Wealth Management Analytics

TGM 554 – Global marketing research

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## **Executive Summary**

## This study aims to describe whether or not the culture and country of origin of investors influence their comfort level in self-managing their portfolio of assets (stocks and/or cryptocurrencies) and their willingness to utilize different forms of wealth management such as traditional financial advisors and Robo-advisors. The method used in this research is a mix of qualitative and quantitative techniques, initially conducting two focus groups between Indian and American nationals and then administering surveys to a large range of financial backgrounds, incomes, and ages of both cultural origins. We utilized a river sampling and non-probability sampling technique when administering the survey. We obtained a total of 132 responses, however after cleaning the data we ended up utilizing 117 responses for our analysis. Through data analysis, we discovered multiple significant correlations between our independent and dependent variables. For example, an individual's country of origin and financial literacy seemed to play a role in influencing their inclination to invest in stocks or crypto.

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## **Research Objective**

The overall goal of this market research experiment is to evaluate the wealth management preferences of an individual, specifically with two types of assets: Stocks and Cryptocurrencies. The specific objectives of our project are as follows:

* **Objective 1:** Determine customer preference and comfort level in investing in two different types of assets (stock vs cryptocurrencies).
  + **Question 1:** What asset classes do individuals prefer to invest in (stocks, crypto, none)?
* **Objective 2:** Determine whether an individual is self-managing their stock and crypto investments through online brokerages and/or wallets, using an artificial intelligence financial advisor, commonly referred to as a robo advisor, or using an in-person traditional financial advisor. Determine willingness to engage in self-management versus Robo-advisor versus utilizing a traditional advisor to aid in managing their investment.
  + **Question 2:** What are individual preferences when it comes to managing their investment portfolio (i.e., robo advisor, financial advisor, self-management)?

**Variables**

* **Independent Variables:** Asset types (stocks vs. cryptos), Age, Financial literacy level, Brand Name (brokerages, Robo-advisor apps), Culture/Country differences, social media impacts, gender, Income, Education level, Risk Aversion
* **Dependent Variables:** 1) Willingness to engage in investing in stocks or crypto 2) Willingness to engage in Robo Advisors vs. Self-Managed Brokerage vs. Traditional Financial Advisor.

**Assumptions Made**

* During one of the focus groups, 1st-semester Indian students were assumed to represent the population in India.
* Survey participants filled out the questionnaire to the best of their ability.
* Financial literacy was self-made assumptions and participants answered it accurately.

**Hypotheses**

* Those individuals that have little to no financial literacy in stocks and crypto are more likely to utilize a traditional advisor or Robo-advisor rather than self-managing their accounts.
* Individuals from India are less likely to invest in crypto compared to individuals from the US.
* In general, individuals from both India and the US are more likely to invest in stocks over crypto because they view stocks as a less risky investment compared to crypto.
* Those individuals with higher income levels are more likely to invest more in stocks and crypto compared to those with less disposable income.
* Social influences are more likely to cause people to invest in stocks and crypto.
* The rate of return is the most important factor when choosing a Robo-advisor.

## **Research Methodology**

The methodology for the research was two-fold, which initially started with forming secondary infographic data and then collecting the primary data using two research techniques (Exploratory research - focus groups and Descriptive research - Qualtrics survey). To capture the best insights our research consisted of both qualitative (i.e. focus groups) and quantitative research (i.e. surveys) methods.

**Secondary Data Insights/Implications:** We initially started our research process by looking at credible sources and narrowing down the information to build an infographic that conveyed the most important insights. Secondary data illustrated that in 2022, people allocated 34% of their investments toward cash, 21% was allocated towards property, 18% towards stocks, shares, or ETFs, and 14% towards crypto. Data illustrates that the most popular global investment option was cash, with 24.5% of those surveyed saying it was the safest option. In 2022, aside from cash, women felt more optimistic about real estate investments (22%), while 21% of males felt more optimistic about stocks. Another data source depicted the potential takeover of Robo-advisors in the wealth management industry. In 2019, there was about $330 billion worth of assets managed by Robo-advisors, and this is projected to significantly increase to $830 billion by 2024. Also, data security was an imperative attribute among Robo-advisors. Secondary data also shows the primary investment goal of Millennials is to ensure their money is safe and to have strong retirement savings goals. There was a shift in investing habits from 2021 to 2022, with the COVID-19 Pandemic loosening its grip on Millennials and Generation Z. This change led to 43% of Generation Z investing more and 27% of Millennials investing more than the previous year (Bankrate Financial Security Poll May 2022). Our secondary data research purported different levels of financial thinking per age group, for example when asked which will be the best performing investment in 2022, older participants (45-65+) established property as the best performing. However, younger participants (18-34) preferred investing in stocks and cryptocurrency much more than other investments. We will conduct primary research to analyze more specific factors related to comfort levels in investing in stocks and/or crypto and comfort levels regarding engagement with Robo-advisors.

**Exploratory Research:** Before conducting our final focus groups, we conducted a mock focus group to determine if there would be any changes, we would need to implement for our actual focus groups. The mock focus group illustrated that there will always be a select few participants who speak less. To account for this and ensure we get a diverse range of opinions, in our final focus group we ensured to call on people to express their opinions. During our mock focus group, we also learned that topics regarding investments and Robo-advisors were relatively new to some of the participants. To bridge this gap in our final group we created a short PowerPoint and included a short video about Robo-advisors to educate our participants. On top of educating our participants, we felt that it was important to incorporate a demographics survey for our final focus groups. Finally, in our mock focus group, we learned that the flow of our dialogue was not great, and it was difficult to locate a centralized theme and purpose. To ensure this was fixed before our final focus groups, we changed the flow and structure of our questions to narrow down the scope and obtain a centralized purpose. Ultimately, this resulted in smooth discussions for both of our final focus groups, leading to a diverse range of opinions from participants.

Since one thing we were measuring included determining whether there are cultural differences in terms of investing between Indians and Americans, we conducted two separate focus groups. One focus group consisted of individuals that were from India or have come to the US within one year, while our second focus group consisted of those individuals that are from the United States or have been in the United States longer than two years. Our US focus group consisted of eight participants, while our India focus group consisted of nine participants.

From our focus groups, some insights we gained include that those individuals who were more experienced in trading stocks and cryptocurrency seemed to be more reluctant towards utilizing Robo-advisors and even traditional advisors for their investments. Those with higher financial literacy and knowledge in investments did not want to pay fees associated with these wealth management alternatives. They felt like they had more control over their investments, which was something they did not want to give up. They also believed that they could generate higher returns compared to traditional and Robo-advisors without having to pay any fees. Through our focus groups, we also discovered that a majority of participants from India were less comfortable trying to invest in cryptocurrency because they felt as though crypto was not tangible and not associated with something physical like stock. Those from the India focus group felt that crypto was too new, too risky, and way too volatile. They also mentioned that there is a huge social media factor associated with the price of crypto and that it is pure speculation. In the US focus group, there were more individuals that tried investing in crypto due to social media and what some of their peers were doing. Overall, through these focus groups, we also gained some insight in regard to how financial literacy impacts investing decisions. Through the participants in the focus group, we learned that for these specific individuals, financial literacy impacts comfort level with investing in stocks and cryptocurrencies. In both the US and India focus groups, those individuals that were financially illiterate were less likely to invest in stocks and crypto. Individuals from both groups stated that if they were more financially literate and had more financial awareness, they would more likely invest in stocks and crypto.

