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Theme: Behavioral finance implications on investment decision making and financial education importance

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Abstract

As individuals, we make certain decisions each day. Some of these decisions are good, but not all of them. The future is uncertain. When making forecasts about the future in investment projects, risk analysis should be done, projects with maximum return minimum risk should be selected, and risk limits should be determined according to possible deviations in estimates. Otherwise, a wrong choice brings together both economic losses and significant losses.

In my thesis, I am concerned about how human instinct and education level affects its financial freedom and decisions. I want to touch specific topics of behavioral finance, stock markets, and historical events, education, and financial literacy. Also, my thesis is debated on the economy and the impact of financially literate people.

In this study, I will try to measure the impact of education level and mental awareness of society on this issue.

Contents

Introduction 6
Chapter 1: Behavioral finance 7
Biases 9
Framing effects 12
Heuristics 18
Chapter 2: Stock markets and historical events 23
The crash of 1929: 24
The crash of October 1987: 24
The Asian crash: 25
Dot-Com bubble: 26
Cryptocurrency 28
Chapter 3: Education and financial literacy 29
Characteristics of Financial Literacy 30
The Importance of Financial Literacy 32
The Importance of Financial Literacy for the Individual 34
The Importance of Financial Literacy for the Financial System and Economy 35
The Importance of Financial Literacy for Society 37
Chapter 4: Financial attitude 37
Financial behavior 38
Financial information 39
Financial literacy requirements 40
The importance of financial education 42
Chapter 5: Benefits of financial education 42
Individual Contribution: 43
Financial Education Programs in the World 44
Financial Stability and Financial Stability Contribution: 46
Contribution to All Economy and Social Well-being: 47
Conclusion 48
Bibliography 48

Introduction

We live in a world where globalization is in our lives and businesses are a vital part of it. In the modern era, businesses help the globalization and economy to develop and to help the lives of people. So as always, I would like to talk generally then go to a specific part and explain that part in several dimensions and communicate the reader my points and statements.

The first question we must give ourselves is what is a business what its goal and mission are?

My answer to that is business a particular entity or organization which is involved in commercial, professional and industrial activities. Its primary mission is to earn profit and to survive in the market, and the mission is about to develop the company. As we know, each company has its own business goals and objectives, and they have written a strategic plan in advance. An organization has different types of structures and so on. The part I would like to talk about is the Finance department and how behavioral finance affects the managers in our daily life?

Finance department

It is a part of an organization which manages a company's own money. Finance department business functions include planning, organizing, auditing, accounting for and keeping the control of the company's resources. Also, in this department financial statements are made and published to the higher-level managers in the company. After having a little bit understanding of the finance department of a company I think now we are ready to explain what is behavioral finance? How it affects the workers and company? Looking back to history and checking some examples and doing surveys to confirm that is it really true or just scientific stuff.

Why did I choose this topic?

Firstly, it is related to my profession which is finance.

Secondly, it is a topic which my university UNEC and BIMB Montpellier can accept because it is a financial and managerial topic.

Thirdly it is a modern topic; what I mean it only started to research before two decades ago, not like other topics which are over a century.

Finally, I think everybody in his life will need to make a decision-making process in business or his daily life, and to me it seems crucial to be aware of what we do, cause if we don't understand what we are doing exactly or the reasons behind it we won't be able to succeed or probably will face some failures in our life. Sometimes we make some sound decisions, but we face some unfortunate event that we couldn't have anticipated. Other times we make bad decisions, that we can't avoid the losses and suffers. I think the wisdom here is we must recognize circumstances which lead to unfortunate and poor decisions and as a result of we should decrease stupid or careless mistakes.

Chapter 1: Behavioral finance

Behavioral finance tries to understand and show how some errors in our thinking affects our reasoning and financial decisions. The leading research made in this field is mostly made from or stems from cognitive psychology, which shows how people or financial managers think, reason and makes decisions. Errors in reasoning are often named as cognitive errors.

Now I would like to review our three main topics which cause these errors:

1) Biases

2) Framing effects

3) Heuristics

Before that, I would like to mention how it emerged.

One of the most thought-provoking and published articles on finance literature in recent years is behavioral finance. This popularity arises from that it is also a pleasurable research area and a more realistic approach to financial theories that have remained a bit utopian until this time.

What is this behavioral finance? Behavioral finance is an approach that suggests that market participants are influenced by psychological and sociological factors when making decisions under the conditions of risk and uncertainty as I understand from this short description, behavioral finance, economics, finance, mathematics and so on. It is an interdisciplinary field with a broader spectrum than the traditional models that benefit from disciplines as well as psychology, sociology and even neurology.

According to behavioral finance theories, contrary to modern portfolio theory, market participants are not entirely rational. Everyone can make mistakes with several cognitive defects and a number of mental shortcuts that do not comply with the rationale and cause of these defects. Investors are also affected by these flaws when they make their decision. I will also touch on this topic later in the article. Now I want to talk a little about the emergence of theory.

The behavioral theory was first introduced by Princeton academics Daniel Kahneman and Amos Tversky. The differences between these two academics were not related to the content of the theory they had just revealed, for both were academicians whose primary field of research was psychology but also interested in areas such as economics and finance. "Prospect Theory: An Analysis of Decision under Risk" has produced one

of the most essential pieces of finance literature over time. In 2002, Daniel Kahneman won the Nobel Prize in economics.

In modern portfolio theory, the individual was rational in deciding under specific risk and uncertainty conditions and aimed at "maximum return at the lowest risk level."

Biases

If our decision making makes systematic biases, then we will make systematic errors in our judgment. The type of error depends on the bias. I want to discuss three relevant biases which are essential:

1) Overconfidence
2) Over-optimism
3) Confirmation bias

Overconfidence

Well, I think all of us has the thing, even the survey shows. There has been a survey which the question is about to do you think of yourself as a better than average driver? (Be honest). If you do, you aren't alone. Approximately 80 percent of the world population who are asked this question will say yes. Obviously, we humans overestimate our abilities. In my case when now I am writing a little bit later because I overestimated my ability and with sleeping less I hope I can close the gap. Another example if I would ask myself and my friends that which grade we'll receive in this course, most people will say A or B at worst, in France more than which is between 14-20.

