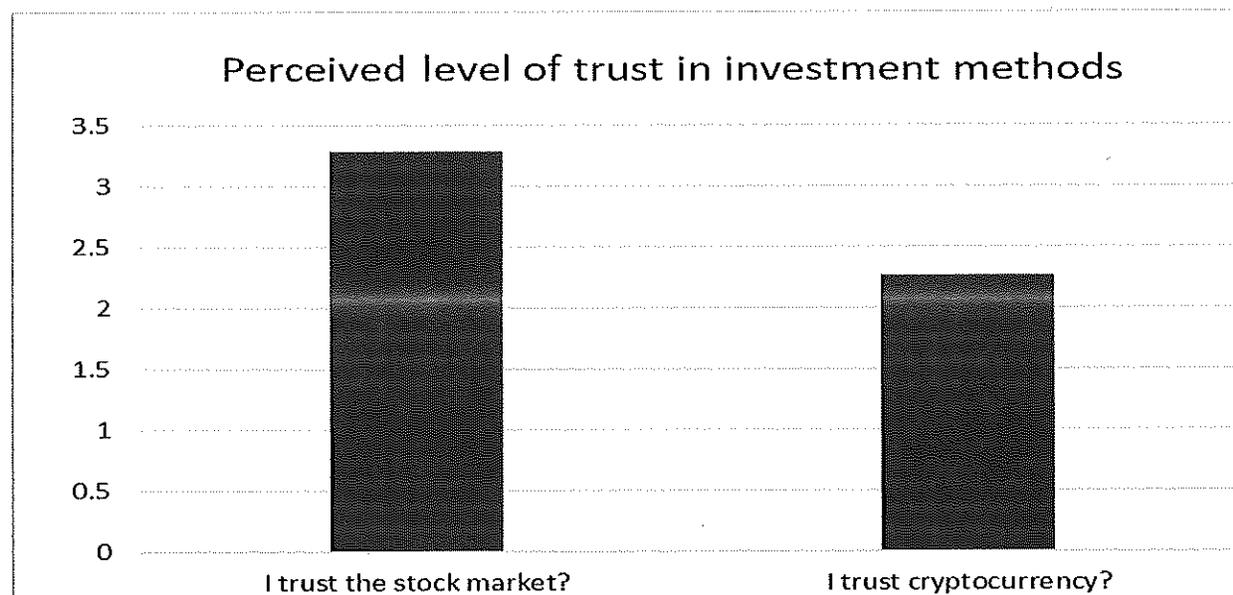


Figure 5- Perceived Level of Trust in Investment Methods



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 6- Opinions of Trust in the Stock Market