There was a common theme among both groups when considering the impact of social influence. Social influence played a role in determining whether or not participants were investing. Those individuals that are currently investing in stock and/or crypto or have tried investing previously did so because their friends and family were seeing a rate of return on their investments. When trying to gain some insight into our dependent variable of willingness to engage with a Robo-advisor, we learned that participants from India with low financial literacy were more open to the idea of using a Robo-advisor compared to Americans. This was interesting because in our secondary data we found that Indians were hesitant with trying newer investment methods since they preferred more physical and tangible things. Participants from India were willing to pay anything lower than what a traditional advisor charges for a Robo-advisor, which was usually around 0.5-0.8% of assets. When trying to gain some insight on financial literacy and willing to engage in a Robo-advisor or financial advisor, we found that those participants with 2-4 years of investing experience in stocks and crypto preferred to self-manage their own portfolio because they felt that they had more control over their investments and the acquaint knowledge to make their own financial decisions. They also believed they could generate a higher return than the alternative options of traditional financial advisors and Robo-advisors without having to pay any fees. Ultimately, we utilized the insights we gained from our focus groups to build the questions and potential response choices for our survey.

**Descriptive Research:** To gain a diverse and in-depth understanding of our research objective, we created a survey using Qualtrics and distributed it to a wider audience (sample size: n >= 100) living in the US and India. To ensure normality, we had a minimum of at least 50 individuals from India and a minimum of 50 individuals from the United States that fully completed the survey. When administering this survey, we utilized non-probability and river sampling. River sampling is a method of online sampling in which the researchers invite the respondents of the survey to participate in their survey.

When creating our survey, we implemented both reliability and validity by carefully considering the order of our questions, eliminating bias, eliminating loaded, complex, ambiguous, and double-barreled questions, and we included questions with repeated measurements to determine if the results were consistent. Also, to increase validity and ensure we were measuring everything we wanted to measure, we color-coded each question for our purpose to ensure they covered our research objectives, independent variables, and dependent variables. Prior screening before distributing the survey was done to increase validity. Our survey consisted of ordinal, ratio, nominal, and interval questions for better analysis purposes. We initially started with an intro and consent form, then moved on to some simple questions toward the beginning, then included our complex questions regarding investing behaviors and preferences in the middle of our survey, then finally ended with demographic questions and a conclusion. Questions and answer choices were made based on focus group findings. Before distributing our final survey, we learned to change the flow of our survey and include logic-based questions based on specific responses of the participant, leading to more accurate responses. We will utilize the quantitative data from the survey to determine more numerical values in which we can draw insights and inferences through statistics.

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## **Data Analysis**

Before putting our data from the survey into SPSS and Tableau to make conclusions and insights, we first cleaned our data by deleting those individuals that did not fully complete all aspects of the survey and deleted those individuals that were from countries besides the United States and India. Doing this allowed us to increase our validity and ultimately lead to better insights and decision-making since we were using better quality data.

**Descriptive Analysis:**

Five main factors were chosen to measure people’s interest in choosing various stocks or cryptocurrencies in India and US: strategy, social media, family, friends, and colleagues. From Exhibit 1 below, it can be seen that US stock investors have a 42.24% preference for strategy, and Indian stock investors have a 44.39% for strategy. The main difference between the two countries is in their secondary characteristics. In India, 21.97% of Indian participants rely on social media for their next move, however, in the U.S 19.6% utilize their close family instead. In Exhibit 2, crypto factors, the main difference is between the secondary characteristics, with U.S crypto investors focusing on friends’ suggestions at 22.76%, and in India people have a strong inclination towards social media recommendations.

Next, we analyze the comparison between financial literacy and wealth management preferences between the two countries. From Exhibit 3 and Exhibit 4 we can see that the majority of people with a higher-than-average financial literacy prefer self-managing their assets in India with a +3.07% positive difference from those in the U.S. In addition to financial literacy versus wealth management preferences, we looked at how India and the U.S differ in risk tolerance (for both stocks and crypto) and their self-determined financial literacy. In Exhibit 5 and 6, both groups of India and US participants that had low to no knowledge of cryptocurrencies, still had a moderate to low risk tolerance. However, when comparing the two countries' risk tolerances/financial literacy in stocks, both groups had a high concentration in taking a medium risk tolerance if there was little knowledge of crypto literacy.

As Exhibit 7 illustrates, in both cultural groups, males tend to invest more in stocks and crypto compared to females. Comparing the assets of stocks and crypto, we can see that both Indians and Americans prefer to invest more in stocks compared to crypto. From the insights we gained from our focus group, this could potentially be related to the reason that stocks are less risky, less volatile, and not as new as crypto. According to our sample, both cultures had far less preference in allocating a majority of their investments towards cryptocurrencies. About 74% of Indians prefer allocating more of their investments to stocks, while 64.17% of Americans prefer allocating a majority of their investments to stocks. Roughly 10.00% of Indians prefer having an equal distribution between stock and crypto, while 16.42% of America prefer equally allocating their investment between stocks and cryptocurrencies. Finally, only about 6% of individuals from the US prefer investing more in crypto, while only 2% of individuals from our India sample prefer investing more in crypto.

As shown in Exhibit 8, through our survey data, we discovered that out of those individuals from the United States group that have not tried investing, are more willing to engage with a traditional financial advisor compared to a self-management or a Robo-advisor (27.03%). Filtering out those individuals from India, there was an equal distribution of 16.22% of people that wanted to engage in either a traditional financial advisor or self-management. For both the India and US samples, our data illustrates that both groups were hesitant to engage with Robo-advisors, with only 8.11% in both samples who were willing to engage with a Robo-advisor.

As shown in Exhibit 9, for both Indian and American participants, on average peer recommendation tended to be the most important factor when it came to choosing a Robo-advisor. The credibility of Robo-advisors seemed to be the least important factor to both our India and US samples. Pricing and fees seemed to be slightly more important for the US sample than for the India sample. Based on the data provided from our survey, we can tie it back to one of our hypotheses and say that according to our sample, the rate of return is not the most important factor in determining whether an individual will engage with a Robo-advisor.

**Correlation Analysis:**

Exhibit 10 shows there is a statistical significance between the number of years of trading experience with stocks and the average amount of money invested in stocks for both the India and US samples. There is also a statistical significance between the number of years of trading experience with stocks and risk tolerance in stocks for the US sample. With a Pearson correlation value of 0.522 for the US and 0.577 for India, we can say that there is a positive moderate correlation between the number of years of trading experience and the average amount invested per month in stocks for people in both India and the United States groups. For the US sample, there was a statistical significance between risk tolerance when it comes to investing in stocks and the average amount roughly, they invest in stock per month. With a Pearson correlation of 0.404, we can say there is a moderately-low positive correlation between risk tolerance in stocks and average monthly investment in stocks.