In general, we are overconfident when we overestimate our ability to make the right decision or correct choice. For instance, most businesses' decision-making demand judgments about the unknown future. The belief that we can anticipate the future exactly is a prevalent form of overconfidence.

Another useful example would be from overconfidence that comes from investors in stocks. Researchers have investigated a large number of actual brokerage accounts to see how the investors perform when they select stocks. Overconfidence of investors caused them to overestimate their ability to choose the best stocks, which lead to excessive trading. The facts support our view. First of all, investors hurt themselves because of overtrading. Accounts which overtraded significantly underperform in comparison to accounts which traded less, mainly because of the costs associated with trades.

There is a second finding which is unusual — accounts which are registered to men underperformed in comparison to accounts which are registered to women. The main reason is that men trade more on average. This overtrading is logical with the evidence from psychology that men have more degrees of overconfidence than women.

Over-optimism

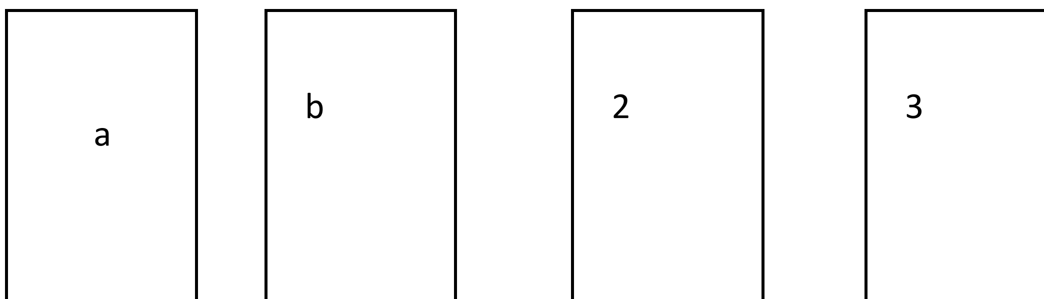
It leads to overestimating the probability of a good result and underestimating the likelihood of an adverse outcome. Over-optimism and overconfidence are relative, though they aren't the identical thing. Overconfident people could anticipate a lousy result; however, it is not the case with overoptimistic people.

When we talk about optimism, it is usually referred to as a good thing. Optimistic people are generally thought as cheerful structure. Though very high optimism cause to bad decision making. From a capital budgeting perspective, excessively optimistic investors will consistently overestimate cash flows and underestimate the likelihood of loss. Thinking like this causes to upward-biased forecasts of project's NPVs, as it frequently happens in the business world.

Confirmation bias

When we are evaluating a decision, we gather all the possible information and opinions. A widespread bias, in this case, is to focus more on the information that agrees with our opinion and make it less critical or pay no attention to the information that doesn't match with or back up our position. This situation is known as confirmation bias, and some people suffer from this because they try to prove themselves correct instead of searching for information that could prove them wrong.

Here I would like to give a classic example from psychology. Below we have four cards. You must be aware that the cards are labeled as a, b, 2 and 3. I will ask you to evaluate the following statement. "Any card with a vowel on one side has an even number on the other side." Now I am asking you to which cards should be turned over to provide if the statement is true or not. Imagine it costs 100$ to turn a card, so you are careful and want to be as economical as possible. What would you do?



Probably you would start by turning over the card which has an “a” on it, which is correct. If you find an odd number, then it is over because the statement isn’t true.

Imagine you find an even number. Now what? Most people will turn over the card with a “2”. Is it the right choice? If you find a vowel, then we confirm the statement, but if you find a consonant, we learn nothing. In other words, this card can’t prove that our statement is wrong, it could only confirm it so selecting this card would be an example of confirmation bias.

If we continue, there would be no point in turning over the card which is labeled "b," cause the statement doesn't talk about consonants, which leaves us with the last card.

Should we turn it over? Answer to this question is yes because it might have a vowel on the other side, which would disprove the statement, though most people will choose two cards over the three cards, cause after hearing this fact their opinions are blurred.

Framing effects

We are influenced by framing effects if our decision depends on how a problem or question is framed. Let's think of an example: A disaster has occurred; 600 people are at risk, and we are in charge. We must choose between the two options available:

Scenario 1:

Option A: Exactly 200 people will be saved.

Option B: There is a 1/3 chance that all people will be saved and 2/3 chance that no one will be saved.

Which we would choose? There is no correct answer to this question, but most people would choose option A. Now let's think of a new scenario:

Scenario 2:

Option A: Exactly 400 people will die.

Option B: There is a 1/3 chance that nobody will die and a 2/3 chance that all 600 will die.

Now which choice we would choose? Again, there is no necessary, correct answer to this question, but most people would choose option D.

Even though a lot of people chose A and D options in our hypothetical question, we would probably see that doing this is contradictory cause A and C options are similar in every detail, like B and D options. Why did people choose contradictory options? The main reason for this is choices or options are differently framed. Our first scenario

is favorable cause it talks about the number of people that will be saved. However, in our second scenario, it is negative cause it focuses on losses and people differently react to positives and negatives in their mind which is a condition of frame dependence.

Loss Aversion

Here let's talk about another example that describes a particular frame:

Scenario 1: Suppose I give you 1000$. You have the following options:

Option A: You can receive another 500$ for sure.

Option B: You can flip a coin. If the head comes up you get another 1000$, if tails come up to you, you get nothing.

Scenario 2: Suppose I give you 2000$. You have the following options:

Option C: You can lose 500$ for sure.

Option D: You can flip a coin. If the heads come up, you lose 1000$, but if the tails come up, you lose nothing.

What are your answers? Did you select option A in our first scenario and option D in the second? If you chose them, then you are doing wrong only focusing on gains and losses and not bother about what is happening; in fact, it is just an impact on your wealth. However, you aren't alone, approximately 85 percent of people who goes through in the first option choose option A and approximately 70 percent of the people who go through choose option D.