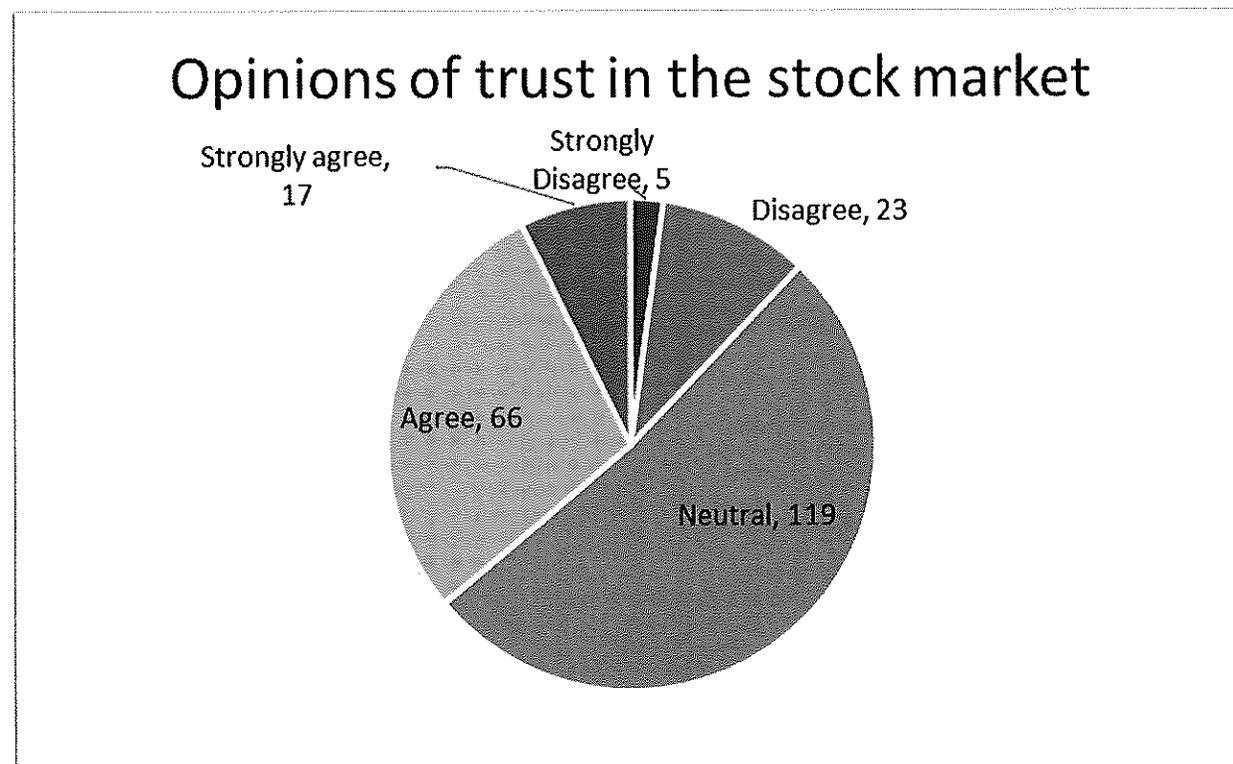


Figure 7- Opinions of Trust in Cryptocurrency

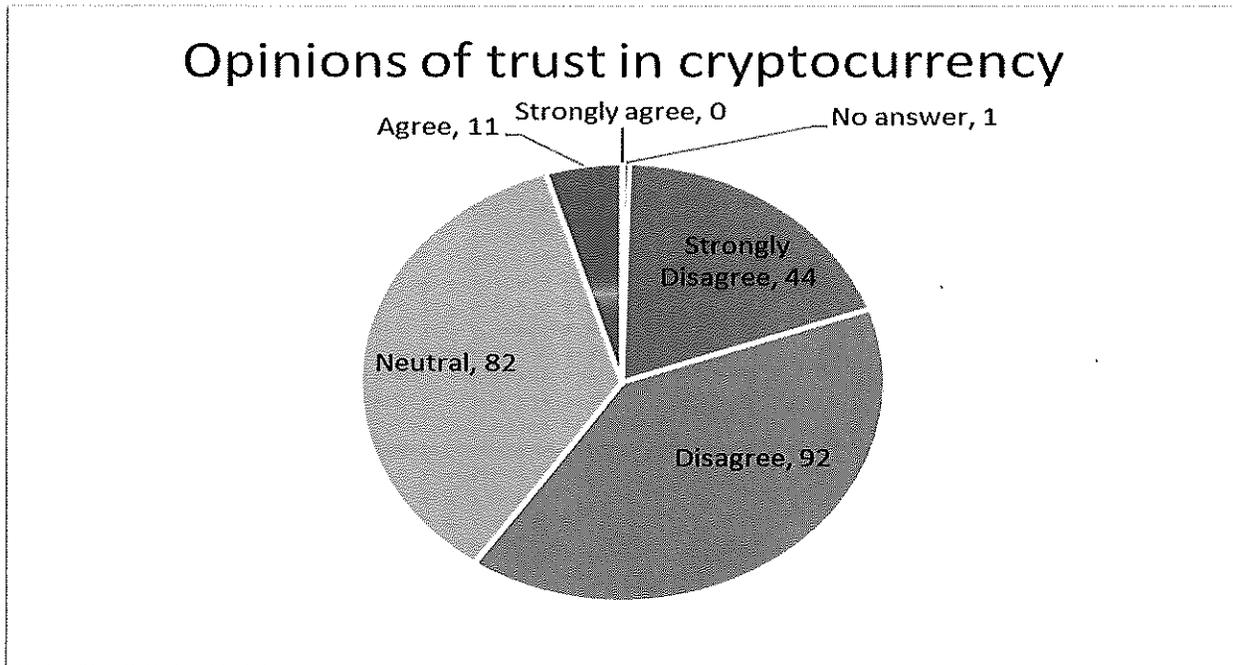
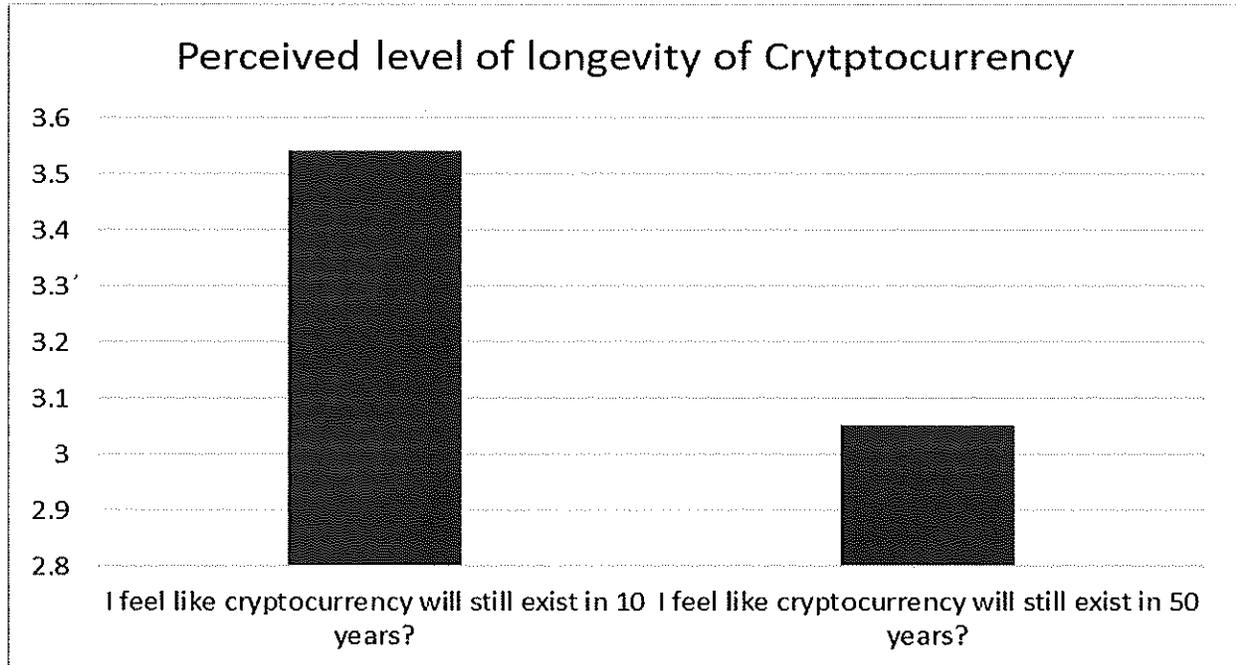


Figure 8- Perceived Level of Longevity of Cryptocurrency



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 9- Perceptions of the Longevity of Cryptocurrency (10 Years)

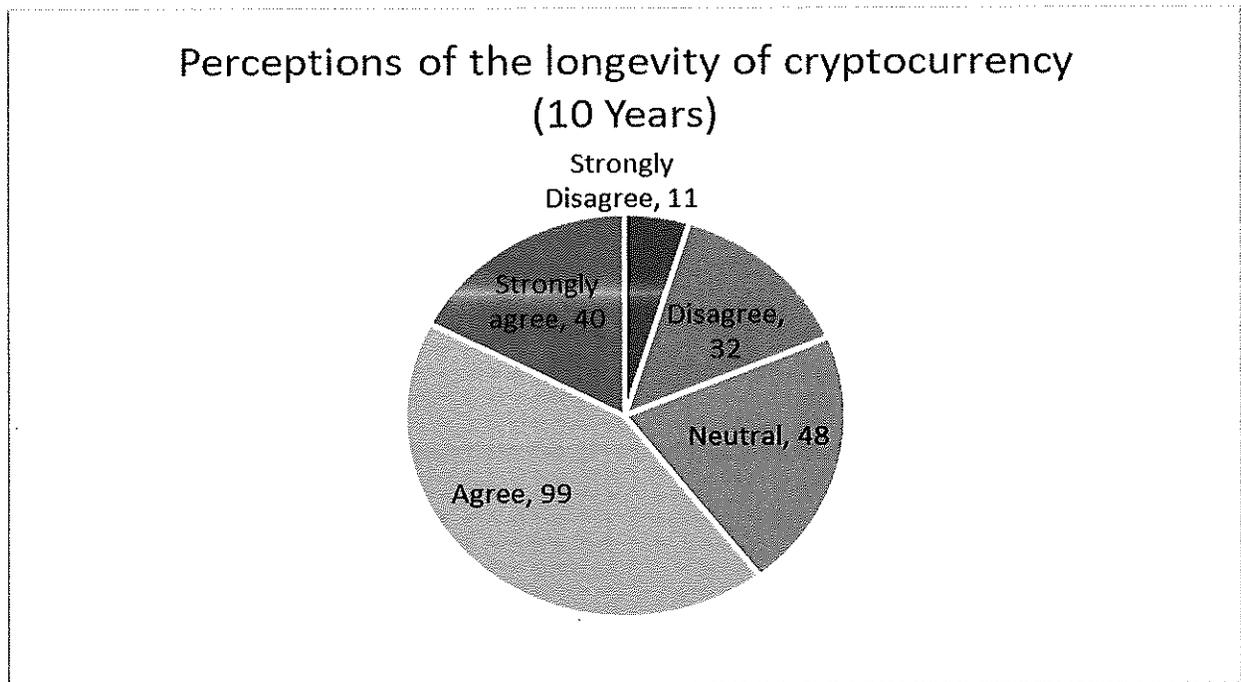


Figure 10- Perceptions of the Longevity of Cryptocurrency (50 Years)