Exhibit 11 shows there is also a statistical significance between the number of years of trading experience with crypto and the average amount of money invested in crypto for both India and the United States. There is a positive moderately high Pearson correlation of 0.659 for the US and 0.715 for India between the number of years of trading experience in crypto and the average amount of money invested in crypto. For both India and US samples, there is a statistical significance between the number of trading years in crypto and the risk tolerance an individual is willing to take. There is a positive moderately-low correlation of 0.394 between the number of years of trading experience in crypto and risk tolerance when it comes to investing in crypto for the India sample. There is a positive moderate correlation of 0.505 between the number of years of trading experience in crypto and risk tolerance when it comes to investing in crypto for the US sample.

**Regression/ANOVA Analysis:**

**Regression Analysis USA:** Looking at the regression analysis of the data from US respondents, the positive R value shows a strong linear relationship between monthly expenditure on stocks (the dependent value) and annual income, gender, age, and risk tolerance. Additionally, the Adjusted R Square, suggests that 57.1% of monthly investment in stocks can be explained by these four variables. Among those four variables, income and risk tolerance have strong positive correlations with monthly stock investment, which shows that as the age and risk tolerance increase, the amount of monthly investment in our sample increases. On the other hand, the negative correlation of gender (1 being male and 2 being female) and age with stock investment represents that men and younger people invest more in stocks monthly compared to women and older people. This makes sense as older people are less likely to invest in riskier investments compared to older people, since younger people have more time to recover. The ANOVA analysis, with a p-value of less than 0.001, shows a very high statistical significance.

**Regression Analysis India:** Looking at the regression analysis of the data from Indian respondents, the positive R value shows a strong linear relationship between monthly expenditure on stocks (the dependent value) and annual income and gender. Additionally, the Adjusted R Square, suggests that 50.6% of monthly investment in stocks can be explained by these two variables. Between those two variables, annual income has a strong positive correlation with monthly stock investment, which shows that as the annual income increases, the amount of monthly investment in our population increases. On the other hand, the strong negative correlation between gender (1 being male and 2 being female) and stock investment represents that men invest more in stocks compared to women. The ANOVA analysis, with a p-value of less than 0.001, shows a very high statistical significance.

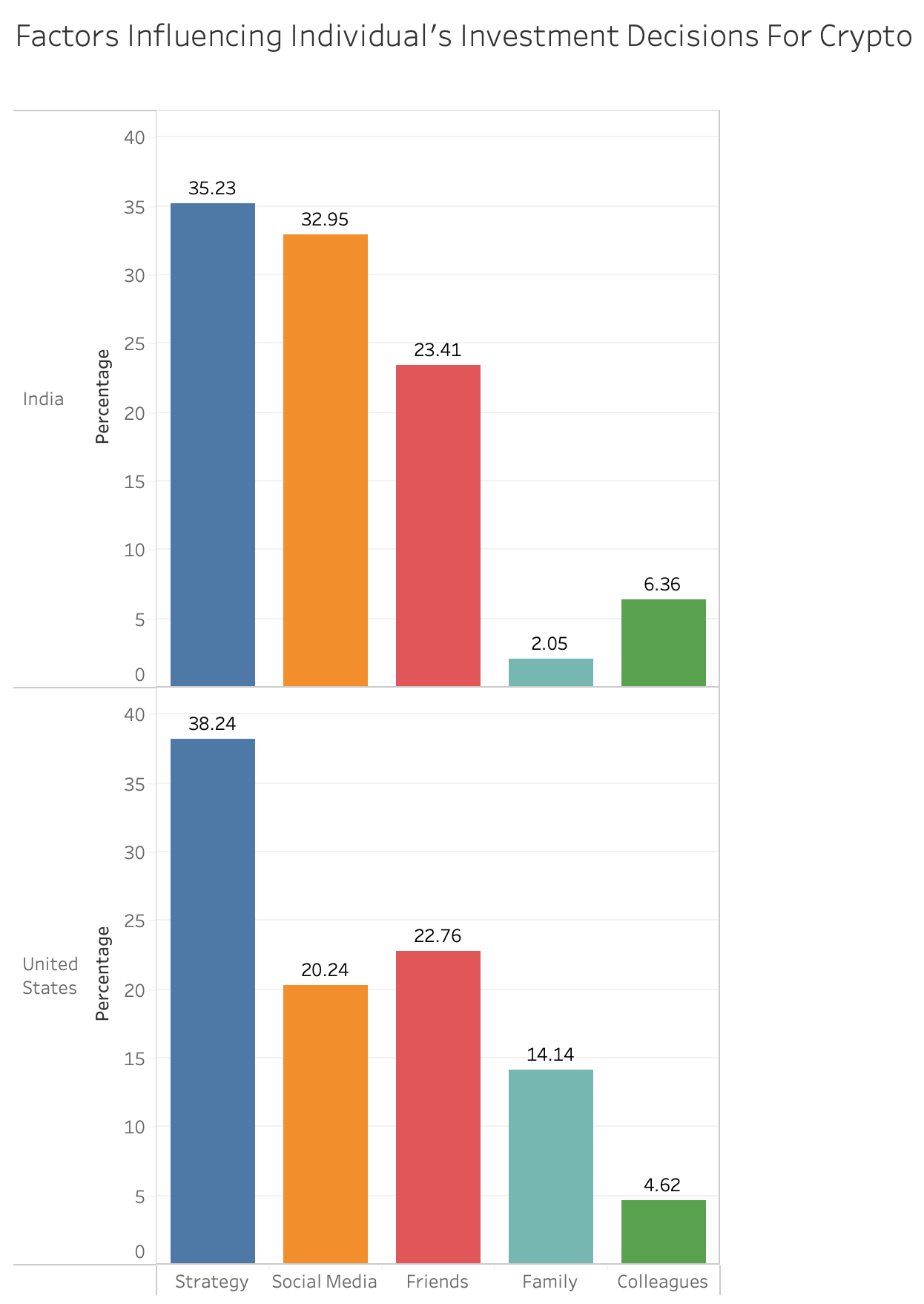
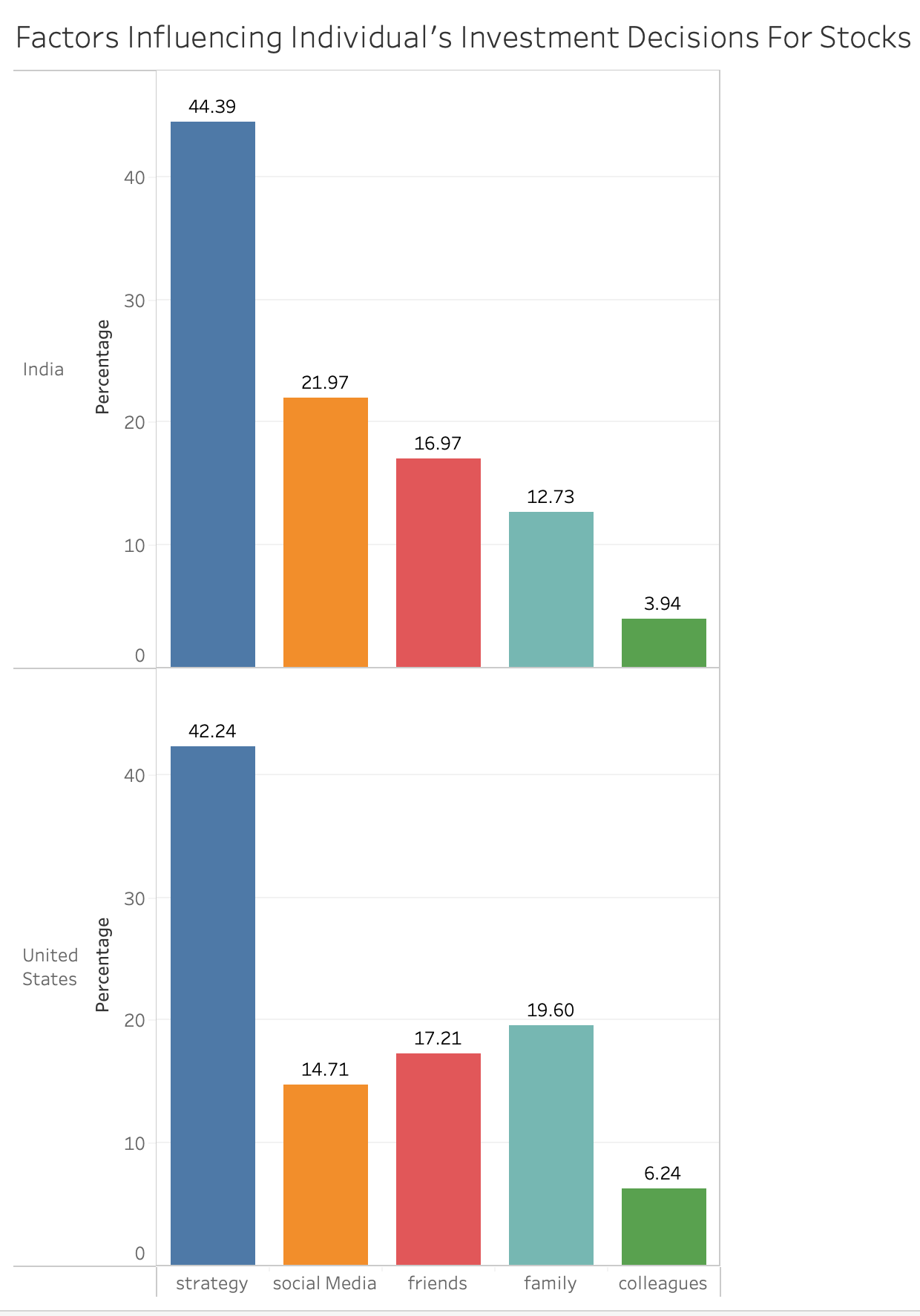
## **Results & Recommendations**