If we look closely at both scenarios, we will see that they are, actually, the same. We finish with 1500$ for sure if we choose A and C option, or we finish with a 50-50 chance of either 1000$ or 2000$ if we choose B and D option. In the end, we should

choose both options which are the same in different scenarios, cause if we don't it doesn't make any sense and we will suffer more than enough.

The example I talked about actually describes an essential perspective of financial decision making. Paying attention to the losses and gains, in place of total wealth is an example of narrow framing, and it guides you to a situation which is loss aversion. Actually, the main reason that most people stay away from option C in scenario 2 is that it is described as a 100% loss of 500$. Generally, it is researched that individuals are unwilling to realize losses and will gamble even though the odds are against them.

This situation loss aversion is also recognized as get-evenitus and break-even effect because it mostly demonstrates that individuals and the companies persist to bad projects or investments (maybe invest a lot more) expecting that something will happen and it will allow them to break even, even escape without a loss on the investment. For instance, the irrelevancy of sunk cost in capital budgeting context and the idea of sunk cost looks pretty clear to everyone. Again, we observe companies always spending the right amount of money after bad investment instead of recognizing the loss concerning sunk costs.

The most famous case about this situation happened in 1995, and a 28-year-old Nicholas Leeson is the reason for the collapse of the company,233-year-old Barings bank. In 1992 at the end of the period, Mr. Leeson had lost approximately €2 million, which he kept secret this in his account. At the end of 1993, the losses were approximately €23 million, and they spread in the following year to €208 million at the end of the year. (which was about 512 million $)

Instead of admitting his mistakes and losses, this person Mr. Leeson gambled a massive amount of the money in the bank as an initiative to catch up to the losses. In 1995 on 23 February he had an €827 million (1.3 billion $) amount of losses, and his unbalanced trading was discovered.

Though he attempted to run away from prosecution, he was caught, arrested and imprisoned.

Now let’s think if we suffer from get-evenitus. Let’s think about a scenario: I just lost 68$ dollars in some way. I can live with the loss or make a bet to get my money back. If I make this bet, there is an 80 percent chance that I will lose and the amount of loss will be 90$, but if I win by 20 percent, my loss will be 0. Should I take the bet or bear the loss? Let's think I take the bet. If I do, then I have get-evenitus cause this bet is a bad one. Cause I have a sure loss of 68$, but expected loss from the bet is 0.8x90$+0.2x0$=72$. If we compare, the expected loss is more significant than our initial loss.

Loss aversion can be quite harmful in corporate finance. I already mentioned about the pursuit of sunk costs. In real life, we can see that managers skip positive NPV projects, because there is a possibility of significant losses (possibly with low probability). There is another situation which debt-avoidance is. We know from some countries that debt financing creates valuable tax shields in terms of profitable companies. Nevertheless, hundreds of profitable companies which are listed on major stock exchanges entirely avoid debt financing. Because the probability of losses and even bankruptcy are increasing because of debt financing, this potential creates a loss aversion behavior even in some managers.

House money:

Now I would like to mention about a concept which is called house money. In Las Vegas, all casinos know about playing with house money concept. Casinos know that gamblers will gamble more with the money that is earned from the casino (house money) and take more risks.
Besides, casinos detected that gamblers aren't sad about losing house money in comparison to the money which they brought with them to gamble.

It is actually natural for us, because the money we brought we worked hard for it, and it is precious to us. On the other hand, other money that we earned from gamble is less precious, because it came to us a windfall. However, these feelings are entirely irrational and absurd, because any dollar we have buys the same amount of something. It doesn't matter how we obtained the dollar.

Let’s think about another general situation which describes some of these ideas we have studied thus far.

Investment A: We bought 50 shares in company A at a price of 45$ per share. The share price immediately decreased to 25$.

Investment B: At the same time, we bought 50 shares in company B at a price of 10$ per share. The share price immediately increased to 30$.

How would we feel about our investments and decisions?

We would be happy about investment 2 and probably feel upset with investment 1. Let’s consider several cases that will affect us.

1) I may think that my investment in company B was a great idea and I am a brilliant stock-picking genius. The decrease in the share prices of company A wasn't my fault; it was probably just a piece of bad luck. It is a form of confirmation bias, and it describes self-attribution bias too, which means that we take credit for good results and we can control the situation, however in case of bad results we think it is just a piece of bad luck or misfortune and we can't do anything about it.
2) I might be sad about my investment in company B is nullified by investment in company A, but I should be aware of that my overall wealth hasn't changed. If there was no change in the investments during this period, would I feel sad about it like now? I mean if I am in the same position in both why I feel sad about the first event, even though nothing happening is also the same.

3) I might want to realize my gains from company B and hang on to my investment in company A in the hope that they will recover eventually. I am hoping to avoid the loss which is loss aversion of course. Selling winner shares and holding the loser shares is a tendency and it is called a disposition effect. Frankly speaking, the logical thing to do is to determine if the stocks are attractive investment or not, according to their new prices and consider the event in the market.

Now let's think I am trying to keep both stocks in my portfolio a little longer. After doing this, both of them declines to 20$ per share on both investments. Now I might feel a little bit different about investments according to their prices, depending on the stock I choose. Investment A is already at more than 50 percent drop, so I am in a bad situation. With investment B I feel way better than with investment A because I only lose some profit, I am not in the loss. This kind of thinking is dangerous, because we think we are still way ahead with house money. It doesn't matter if I lose from my gains or my investment a loss is a loss and recognizing it in this way is more rational.

This example shows us a real-life situation when investors feel emotional about their stock purchases in real life. When we add a new stock to our portfolio, it is psychological that we compare the stock price with its initial purchase price. As time passes the price of stock changes and we will have unrealized losses or gains when we compare the current with initial investment price. Through some period, we will mentally think about these losses and gains and how we will feel depends upon where we are, are we winning or losing? This behavior is also known as mental accounting.