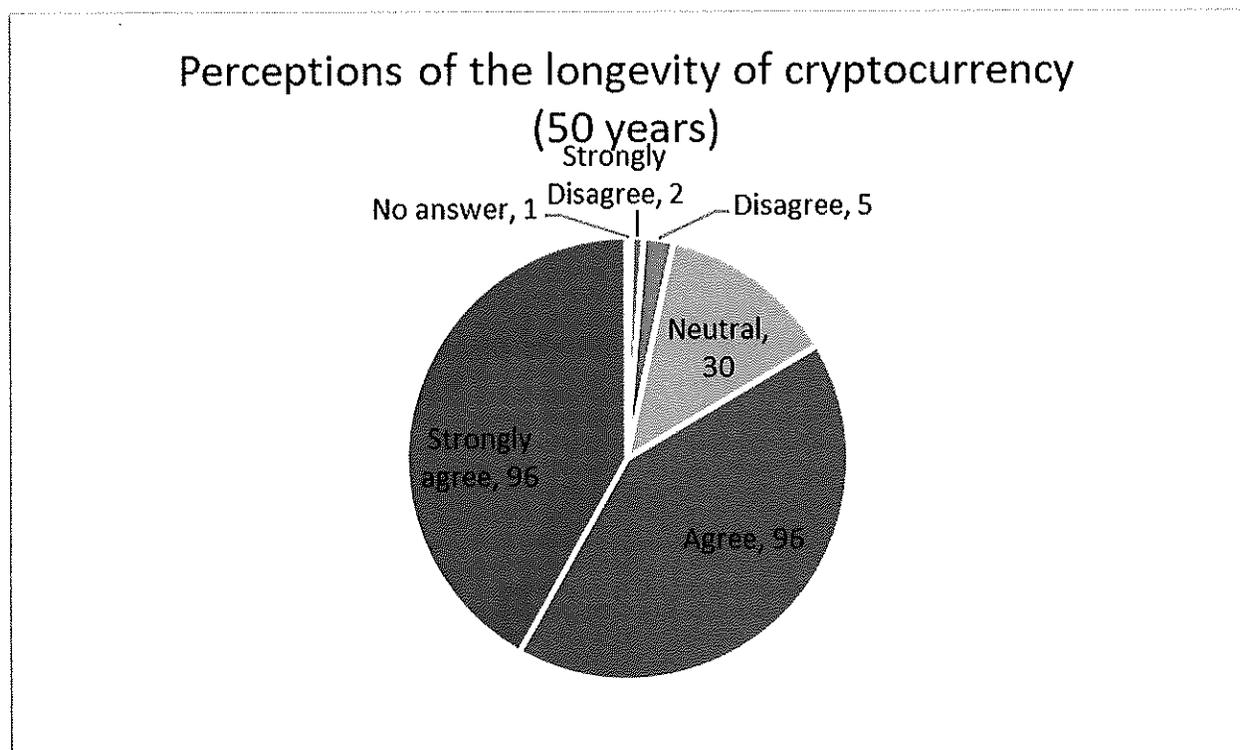
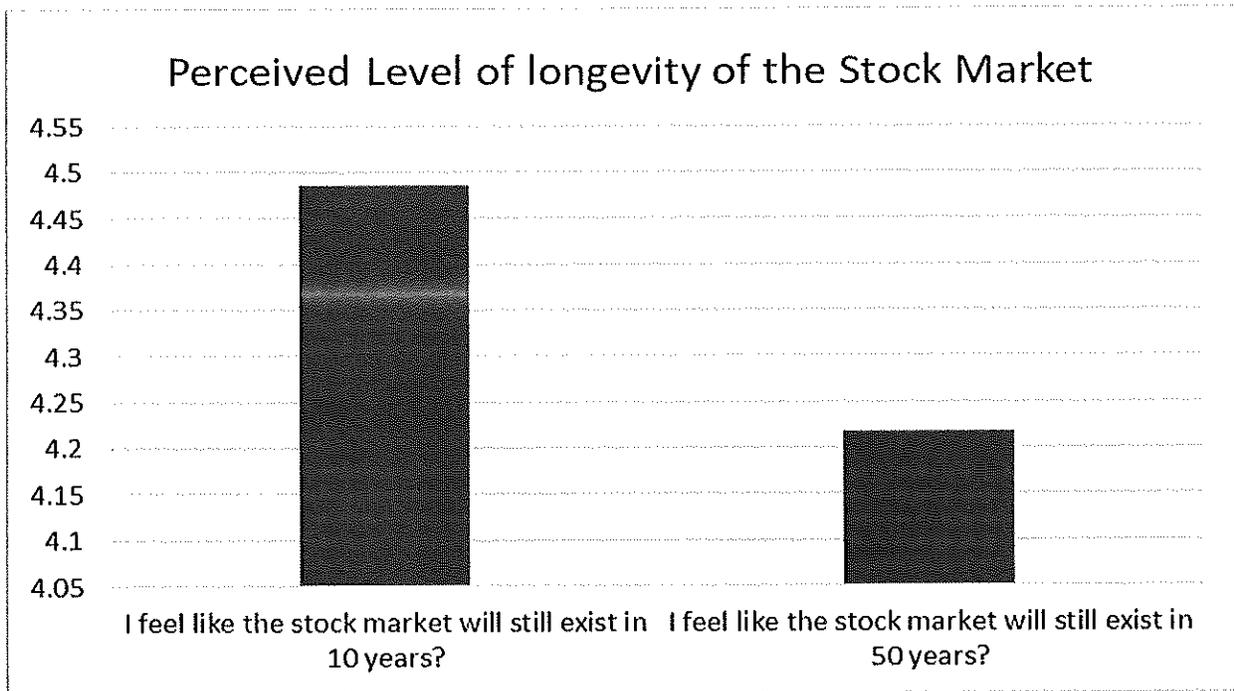


Figure 11- Perceived Level of Longevity of the Stock Market



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 