Based on our research, both India and US participants prefer investing in stocks rather than cryptocurrencies. It is mostly men and those with more investment experience that make bigger investments, so self-managed brokerages both in India and the US should focus their investments on their most experienced male customers. (However, there were more males in our sample size than females, which might have affected the results about gender). It was observed that younger people in the US are investing more than older people. Additionally, since most people prefer to self-manage their investments, and the most important factor in their investment decision making is strategy, we suggest brokerages to offer free online strategy courses within their platform to gain a competitive advantage. Financial advisors can target older wealthy individuals and provide lower-risk investments.

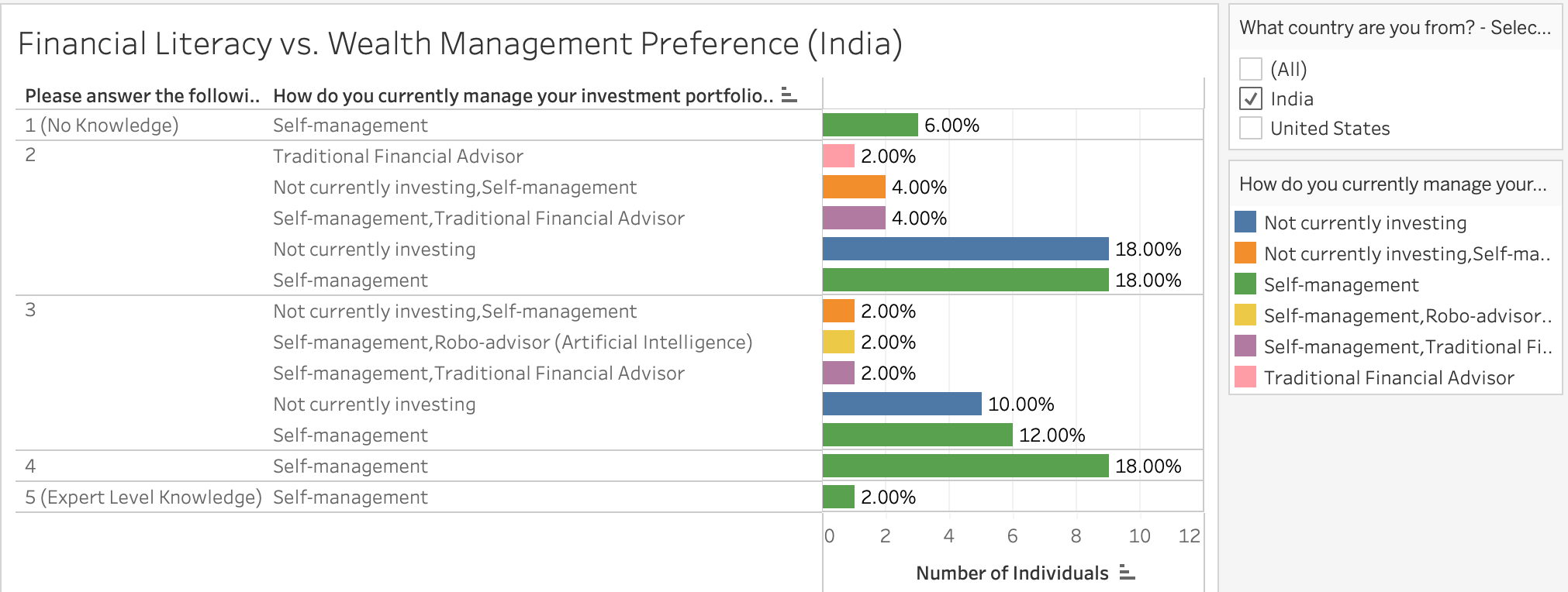
Looking at the second objective of this research, we found that there is a lot of distrust and hesitation around financial management using Robo-Advisors. While investors in both countries prefer self-managing their investment portfolios, the good news for financial advisors is that they are more inclined to use their services rather than using a Robo-advisor. However, if any investment is to be made in creating a new Robo-Advisor, it should be kept in mind that peer recommendation is the most influential factor in customers’ decisions. Therefore, we recommend marketing through micro-influencers, which can make the audience feel like they are getting a recommendation from a friend and create a chain reaction among followers and their communities. Using the findings regarding both objectives we recommend Robo-Advisor algorithms be coded and advertised to invest more in stocks rather than cryptocurrencies. Since most people with low-risk tolerance prefer stocks, this type of algorithm can make skeptics feel safer about using Robo-Advisors. Robo-Advisors should target the younger populations with lower financial literacy, as these individuals are more inclined to utilize AI and micro-influencers. As Robo-Advisors show high rates of return and reliance, there is more inclination toward peer recommendation.