When we are faced with mental accounting, we are unwittingly having a special relationship with our stocks. Consequently, it is harder for us to sell one of the stocks in our portfolio. It is as to break up or fire it from our portfolio. As personal relationships in human life, these relations with stocks make things complicated and believe it or not it makes it harder for us to sell our stocks. So, what can we do about this mental accounting phenomenon? Legendary investor Warren Buffet has a

suggestion about this problem: "The stock doesn't know you own it. You have feelings about it, but it has no feelings about you. The stock doesn't know what you have paid. People should not get emotionally involved in their stocks."

House money, mental accounting, and loss aversion effects are significant examples of how limited framing cause to poor decision making. There are other related kinds of judgment errors which I want to mention:

Myopic loss aversion: It is a tendency that focuses on the behavior of people. People avoid long term gains for the cost of short term loans. For instance, we might fail to invest in an investment for long term benefits, because we have a fear of loss in the short term.

Regret aversion: It is a phenomenon that we are afraid of making decisions because we think after making the decision we can miss something while in the decision process, therefore, we can lose. This situation regrets aversion is also relevant to myopic loss aversion.

Endowment effect: It is a situation that we consider if we don't own something I mean after selling its price will go up. Therefore, some people demand more money on sales even though they wouldn't pay that amount.

Heuristics

Managers in general and financial managers often believe in rules of thumb or heuristics in the decision-making process. It is like shortcuts to making a decision. For instance, some managers can decide that a project with a payback period of fewer than three years is acceptable and therefore they won't bother with additional analysis. From the practical side, these mental shortcuts may be excellent for many conditions or circumstances; however, it is apparent that eventually, this will cause of acceptance of a bad NPV project.

Affect heuristic

When we watch television or read the news, we see that business and politics people talk about following their instinct. In principle, this type of people makes decisions on the base of their emotions because it feels right. Psychologists describe this term affect or affection to explain emotional feelings and the trust on instinct is described as the affect heuristic.

It is trusting on the instinct mainly related to confidence in intuition or experience. Both of these concepts intuition and experience are vital and essential; if used correctly it helps the people in the process of decision making to recognize and select potential rewards and risks. But intuition, experience, and instinct must be viewed as complementary to analysis, not as a substitute. Excessive trust in emotions while making decisions will pretty much certainly cause (at least sometimes) to costly consequences that could have been prevented by careful and structured thinking. An obvious example would be the capital budget decision-making process based on instinct, instead of market research and cash flow analysis of the project.

The representative's heuristic

People frequently think that a specific object, person or result is widely representative of a larger class. For instance, let's think an employer hired someone who is a graduate of your high-quality educational institution and honestly, he is quite pleased with the employee. The employer may think that to look to your university again for the next employee vacations because the previous worker was excellent and it means that the next ones will also be quite good. Indeed, by doing this, the employer thinks the previous worker is representative of all the next workers, which is a case of the representativeness heuristic. If we go further deep down, this phenomenon representativeness heuristic is based on reliance on analogies, stereotypes or limited samples for forming an idea about overall class.

Representativeness and randomness

Different conclusion of the representativeness heuristic is about understanding causes or patterns where there is none of these. For instance, in a study, it was researched about basketball games. Basketball fans, in general, believe that success brings success. Let's imagine we look at the latest performance of some basketball players. Let's name it as player X and player Y. These players make half of their shots. But player A has just made two consecutive shots in a row, while player Y has just missed two in a row. The research shows that if we ask 100 basketball fans which player the better chance in terms of has made the next shot, 90 percent will say player A because he has a hot hand. 84 percent of fans believe that it is vital for teammates to pass the ball to player A after he has achieved three or two shots in a row.

However, and the sports fans will have a hard time with the research because the hot hand is an illusion according to the researchers. That means player really doesn't deviate much from their long-term shooting averages, although it may not seem to fans, coaches, spikers, and even the players.

Basketball players shoot in streaks that is true, but these streaks are within the range of long-run shooting streak percentages. Players are either hot or cold is just an illusion, and if there are some who believe in the hot hand, they will most likely reject this because they think they know better from watching their favorite teams. It shows they are being deceived by randomness.

Humans believe that random events that happen in clusters aren't really random which is an example of clustering illusion. For instance, let's take a coin as an example. The coin has two faces which are head and tail. Let's suppose that four times in a row tail come up and we think that it isn't a random event but considering the probability of 50/50 percent it is a possible event in terms of flipping 20 times. In this case, should we consider this event of coming tails like a hot head or is it just random?

Gambler’s fallacy

A lot of people act according to gambler's fallacy when they think that a deviation from what is happening on average or in the long period, will be corrected in a short period. The interesting point is that some people suffer from both events: hot hand illusion (which estimates continuance in the short period) and the gambler's fallacy (which estimates reversal in the long period). The main idea is here that because a situation hasn't occurred recently, it has happened too much that and it will more likely happen. Occasionally most people wrongly refer to the law averages in these kinds of events.

Roulette is a casino game, and it is a casual gambling game where players can make bets on the spin of a wheel. In American roulette there 38 numbers on the wheel which consists of 2 greens, 18 black, and 18 red numbered space. One of the possible bets is that the spin will end on a red or black number. Let's think that the black one has appeared four times in a row. Most of the players will be confident that the next spin will be red; meanwhile, the real chance is the same 50 to 50 percent (18 in 38).

This wrong understanding is actually coming from human intuition that the total odds of the wheel should be considered in a small number of spins. Players frequently believe that the wheel is expected to hit a red number after a series of black numbers. Players also know about the probability of black and red numbers appearing that it never changes: 18 in 38. However, players can’t change the feeling that after a series of black numbers, a red one must happen in order to restore the balance between black and red numbers over the period.

After talking about this kind of errors now, I would like to mention a few of them in order to finish this concept:

Law of small numbers: If we believe in the law of small numbers, we might believe that a small pattern of conclusions will always resemble the long-term distribution of consequences. If our portfolio manager has been correct seven times out of 10, we might believe that in the long run his outcomes or consequences of his portfolio choice

will be like this. This law of small numbers is relative to recency bias(below) and the gambler's fallacy.