12 -Perceptions of Longevity of the Stock Market (10 Years)

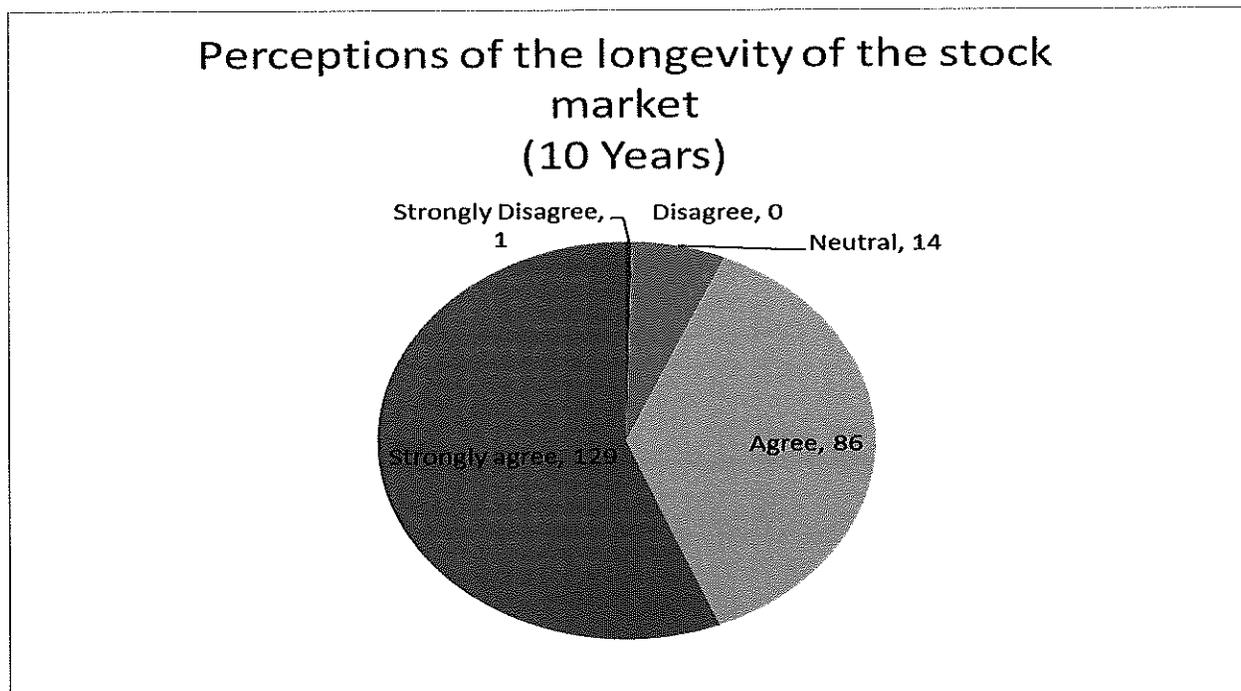
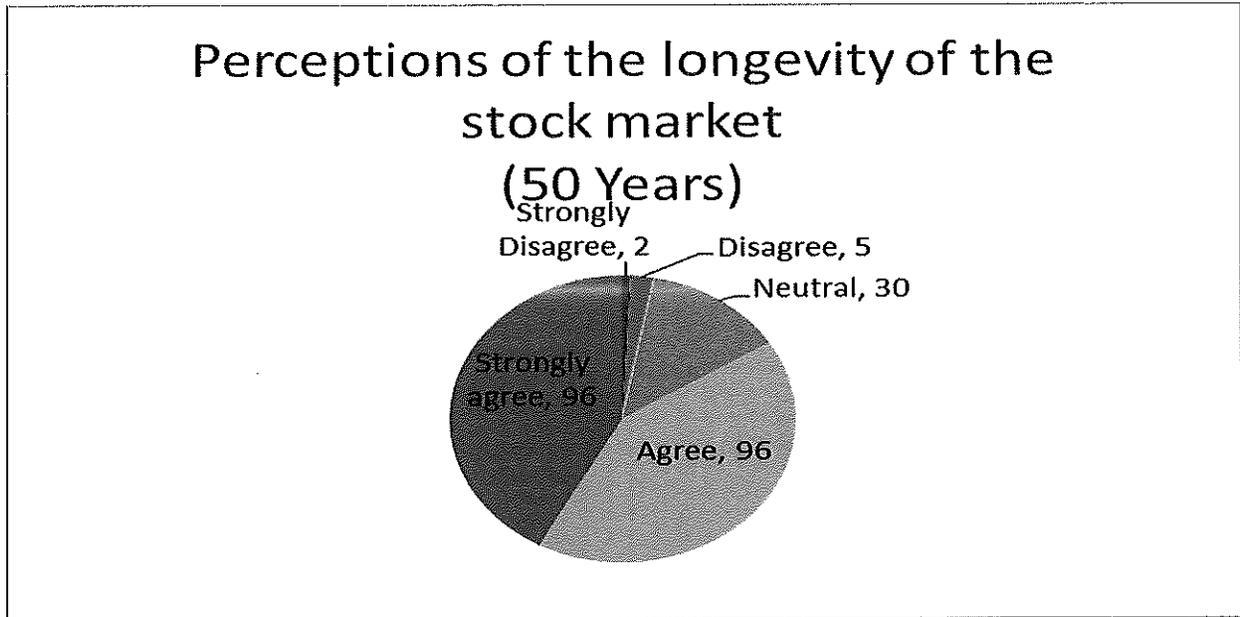
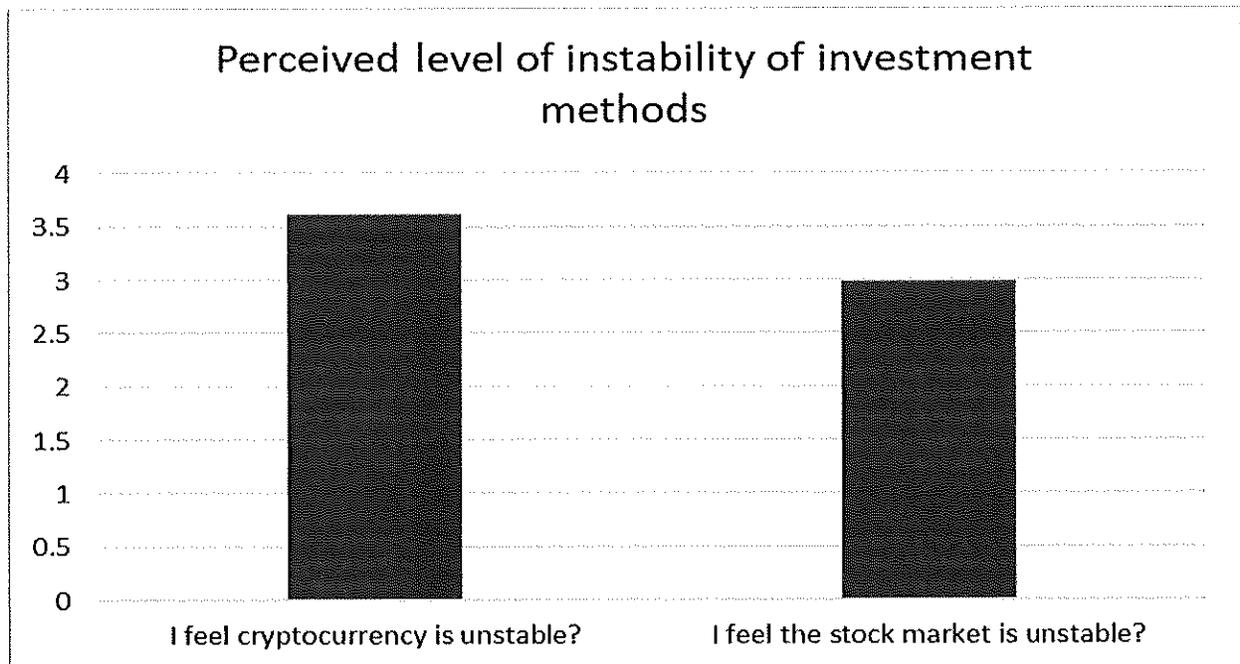