**Appendix**

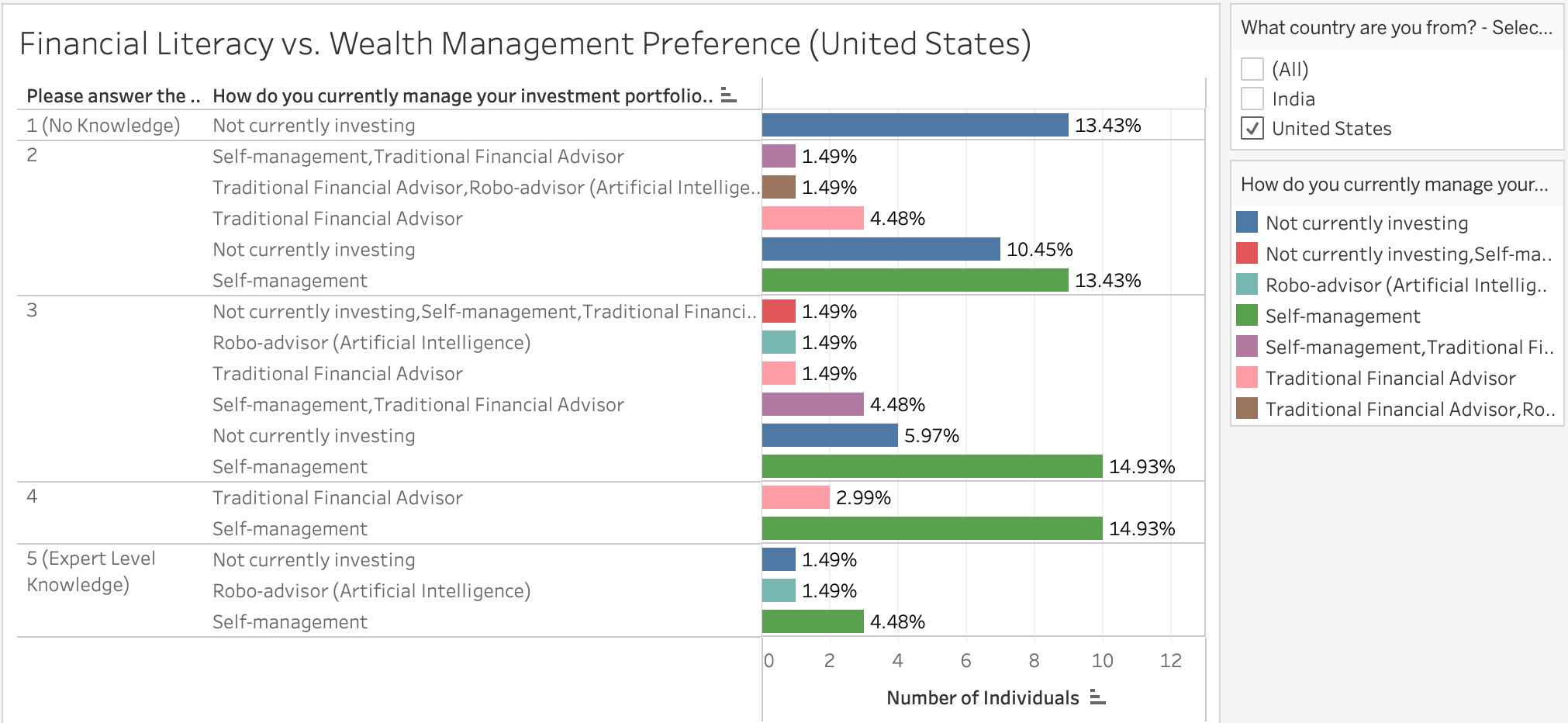
**Exhibit 1:**  **Exhibit 2:**

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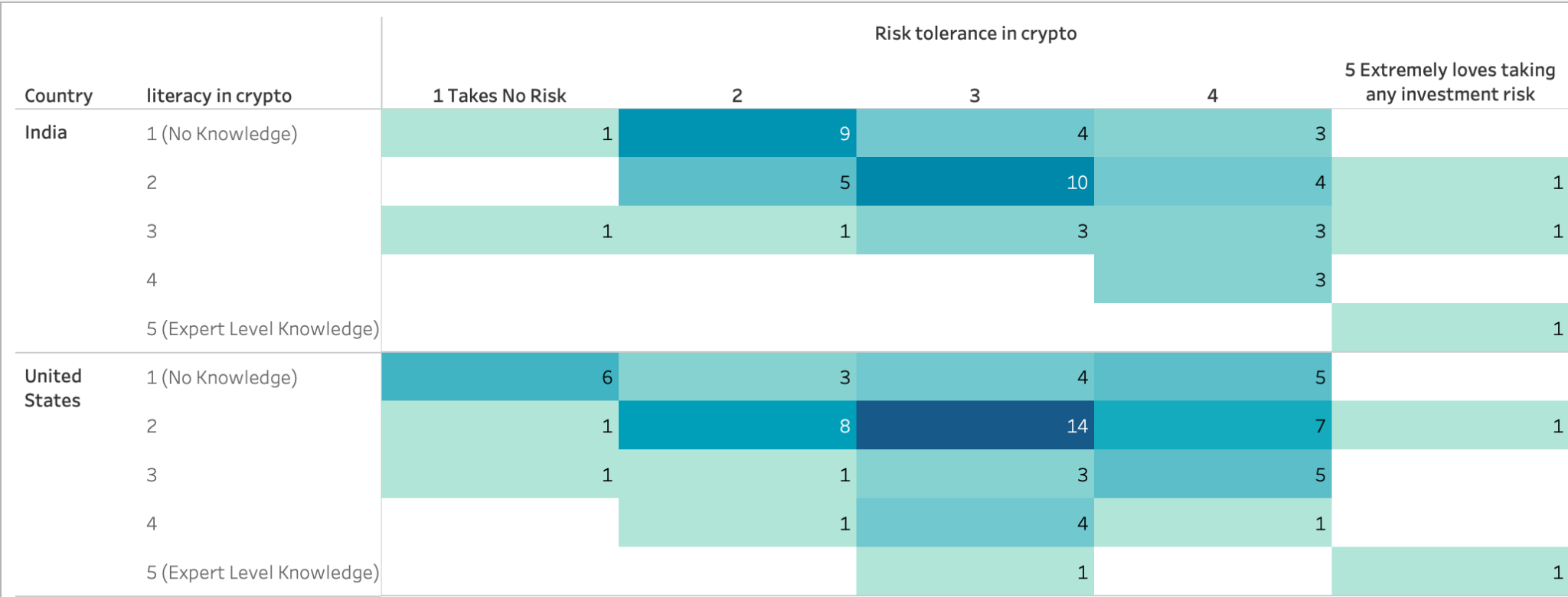
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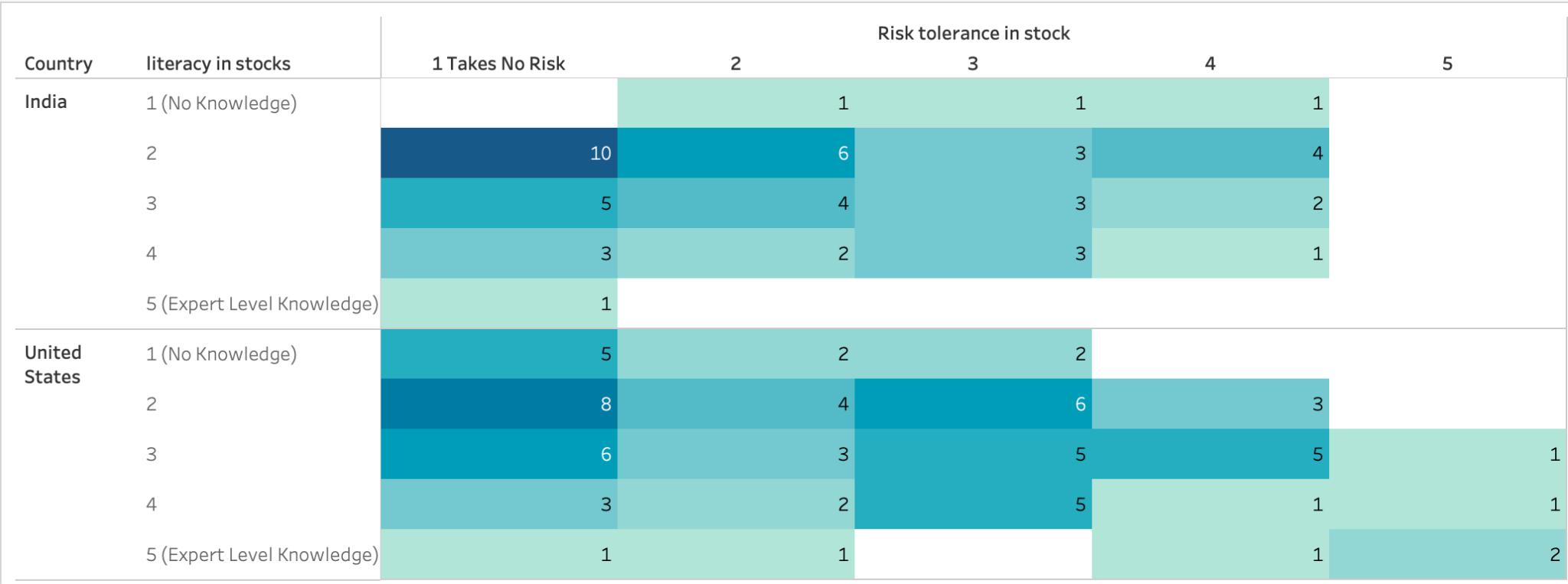