Recency bias: People give importance to the latest events in comparison to less recent events. For instance, in the considerable bull market period, which happened from 1995 to 1999, plenty of investors guessed that market would continue to give its big profits for an extended period, but they failed to remember that the bear markets also happen which was between 2000 and 2002. As mentioned above this bias is relative to the law of small numbers.

Anchoring and adjustment: In this situation, it means that we give more importance to previous information that we have in mind and therefore we can't accept the new information which contradicts the old one. For example, let's say a manager believes or has an opinion about a particular investment and thinks that this investment will bring a lot of money. Therefore, if there is bad news about this project, he will likely to ignore the facts which contradict his thoughts. It is a dangerous process if we check because it affects our judgment and therefore we become blurred or blind of our thought.

Aversion to ambiguity: This situation results from unknown. There is a famous example about it: Let's say there are some options we give you: First you can get 1000$ money for sure or in the second option you will get 2000$ for drawing a blue ball from a sack which consists of 100 balls. In this situation, people most likely take the money and go away. However, if we tell that 50 balls are red and 50 balls are blue, then their opinion changes and some try the second option. We need to be careful and not to confuse this theory with risk aversion. Because in risk aversion we know about the probabilities of an event, but in this situation, it is unknown. The problem in this situation people are afraid because they don't know probabilities, even though odds may be in their favor.

False consensus: In this situation, we think that what we think is the same as other. For example, let's say a group of managers are in a decision-making process and they are trying to implement a strategy. When they decide the result, they think that their choice is the same with the market, customers and other, etc. so therefore they overestimate their abilities, and it results in a wrong way.

Availability bias: In this situation managers may be considered careless. Because some managers put too much weight on a piece of information which is readily available and forgetting put weight on the information which is hard to get. In real life situations, companies try to get a piece of balanced information (easy and hard), because in this way they will manage the decisions much better. I want to give a personal example: When I chose to rent, I got all the accessible information and rushed to rent the house. However, after some time I suffered from my decision because I haven't evaluated all the information correctly. Therefore, availability bias plays an integral part in the decision making the process.

All the information about bias, heuristics, and framing I think is enough to go to the next part of my research paper. After having an understanding of this type of situations and notions, I think it is time to look back on some events and check the validity of these ideas.

Chapter 2: Stock markets and historical events

Now I would like to talk about how behavioral financing affects the stock markets?

Bubbles and crashes to this question could be considered as a valid proof. First of all, I would like to define them then look to the back. A stock market bubble is a type of economic bubble, and this situation happens when market participants cause stock prices to increase above their current value in comparison to their real value which is determined by several factors. However, a crash is a sudden decline in the price of stocks. Usually, a crash happens the bubble afterward because everybody understands the bubble and suddenly current value goes down. Usually, a bubble lasts longer than

a crash. It can be weeks, months or even years. Crash on the other side are sudden and mostly lasts less than a week. However, the consequences of the crash are severe and disastrous, and its results can last for several years.

The crash of 1929:

In 1929, the crisis in the United States, particularly in New York, and then in the aftermath of the collapse of other major stock exchanges, leaped into the industrial, service and agricultural sectors and deeply affected the whole world, The Great Depression is called the Great Depression because the vast majority of the world's industrialized countries, more than 50 million people are left unemployed, world production is reduced by 40%, world trade is reduced by 70%, and the effects continue until the Second World War.

Since the beginning of the 1900s, the US economy, which entered a rapid growth trend, achieved significant savings in the country as it exported significant amounts, especially industrial goods, with the figures of that period. These saving savings provided credits to European countries and other countries that were severely destroyed after World War I. In the industrial sector, significant advances in the development sectors such as automotive, machinery and electricity were the most significant advances in the 1920s. As a result of speculative demand for emerging industries, the US stock market, especially the New York Stock Exchange, was experiencing rapid rises. Smaller capital owners, banks and speculators who want to earn from the ascension have begun to recall loans they have opened to European countries. Thus, it would be possible to invest more funds in the markets, to earn more money from the rise. The effect was small, in 2008 there was a balloon observed in the small 1928 Florida real estate market that resembled a balloon in the US housing market.

The crash of October 1987:

Program trading, which has been widely used in capital market transactions with the development of technology, is among the most important reasons. Program trading;

Large and small funders are computer programs that have the ability to buy or sell automatically for over-intensive transactions in the stock market. In the sudden surge in the stock market, portfolio owners participate in massive sales waves in order to protect their portfolio and thus try to minimize their losses. Along with the strong sales wave that was experienced with the program trading, very steep declines occurred in the world stock exchanges during days.

Excessive appreciation of securities traded in the market through speculative movements and the formation of speculative bubbles lay the groundwork for the 1987 crisis.

With the record-level rises in the markets, the adverse developments in the economy and the psychological weather created by disproportionate stock market rallies, as well as the negative expectations of investors in the US and European markets, shortly after the crisis, the central bank intervened in the US by rapidly reducing short-term interest rates to prevent a possible major crisis. Thus, the economy tries to prevent a recession or a bank crisis. As a result of these efforts, the financial markets that started to recover remarkably soon began to recover. In addition, in the post-crisis period, the recovery did not last very long as companies took back their own stocks at rapidly falling markets.

The Asian crash:

The main characteristics of Asian countries are that they are rapidly growing economies with open foreign policy monitoring. These countries affected by the crisis are countries that showed significant improvements in terms of economic performance, reached high growth rates and solved their macroeconomic problems. The Asian crisis has emerged in Indonesia, Malaysia, Philippines, Singapore, and Thailand, which have achieved great economic success such as average annual GDP growth of 8% in the last decade and are known as ASEAN-5. National income per capita in the last 30 years has increased ten times in Korea, five times in Thailand and four times in Malaysia.

Moreover, in Hong Kong and Singapore, per capita income figures have left many industrialized countries behind. Until the crisis, the region had attracted about half of the foreign capital flowing into developing countries and doubled its share in world trade. The common question of all is how these countries are crushed by the rapid and balanced growth path.