Figure 13 -Perceptions of Longevity of the Stock Market (50 Years)



Note: one non answering participant vote is not included in this figure.

Figure 14 -Perceived Level of Instability of Investment Methods



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 15- Opinions of Instability of Cryptocurrency

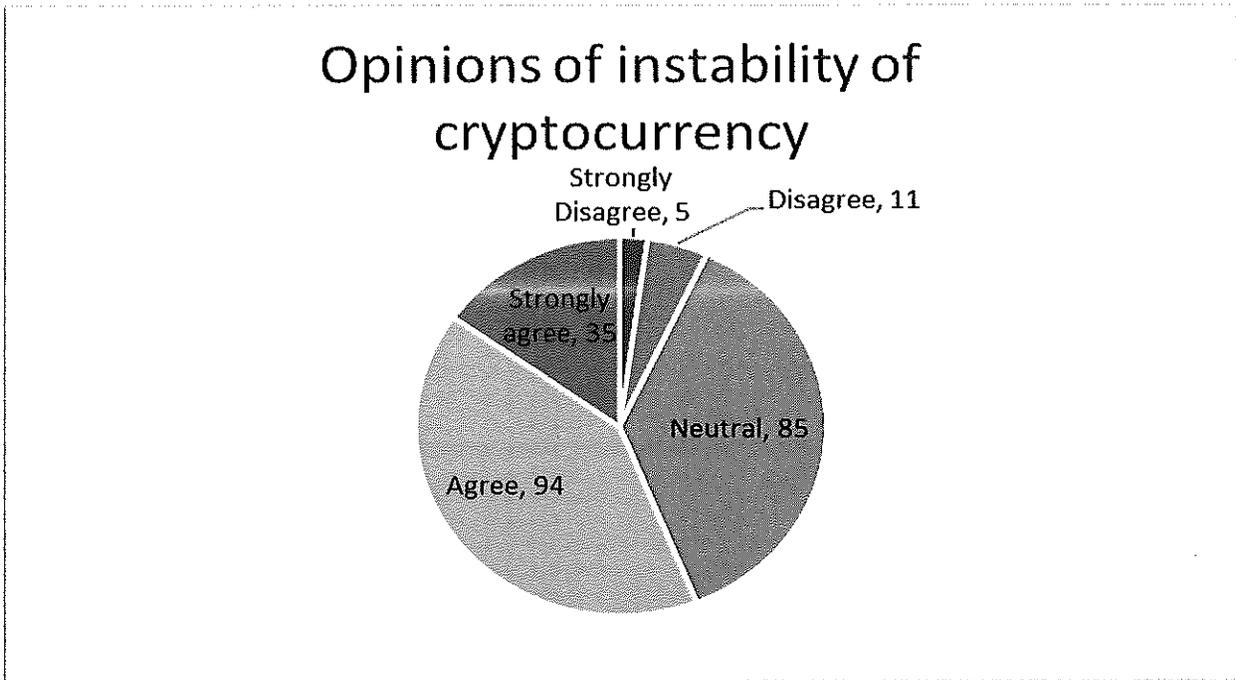


Figure 16- Opinions of Instability of the Stock Market

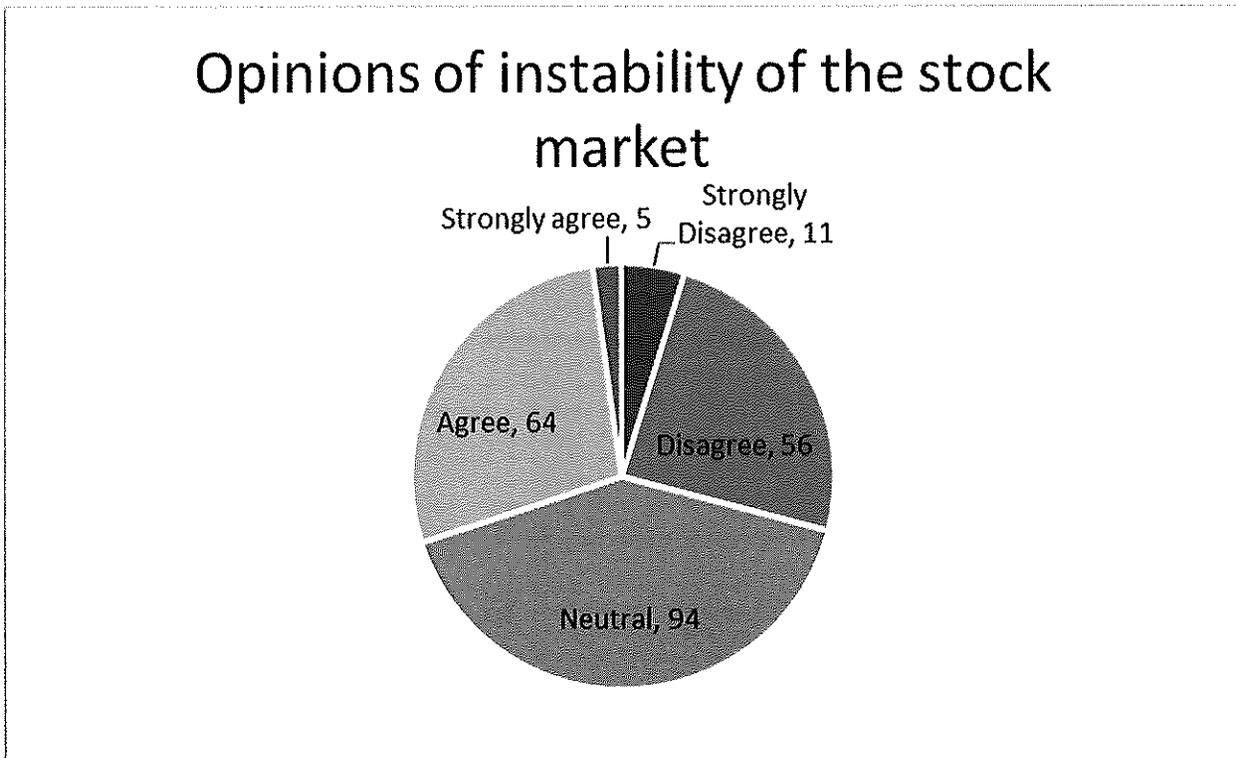
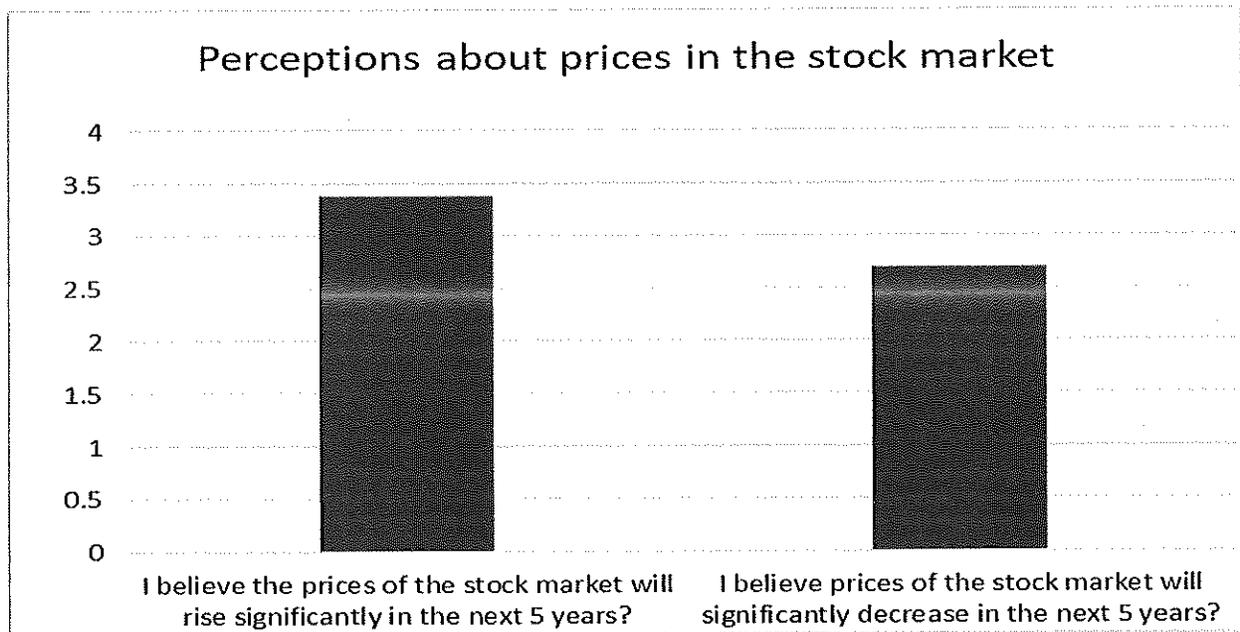


Figure 17- Perceptions about Prices in the Stock Market



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 18- Perception of Significant Increase of Price in the Stock Market (5 Years)

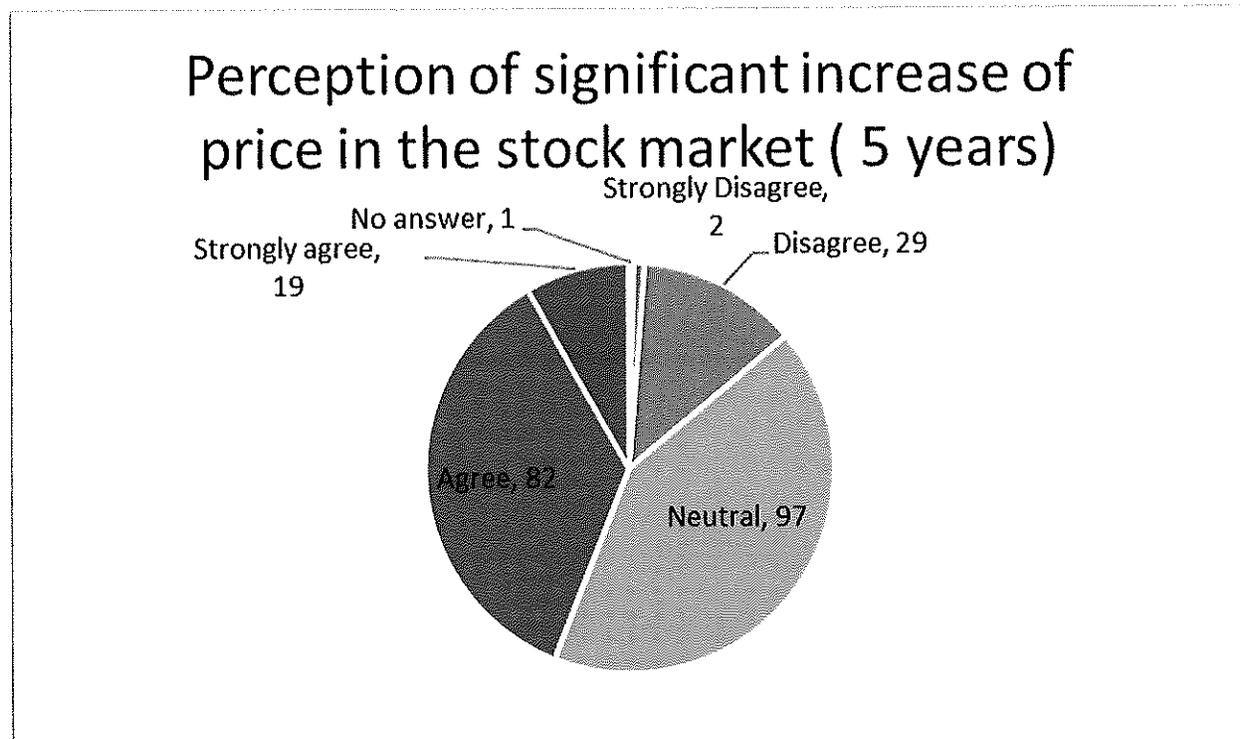


Figure 19- Perception of Significant Decrease of Price in the Stock Market (5 Years)