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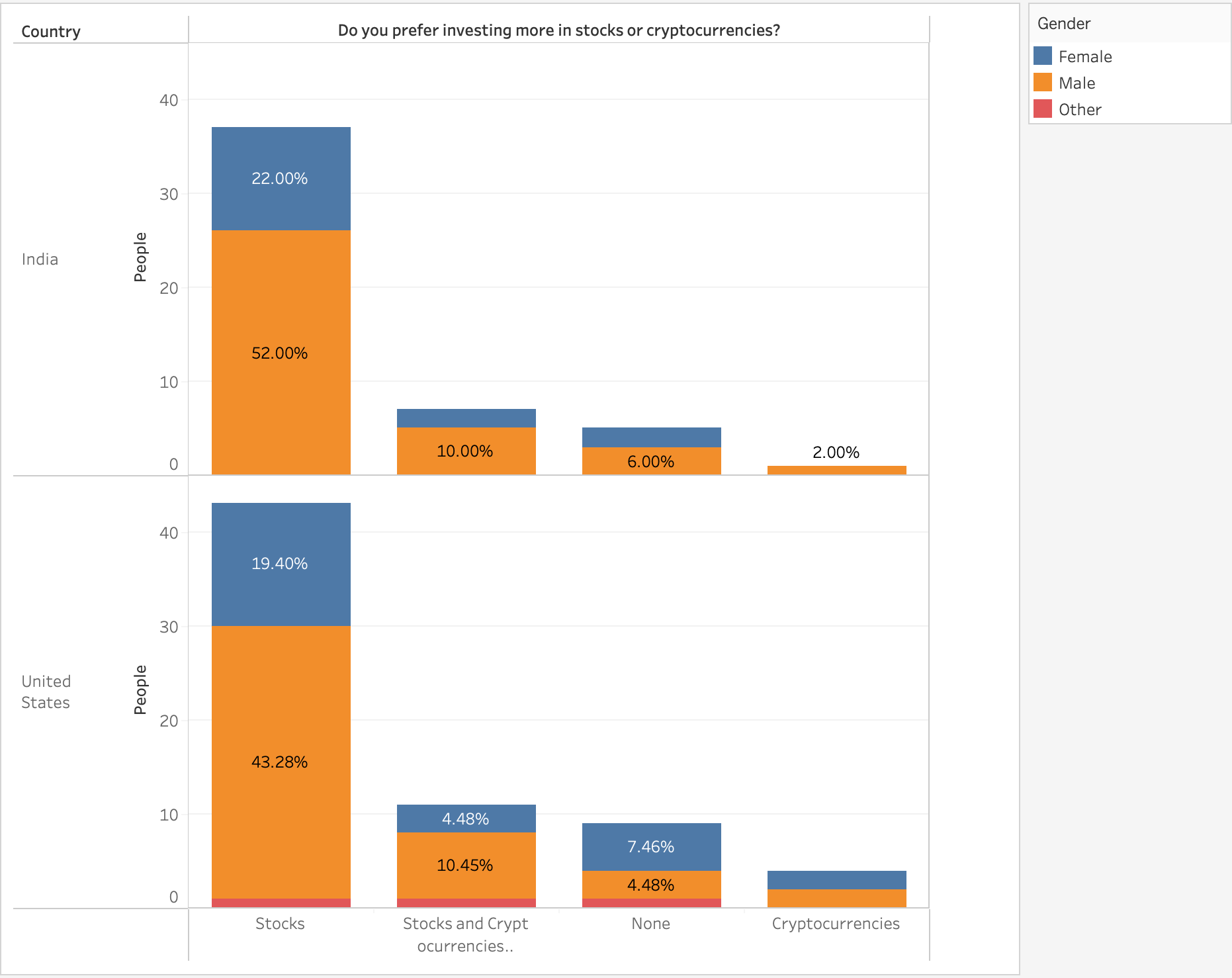
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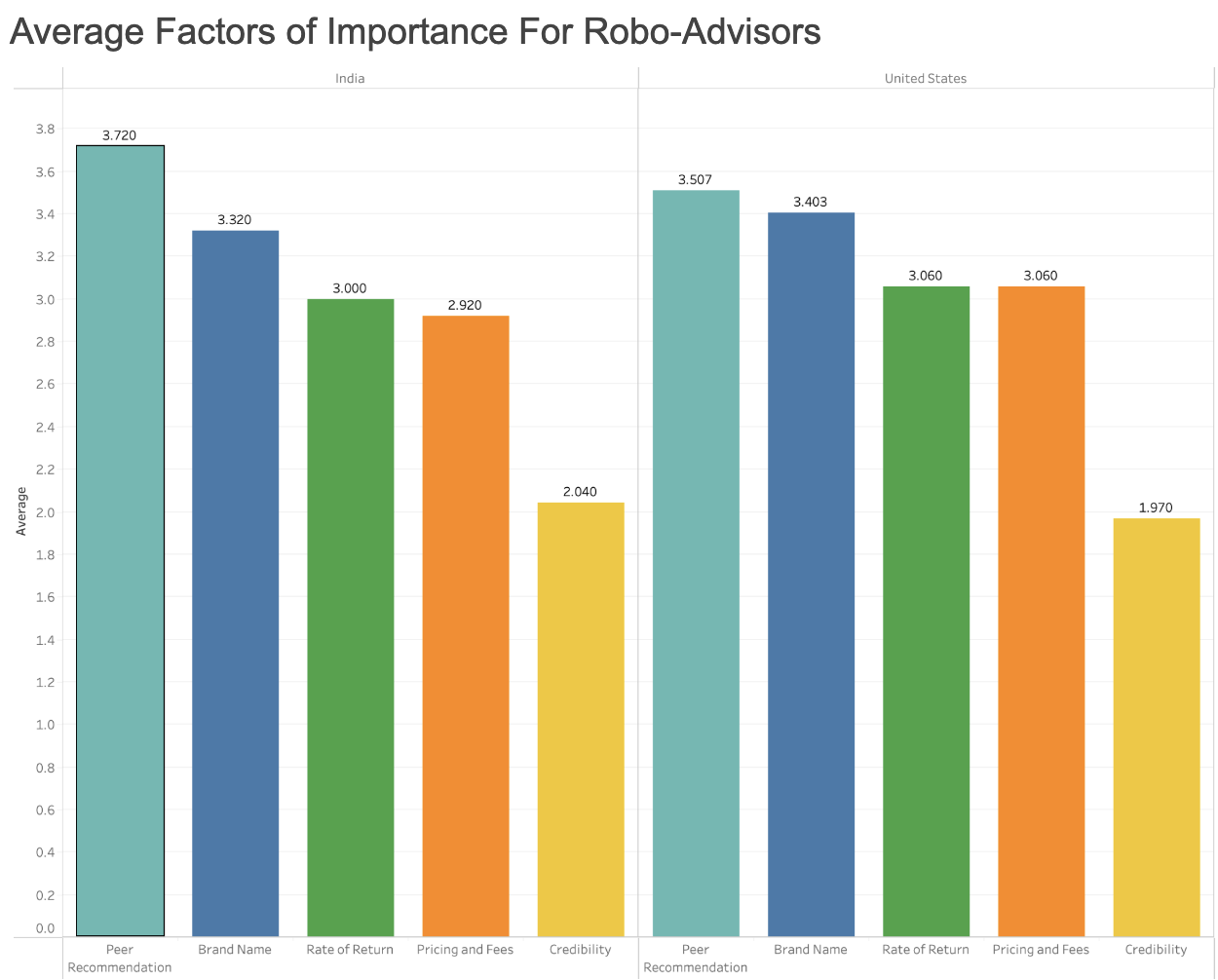
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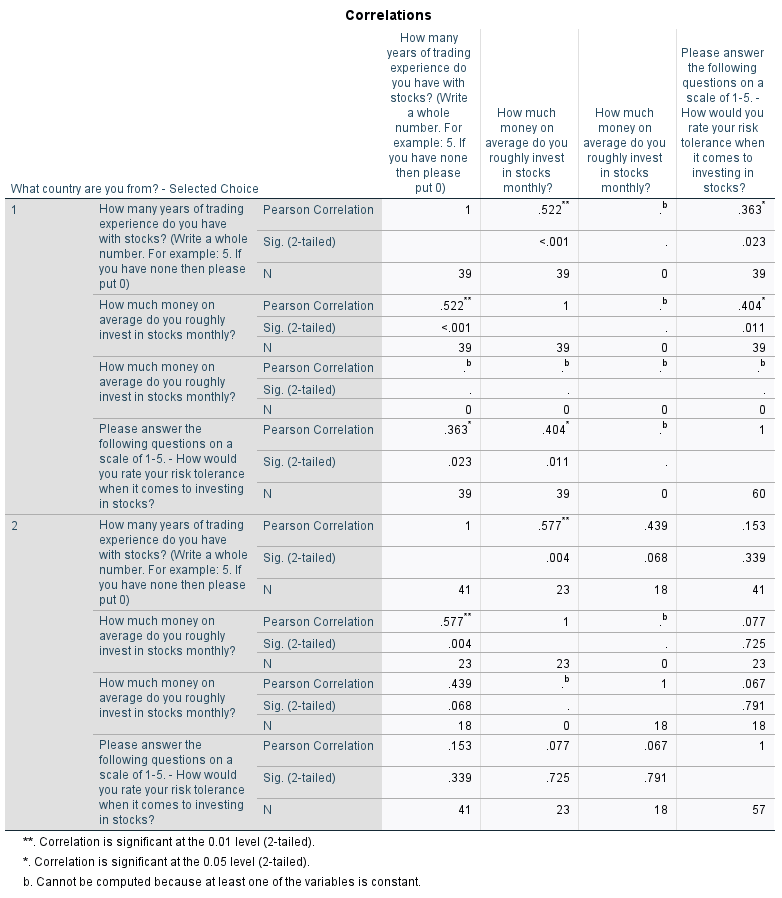
**Exhibit 7**