The crisis, which began on July 1997 (devaluation of the national currency linked to the US dollar) by devaluation of 40% of Thai Baht, affected Malaysia, Indonesia, and the Philippines with a domino effect, Malaysian and Indonesian money also depreciated as the outflow of money abroad increased significantly. The crisis that shook Singapore and Hong Kong was also finally threatening the entire Asia Pacific and thus the world economy, including South Korea, which was also affected by the excessive borrowing of the private sector.

Dot-Com bubble:

In fact, as the balloon began to inflate, there was not even internet yet. Everyone was talking about an "information society." But the fact that the developments were highly encouraging, the increase in the value given to the knowledge and the knowledge that could be achieved, evoked a century of aggression under the front.

In fact, the necessary motivation was the same as it was in the gold rush: People were flocking to a source where they thought they could be rich easily. Ironically, in both cases the target of the expedition was California.

Those "quadrillion-dollar" digital worlds that embraced the covers of all respected business and economic magazines from Forbes to Newsweek at that time were of great interest to both entrepreneurs and investors. The addition of internet on it has boosted the speed of all this tendency.

It's not so easy to give a full date for the balloon. Because March 10, 2000, the date on which the ball exploded in the form of a nightmare, was actually a result, and over time, it gradually began to burst with balloon swelling. Some people agree that the date

on which the balloon begins to swell was 1994 when Netscape's first scanner was removed. For others, the start date of the balloon was the introduction of TRA 97, which provided investor tax reduction in the US in 1997. While acknowledging that both are a factor, we must acknowledge that they are significant parts of the big picture, but we must acknowledge that not all problems are limited to them.

One major factor in the balloon swelling was the dreams of super-connected and super interactive smart devices that we have become slowly adapting to today, though big-time internet companies' memories of being on the stock market are one of them.

At that time, digital everything seemed to be a fortune for entrepreneurs and an opportunity not to be missed for small investors. The high interest of investors is that it has led to the illusion that almost every venture has a potential of millions of dollars on the first day, and corporate valuations have risen unrealistically.

Even worse, the landscape was so eye-catching that even experienced investors seem to have forgotten to make traditional investment appraisals. In this period when the cash flow is almost non-existent, even for very new companies, the prices of the shares have gone up to 40 percent on average, which should be reasonable. Despite this, investors' interest continued. At that time, the total value of nearly 400 internet companies traded on the stock exchange reached 1.3 trillion dollars, corresponding to 8 percent of the entire US stock market.

Eventually, the balloon exploded in a spectacular collapse on NASDAQ. Almost all the small companies were gone, and the big ones got intense bumps. For example, Cisco's share fell by 86 percent. Amazon's stocks fell from $ 107 to $ 7. This collapse caused companies, investors, to be dragged together.

The crash of 1929, the crash of October 1987, The Asian crash, the dot-com bubble and crash all have the same elements. People tried to get rich as quickly as much without researching about prices and hoping they will get a good profit from their investments. People are anchored, they are influenced by recency bias, they don't

understand the importance of availability bias and all these notions heuristics, framing affected their decision making and a lot of people have suffered from this. I want to focus on cryptocurrencies and bitcoin is the beginning of everything.

Cryptocurrency

Bitcoin is a digital currency, and its purpose is to decentralize the way of payment. A lot of countries are trying to implement this kind of technology to facilitate payment and worldwide operations. Such as ripple technology is applied to bank technology and so on. So bitcoin was created on 18 August 2008 by Satoshi Nakamoto, and he titled bitcoin as a peer to peer electronic cash system. In January 2009 bitcoin came to existence and can be sold or purchased by cash through our credit cards. What I want to talk about how people forget things and only concentrate on things which they are interested in.

The minimum price of bitcoin was 0.003$ in 2010 on March 17 which it started to trade.
Maximum price of bitcoin is 17900$ in 2017 on December 15 afterward it started to fall.
This year (in 2017) it had a minimum of 6200$ and maximum of 17462$ (for now March)

So, over time its price started to increase slowly, and the hype happened in 2017. A person like me from the beginning thought that should I invest or not? In December when the prices were increasing day by day, I bought a little share of bitcoin. In 2 weeks from the beginning of the month, everything was going fine. I made a right amount of unrealized profit for me. Though I didn't have any idea about behavioral finance during that time. Now I realize how carelessly I invested and I could have suffered. First of all, the situation in availability bias happened to me, and I didn't research a lot. I was just getting opinions some information which confirms my thoughts (anchoring) and I was ready to jump on the hype. I also didn't know about recency bias.

After buying shares of bitcoin, I had this over-optimism that bitcoin price would go up above 30000$ (I know it sounds crazy) and after two weeks of gains from this bitcoin I thought my gut is telling the truth, I am this genuine investor who knows how to do investing and so on.

I also had some feeling about it day by day selling the bitcoin was getting harder, because I was thinking I am selling earlier If I sell a little bit early, I could have lost my unrealized gains.

As you see it is essential to be aware of these kinds of situations and try to avoid feelings. Writing these sentences is straightforward or understanding the situation, but the important thing is to implement our knowledge of this topic in decision making; therefore, I think we need to have some rules for ourselves in order to be in control of our actions.

Chapter 3: Education and financial literacy

Changes in the economic processes are also essential and permanent changes in the behavior patterns of the individual in the aftermath of the society. Nowadays it has led to problems and worries in financial matters by the fact that on the one hand individuals have an increasingly negative expectation that they will manage their own financial situation and that the financial environment becomes increasingly complex. As a consumer, the individual develops new attitudes and behaviors due to diminishing expectations and growing anxieties. Individuals need appropriate financial planning and management for their own lifetime, such as achieving a good standard of living, multiplying their possessions, transferring them to a new generation, and providing economic security. Financial information and attitudes in the life of the individual are the basis for future behavior and the well-being of the good. Moreover, the financial problems experienced by individuals can create negative consequences. Being mature in financial terms means having financial knowledge and skills, which is a component of financial literacy. In other words, it is necessary to give direction to financial

attitudes and behaviors such as making informed choices, making budget planning, balancing expenditures, calculating the retirement and saving needs and having knowledge and skills in using financial resources.