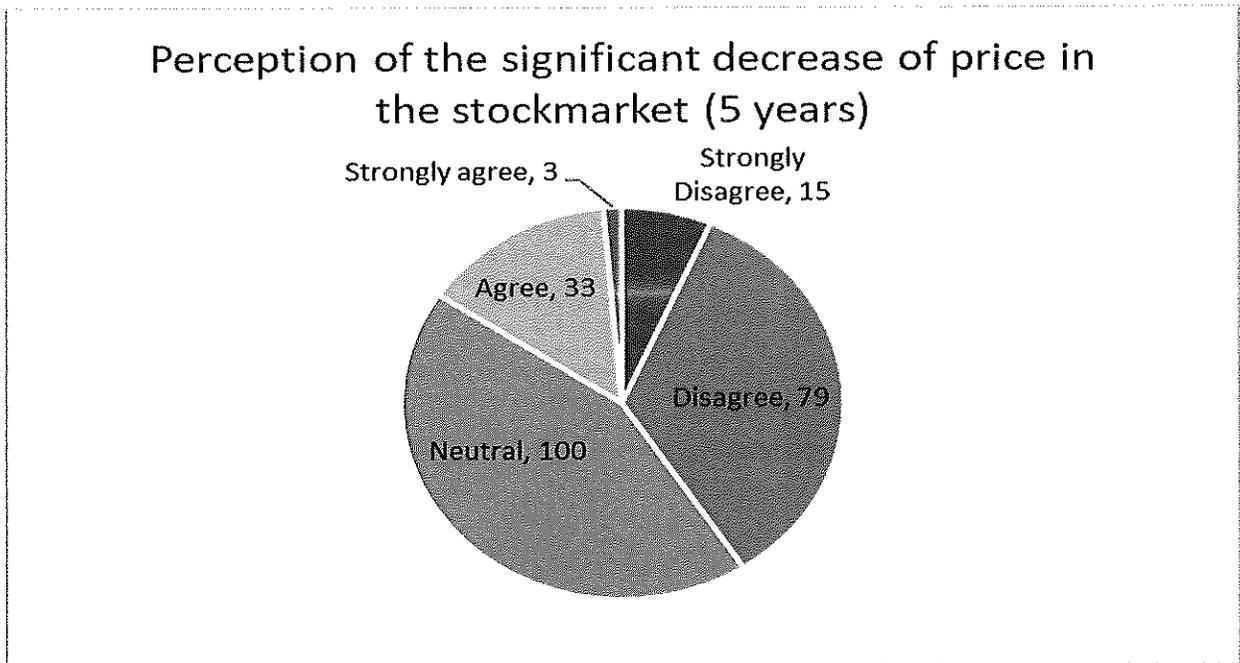
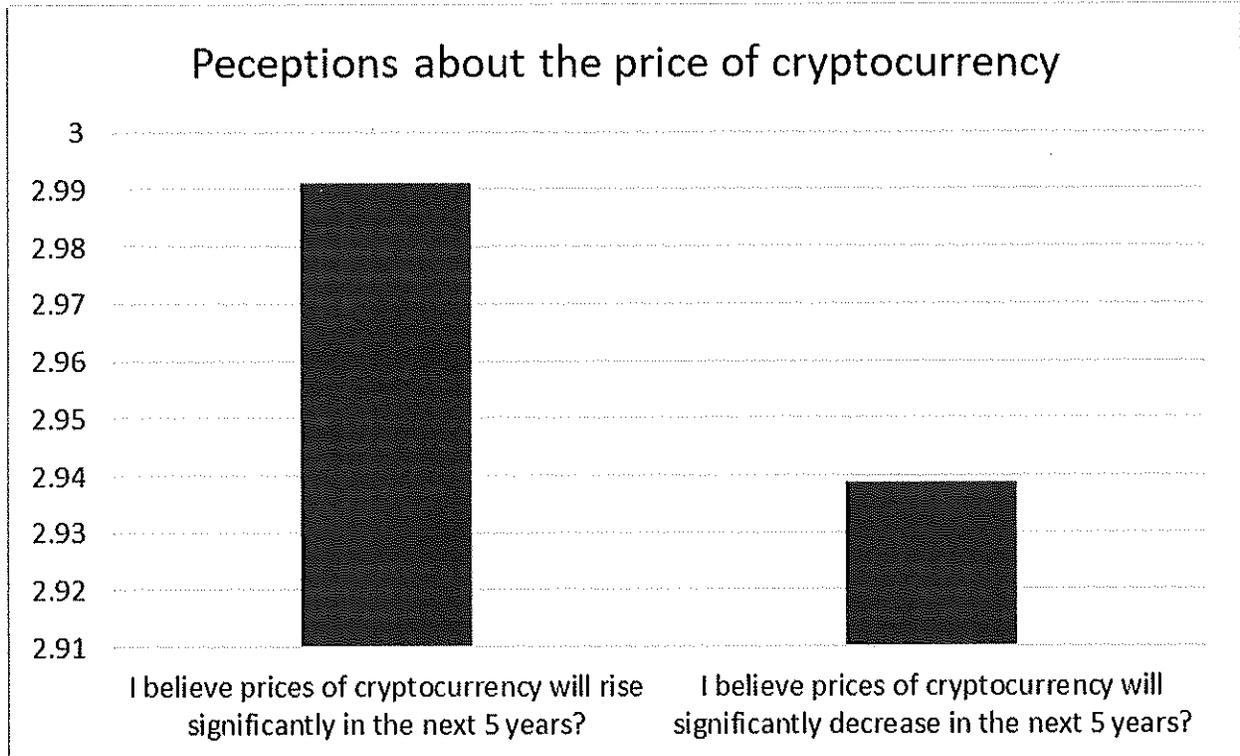


Figure 20- Perceptions About the Price of Cryptocurrency



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 21- Perception of Significant Increase of Price of Cryptocurrency (5 Years)

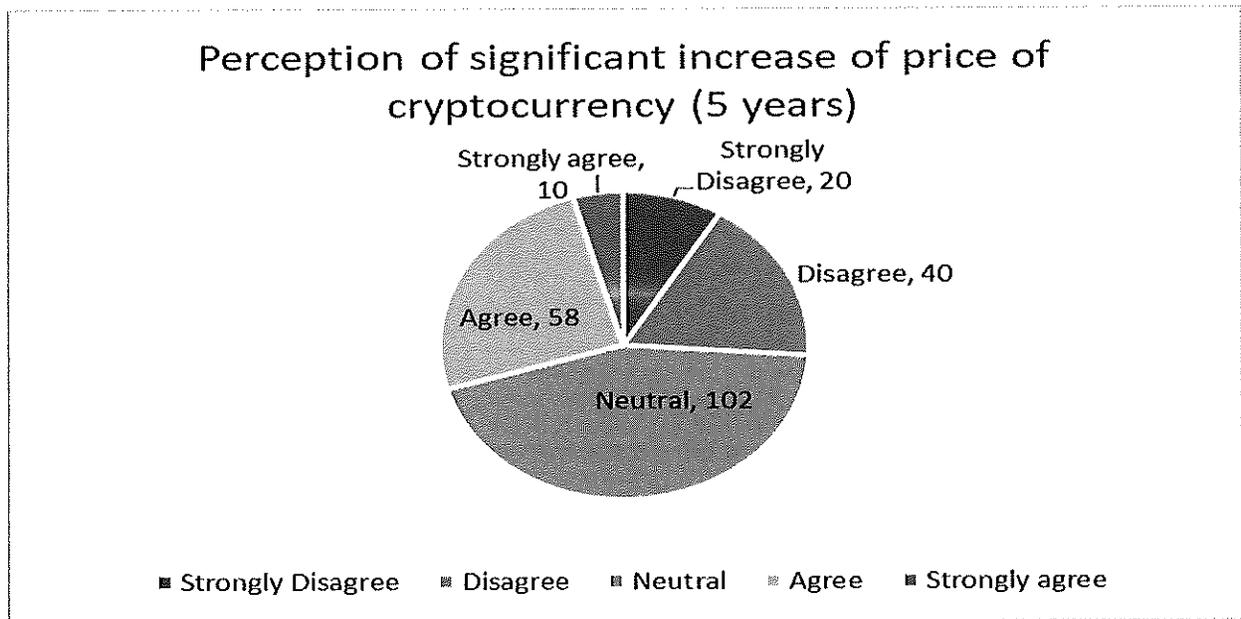


Figure 22- Perception of Significant Decrease of Price of Cryptocurrency (5 Years)