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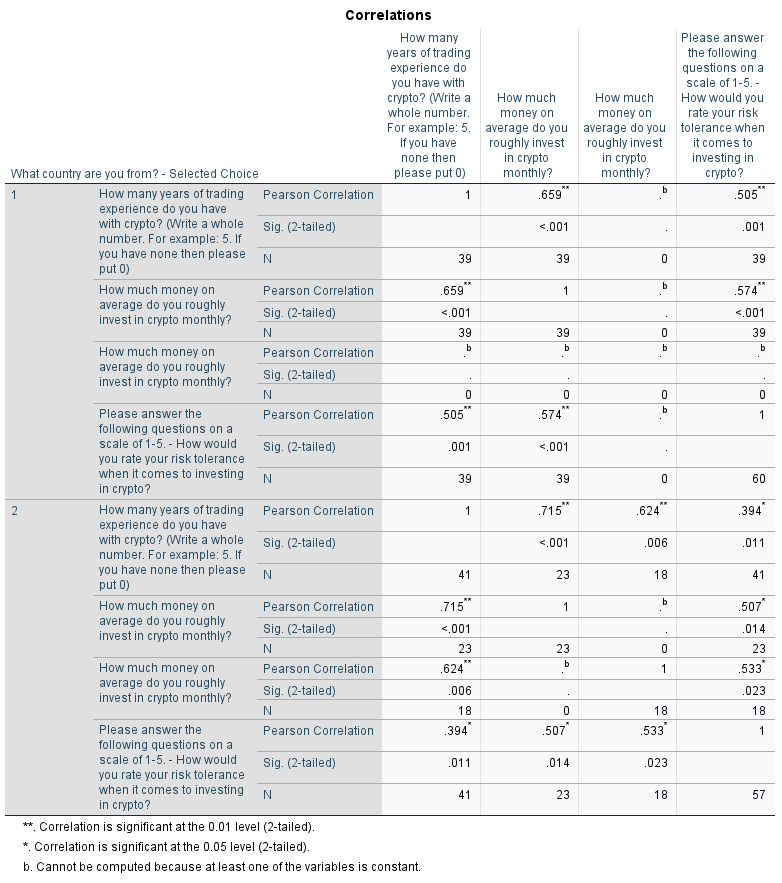
**Exhibit 8**  **Exhibit 9**