Financial literacy, a successful financial management process in terms of individuals and securing the future from an economic perspective; determination of requests and needs, financing of resources, investment transformations are vital. Saving is defined as the difference between the income and the expenditure of the individual. It is a fact that individuals who do not consume their entire income can improve their standard of living after a while. Short and long in the financial management process savings obtained by saving according to financial futures can generate significant savings when added to existing economic resources. Studies on financial literacy are possible in many countries. However, various terms and definitions with the same content as the concept of financial literacy are used. For example; The United States, Australia, New Zealand, Brazil and so on. "Financial Literacy" is used in many countries while "Financial Capability" is used in Canada and the UK. In addition, the most frequently used and closest terms are "Financial Awareness" and "Financial Education."

Characteristics of Financial Literacy

The fact that an individual is a financial literate does not mean that the individual is an expert or a professional in finance. An individual who is a financial literate is the person who has financial knowledge and habits that are worthy of himself and his family. An individual who is a financial literate should not be expected to know the value of a stock or bond, at least it is enough to know what the stock is and what is the difference between the stock and the bond. In short, a financially literate person the knowledge, skills, attitudes, and behaviors that should have become as follows:

- They should manage their money well.
- Understand the functioning of the financial system.

- Make financial plans.
- Excellent communication with financial institutions and people

Financial literacy should not be restricted to the process of understanding and understanding, interpretation and decision-making; it should be considered as a process that covers the research of the information about the financial decisions of the individuals and the use of this acquired information in the way of evaluating and solving financial problems.

Financial literacy, financial products and concepts of financial consumers and investors information and guidance, or objective advice to better understand financial risks and opportunities, to make more informed choices, to know where to get help, and to do all other productive activities to increase financial welfare. This process

- Includes providing information that allows consumers to be aware of the situation, data, and financial opportunities, options, and results.
- Orientation involves ensuring that individuals acquire financial terms and concepts through the necessary skills and strength training and guidance to understand them.
- Providing advice on consumer financial issues and products, and the best way to assess the financial information and direction that they have. Hilgert and Hogarth have shared some of the common characteristics of financial literate individualism the following order:
- Financial literate is knowledgeable and educated. It has information on cash and asset management, banking, investment, credit, insurance, tax and so on.

•The literate financial plans for the future with the knowledge he has acquired and tries to apply his financial decisions in this direction.

- • Understands the basic concepts of financial literacy, cash and asset management.

The Importance of Financial Literacy

The proliferation of free market economies and the global crises that happened in recent years and left deep traces in the global economic system are increasing the diversity and complexity of financial market instruments. This increase in the diversity and complexity of financial market instruments makes it difficult to understand the financial products. Achieving financial awareness is of great importance in this environment. Studies conducted in recent years have shown that ensuring financial awareness can be achieved by increasing the level of financial literacy.

The changes that have led to an increase in the importance of financial literacy in recent years can be summarized as follows:

- Transformation of financial instruments into an increasingly complex structure
- Increased responsibilities of individuals in financial decisions
- Technological developments and innovations
- Changes in the pension system
- Demographic changes
- Consumers' faulty financial behaviors have an adverse financial literacy level effects
- Financial fraud

In addition to changing financial products, the demographic characteristics of individuals also vary. The standards of life for some people, the levels of their needs, changes cause individuals to increase their borrowing tendency while reducing their saving tendency. For example; every new generation wants to have fewer children than the number of children their families have. As a result, while the new generation is retiring, there will be fewer employees to support more pensioners. In the future, as the balance in the pension system will deteriorate, it is necessary to take some steps in order to guarantee the future of the state as well as the state. The decisions they make

today are crucial in order to make the retirement experience of individuals comfortable and distress free. Of course, to be able to choose and implement for at least 20 years from today is about financial literacy.

Research and studies show that the level of knowledge increased consumer or investor is better consumer or investor. As the level of complexity of the goods to be invested or the goods and services to be consumed increases, the information of the consumer becomes more important. For this reason, it is necessary to increase the pre-requisite financial literacy level so that the consumer can make the right choice among different financial products.

They have a low level of financial literacy that prevents them from taking other correct questionnaire decisions and, as evidenced by updated risks, knowledge and awareness, as a consumer or investor, it is necessary for every individual to be an essential financial literate for financial security and welfare. Financial literacy, on the one hand, allows individuals to make investment decisions more accurately while contributing to the healthier growth of markets and the general economy.

The financial literacy is the key to customers' financial transactions in free market conditions and the effective functioning of financial institutions. Even underlying banking transactions such as opening a deposit account, using a credit card, using consumer credit, opening an individual pension account are becoming a problem for the individual in everyday life. However, the existence of more complex financial products and new technologies lead to an increased level of anxiety in society. This is why financial literacy is essential in that markets work better and that individuals can make the right financial decisions.

Studies aimed at increasing financial literacy may not give the desired result in a short-term in society. In order to see the results of these studies, it may be necessary to spread the influence throughout the society, to be considered at every point of life, and to expect new generations to grow up with this consciousness. It is possible to increase

the financial literacy level of the society in the medium and long term with successful plans and studies.

Changes in the technological field and financial markets, as well as the understanding of banking, have changed. Thanks to the internet, financial products have become easier to access, and electronic banking has made it possible to open a bank account and use credit. Consumers now want to have more roles in financial markets. As a result, the number of individual investors is also increasing. The reason for this is the increase in consumer wealth and personal income. In particular, there is an increase in the investments made by households and individuals in capital markets. In addition, there is an increase in the debts owing to erroneous financial decisions. Increases in income lead to more consumption, more borrowing and more credit for individuals.