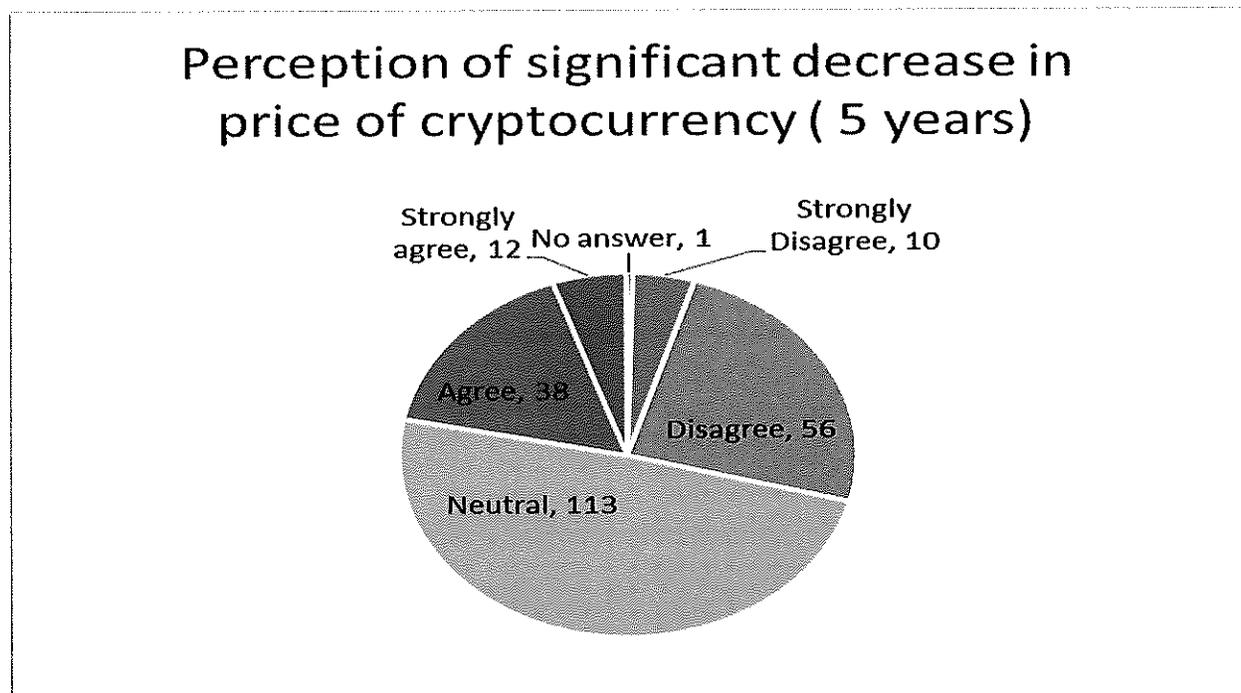
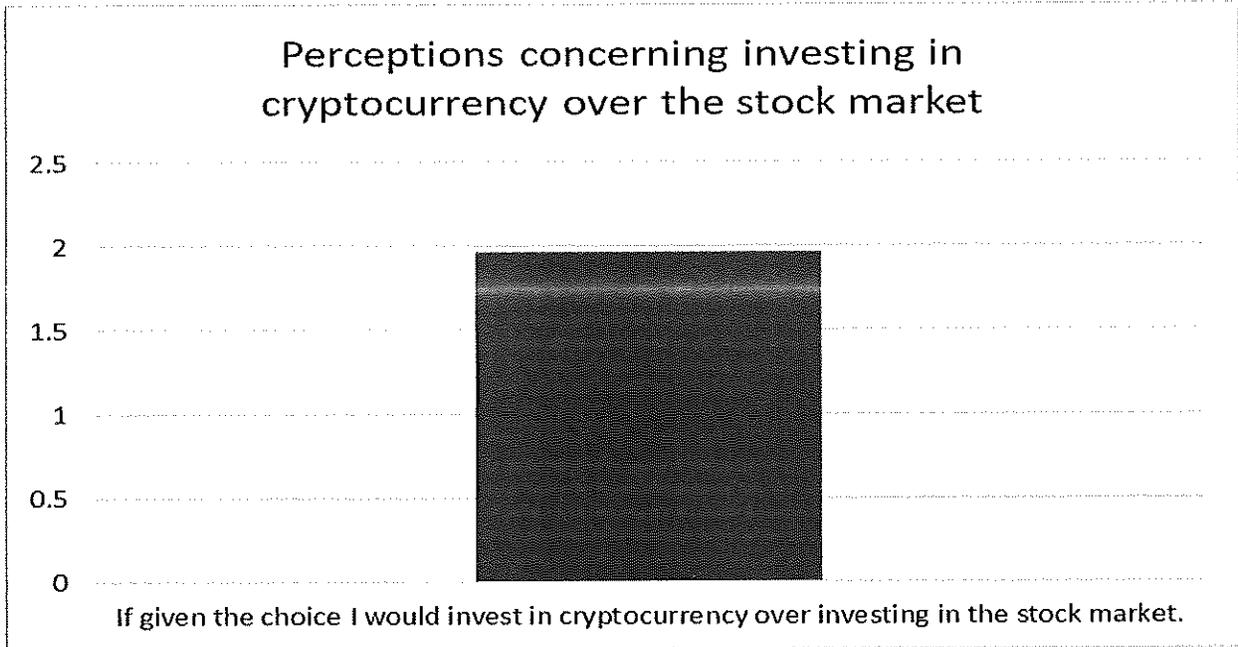


Figure 23- Perceptions Concerning Investing in Cryptocurrency over the Stock Market



Note: the scale is a rank from 1-5. 1 being strongly disagree and 5 being strongly agree.

Figure 24- Opinions on Investing in Cryptocurrency over the Stock Market

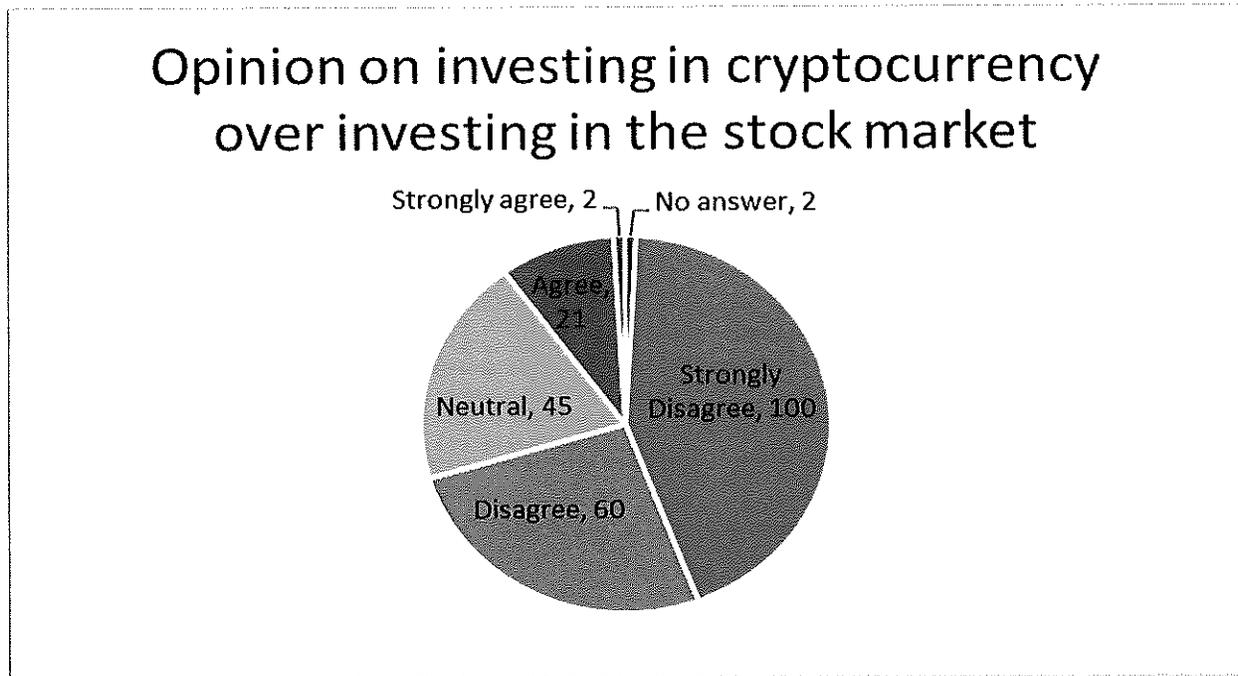


Figure 25- Demographic Data

Freshman	Sophomore	Junior	Senior	Graduate
28	94	74	32	2
12.17%	40.87%	32.17%	13.91%	0.87%

Figure 26-

Between-Subjects Factors- 1

		Value Label	N
Have you ever held stock?	0	never owned stock	152
	1	owned stock	77
Have you ever held cryptocurrency?	0	never owned crypto	188
	1	owned crypto	41

Figure 27-

Descriptive Statistics- 1

Dependent Variable: I trust cryptocurrency?