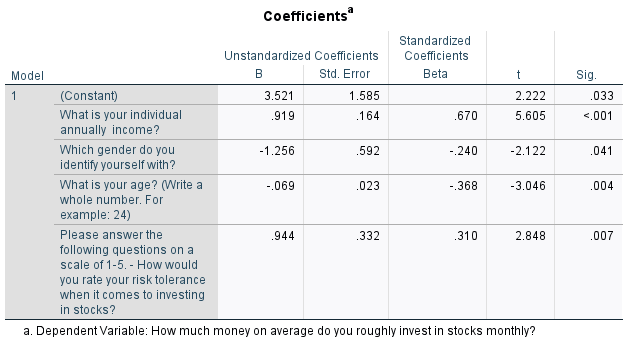
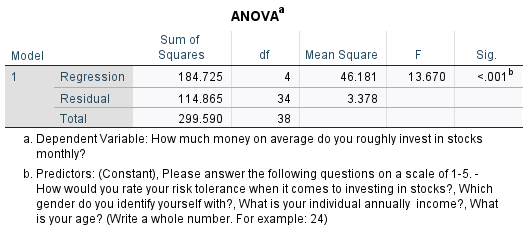
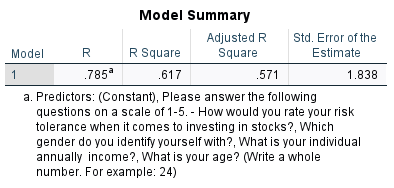
**Exhibit 10**



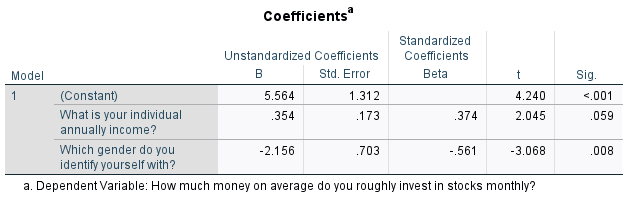
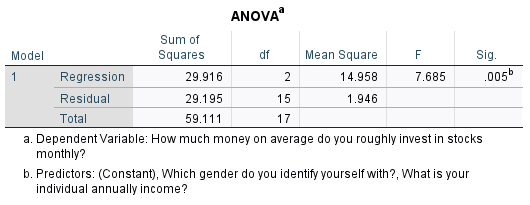
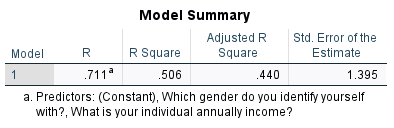
**Exhibit 11**



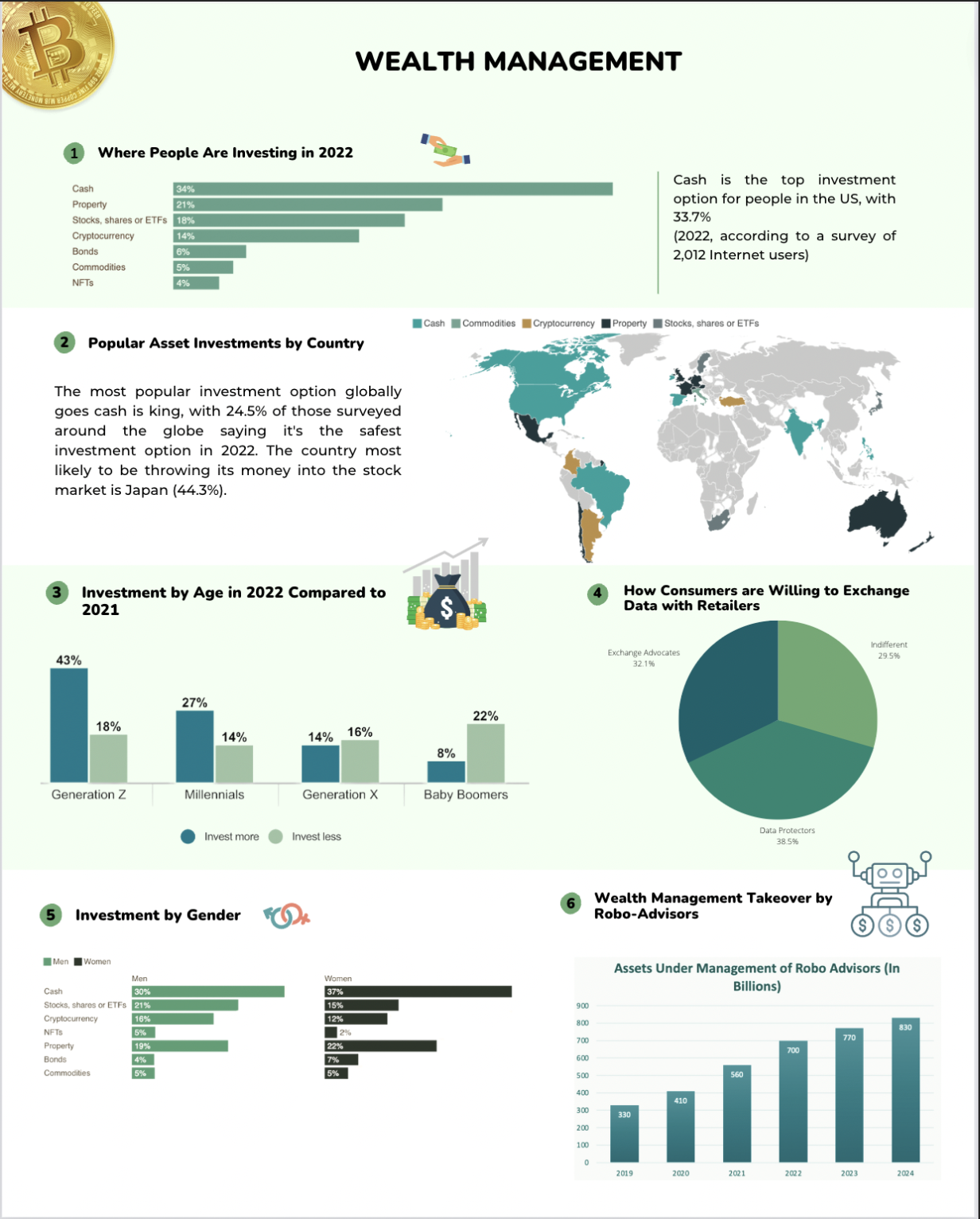
**Exhibit 12**



**Exhibit 13**



**Exhibit 14**



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