Have you ever held stock?	Have you ever held cryptocurrency?	Mean	Std. Deviation	N
never owned stock	never owned crypto	2.26	.834	144
	owned crypto	2.63	.518	8
	Total	2.28	.823	152
owned stock	never owned crypto	2.07	.759	44
	owned crypto	2.45	.869	33
	Total	2.23	.826	77
Total	never owned crypto	2.21	.819	188
	owned crypto	2.49	.810	41
	Total	2.26	.823	229

Figure 28-

Tests of Between-Subjects Effects-1

Dependent Variable: I trust cryptocurrency?

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.934 ^a	3	1.311	1.963	.120
Intercept	478.162	1	478.162	715.595	<.001
Haveyoueverheldstock	.698	1	.698	1.044	.308
Haveyoueverheldcryptocurren- cy	3.077	1	3.077	4.605	.033
Haveyoueverheldstock * Haveyoueverheldcryptocurren- cy	.002	1	.002	.003	.959
Error	150.345	225	.668		
Total	1326.000	229			
Corrected Total	154.279	228			

a. R Squared = .026 (Adjusted R Squared = .013)

Figure 29-

Between-Subjects Factors-2

		Value Label	N
Have you ever held stock?	0	never owned stock	153
	1	owned stock	77
Have you ever held cryptocurrency?	0	never owned crypto	189
	1	owned crypto	41

Figure 30-

Descriptive Statistics-2

Dependent Variable: I feel cryptocurrency is unstable?

Have you ever held stock?	Have you ever held cryptocurrency?	Mean	Std. Deviation	N
never owned stock	never owned crypto	3.54	.866	145
	owned crypto	3.63	.518	8
	Total	3.55	.850	153
owned stock	never owned crypto	3.77	.912	44
	owned crypto	3.76	.936	33
	Total	3.77	.916	77
Total	never owned crypto	3.60	.880	189
	owned crypto	3.73	.867	41
	Total	3.62	.877	230

Figure 31-

Tests of Between-Subjects Effects-2

Dependent Variable: I feel cryptocurrency is unstable?

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.470 ^a	3	.823	1.072	.362
Intercept	1168.537	1	1168.537	1521.063	<.001
Haveyoueverheldstock	.703	1	.703	.915	.340
Haveyoueverheldcryptocurrency	.023	1	.023	.030	.863
Haveyoueverheldstock * Haveyoueverheldcryptocurrency	.049	1	.049	.064	.801
Error	173.621	226	.768		
Total	3193.000	230			
Corrected Total	176.091	229			

a. R Squared = .014 (Adjusted R Squared = .001)

ANOVA with dependent variable "I feel the market is unstable"

Figure 32-

Between-Subjects Factors-3

		Value Label	N
Have you ever held stock?	0	never owned stock	153
	1	owned stock	77
Have you ever held cryptocurrency?	0	never owned crypto	189
	1	owned crypto	41

Figure 33-

Descriptive Statistics-3

Dependent Variable: I feel the stock market is unstable?

Have you ever held stock?	Have you ever held cryptocurrency?	Mean	Std. Deviation	N
never owned stock	never owned crypto	3.11	.859	145
	owned crypto	2.87	.641	8
	Total	3.10	.849	153
owned stock	never owned crypto	2.86	.930	44
	owned crypto	2.61	.966	33
	Total	2.75	.948	77
Total	never owned crypto	3.05	.880	189
	owned crypto	2.66	.911	41
	Total	2.98	.896	230

Figure 34-

Tests of Between-Subjects Effects-3

Dependent Variable: I feel the stock market is unstable?

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7.760 ^a	3	2.587	3.318	.021
Intercept	709.567	1	709.567	910.269	<.001
Haveyoueverheldstock	1.438	1	1.438	1.845	.176
Haveyoueverheldcryptocurren cy	1.314	1	1.314	1.686	.196
Haveyoueverheldstock * Haveyoueverheldcryptocurren cy	.003	1	.003	.003	.953
Error	176.170	226	.780		
Total	2230.000	230			
Corrected Total	183.930	229			

a. R Squared = .042 (Adjusted R Squared = .029)

Appendix: Survey Disclosures and Documents given to participants

Survey Disclosures and Consent

DISCLOSURES: The following contains information you will need to help you decide whether or

not to participate in this research study. You must be at least 18 years old to participate.

Please read the following information carefully and contact the study team member(s) with any questions you may have.

1. Nature and Purpose of Project: The purpose of this study is to determine how students taking courses in the college of business perceive the stock market and cryptocurrency. Also, it is a perception of how much you know about each topic.
2. Participant Selection: You are being asked to participate because you are identified as a student taking courses in the college of business.
3. Explanation of Procedures: The survey consists of questions asking about the stock market and cryptocurrency.
4. Study Duration: The online survey should take approximately 8 minutes to complete.
5. Discomforts and Risks: There are no anticipated risks and/or discomforts for participants.
6. Benefits: This project is not designed to benefit you directly. However, your participation will help us evaluate the perception of students going into the field of business about the stock market and cryptocurrency.

7. Confidentiality: We will use survey responses only on an aggregate basis and will not make public any individual responses. All survey responses that we receive will be treated confidentially and stored in a locked office. However, we are unable to guarantee the security of the computer on which you choose to enter your responses. Information (or data) you disclose can be tracked, captured, corrupted, lost, or otherwise misused.

8. Refusal/Withdrawal: Your participation is strictly voluntary and you are free to withdraw/stop participating at any time with absolutely no penalty. Please note, however, that all questions must be answered in order for your responses to be included in the study results.

9. Contact Information: Any questions about the procedures or conduct of this research should be brought to the attention of Dr. Wayne Tervo at 270-809-7013 or wtervo@murraystate.edu. Please contact him if you would like to be informed of the study results, which will take at least a few months to compile. Results derived from this survey may be presented at academic conferences or published in academic journals.

This project has been reviewed and approved by the Murray State University Institutional Review Board (IRB) for the Protection of Human Subjects. If you have any questions about your rights as a research participant, you should contact the MSU IRB Coordinator at (270) 809-2916 or msu.irb@murraystate.edu.

* Required

Documentation given to the participants

1.

CONSENT: I have read the study disclosure, my questions have been answered, and

I agree to take part in this study. *

Mark only one oval.

Yes, I agree to take part in this study.

No, I do not agree to take part in this study.

Statements for Consideration:

Please read the following statements and respond by **circling** the appropriate response.

Have you ever held stock? Yes No

Have you ever held
cryptocurrency? Yes No

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel that I am knowledgeable on the topic of cryptocurrency?	1	2	3	4	5
I feel that I am knowledgeable on the topic of the stock market?	1	2	3	4	5
I trust the stock market?	1	2	3	4	5
I trust cryptocurrency?	1	2	3	4	5
I feel like cryptocurrency will still exist in 10 years?	1	2	3	4	5
I feel like cryptocurrency will still exist in 50 years?	1	2	3	4	5
I feel like the stock market will still exist in 10 years?	1	2	3	4	5
I feel like the stock market will still exist in 50 years?	1	2	3	4	5
I feel cryptocurrency is unstable?	1	2	3	4	5
I feel the stock market is unstable?	1	2	3	4	5
I believe the prices of the stock market will rise significantly in the next 5 years?	1	2	3	4	5
I believe prices of the stock market will significantly decrease in the next 5 years?	1	2	3	4	5

Status Classification: Freshman Sophomore Junior Senior GraduateCitizenship: US Citizen Citizen of Other Country; please specify _____Other:

_____ Years of Age

_____ Years of Work Experience

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