The Importance of Financial Literacy for the Individual

Financial literacy is essential to the individual in many ways. Individuals with knowledge and skills in financial matters can make better decisions about their short and long term needs and are able to make more informed choices among financial products. These people avoid purchasing services and products that do not have the needs and do not take risks that could put them in financial difficulties.

Failing to have financial literacy makes it harder for individuals to understand financial products and leads them to worry about transactions related to them. They avoid borrowing for these people, avoid money and securities transactions, and are unable to communicate with financial institutions. In other words, there is a financial exclusion in terms of these individuals. However, the long-running financial exclusion leads to the inability to take advantage of the opportunities provided by the financial system and to incur high costs.

Financial literacy is vital for the financial institutions as well as the individual and the country's economy. Financial literacy is a decisive factor in how individuals will save, borrow, invest, and manage financial affairs in their lives. This situation is also

influential in what services and products financial institutions will offer and in what kind of organization they need. The investment decisions that individuals make based on their financial literacy level affect the allocation of resources in the economy. As a result, the sources to be transferred to the real economy determine the long-term growth potential of the country.

Low financial literacy is not only widespread among countries, but also at an unusually high level among certain demographic groups. For example, financial literacy shows a decline in proportion to age groups. It is important to emphasize that individuals are obliged to make financial decisions until the end of their lives and that there is growing concern about fraud incidents targeting older adults. There is a sharp gender gap in financial literacy, where women are less knowledgeable about men, especially about risk diversification. This issue is vital in terms of the difficulties women face in making financial decisions, especially after the death of a spouse.

The Importance of Financial Literacy for the Financial System and Economy

An individual who is a financial literate is more likely than a non-illiterate individual tends to save money and use resources more efficiently. These individuals will positively influence economic growth. The individual participating in the private pension system gets long-term funding necessary for the economy. As savings and deposits also increase, the resource costs of financial institutions will also decrease. Also, financially well-educated individuals are less likely to respond to external variables before and after due to a better understanding of market conditions in countries. This situation alleviates the fluctuations in the market. These individuals have the risk-return characteristics of the different financial products offered by the financial institutions and improve competitiveness with better comparability of changing costs. By demanding products and services that are more suited to their needs, they also contribute to the new product and service development process of financial institutions.

As individuals' levels of knowledge and financial literacy increase, the information they will demand from financial institutions will increase accordingly, which will partly increase the transparency and openness of financial markets and thus reduce complaints and legal problems. As the level of financial literacy decreases, the volume of savings will decrease, and the level of economic prosperity will decrease accordingly.

Financial literacy is vital for a stable and healthy economy. Financially the efficiency of the market will increase as conscious individuals will conduct extensive research before they buy financial products and services. Thanks to the individuals who have received financial education, many inefficient and expensive products are out of the system. Another positive effect of financial literacy is the reduction of informal financial transactions. Individuals who are financial literate will be able to stay away from this system because they can predict the harmful and destructive effects of entry into the informal financial system. The use of informal financing methods (such as usury) damages both the individual and financial institutions. Financial institutions that work legally to pay tax and fulfill other social obligations are at a disadvantage against such structured work. It is also challenging for the uninformed finance system to be able to search for the victim's right. The spread of this situation also leads to the deterioration of social unity and peace.

After the 2008 global economic crisis, the majority of host households in the United States were found to be unaware that their mortgage loans would increase their payments in the event of an increase in interest rates. This result supports the view that the low level of financial literacy is a problem not only of the developing countries but also of the developed countries. Investigations in the United States have shown that the vast majority of individuals have no knowledge of how much interest and debt they will pay when they do not pay the entire credit card debt.

The Importance of Financial Literacy for Society

Financial literacy also has significant social benefits, such as increasing public participation in financial markets and increasing public financial problems through the creation of informed citizenship that can assess the appropriateness of the state's financing laws. The collecting benefits of financial literacy can be listed as follows:

- Participation in financial markets through the use of financial products and services
- Understanding the laws of finance

Chapter 4: Financial attitude

Financial attitudes are defined as a combination of various concepts, knowledge, and emotions resulting in behaviors in accordance with learning in a learning process. Thus, the development of attitudes may emerge as a consequence of individual experiences, due to the emergence and maturation of conditions. In other words, financial attitudes; it is also defined as an abstract measure, response, value, which helps to determine the importance of something. The concept of attitude generally refers to the tendency of the individual to react to any phenomenon or object in the environment. In other words, attitude can be defined as the possible behavior that an individual is expected to reveal in the face of a situation, event or phenomenon.

Financial attitude, which is an essential component of financial literacy, is also closely related to future plans and savings and benefits. Individuals are expected to exhibit a regular attitude after the various experiences they have experienced in matters such as careful use of money, sparing consumption, accumulation for the future. For example, if people have negative attitudes towards accumulating the future, it can be expected that they will be less prone to accumulating. Again, those who prefer to ignore short-term demands will be less likely to make savings or long-term financial plans for emergencies. Mandell and Klein have investigated whether there is a meaningful relationship between motivation and financial literacy. While other factors affecting

financial literacy were under control, motivation was found to have a significant effect on the financial literacy level.

Financial behavior

Financial behavior can be defined as anything an individual can or can try.

In recent studies, financial behavior, which is defined as the financial literacy component, is defined as the most fundamental component of financial literacy. In this sense, financial behavior can be thought of as the ability of individuals to follow their personal financial situation, to make careful shopping, to manage savings and investments in personal loans and loans, and to invest in short and long-term investments.

Sam and others (2012) argued that the concept of financial behavior is a combination of financial knowledge and psychological variables (motivation, risk tolerance, expenditure tendency, saving tendency, etc.) On the other hand, Xiao (2006) defined the concept of financial behavior as "focusing on how to spend the money, keeping written accounts of spent money, paying fixed expenses, creating a written budget." Dew and Xiao (2011) distinguish three basic sub-factors of financial behavior tendency; savings and investment, cash management, credit management.

The study by Lusardi and Mitchell (2008) found that low-level financial literacy in the United States is lower in people with low levels of education, especially lower levels of financial literacy in women, African-American and Spain population which are living there. The lack of financial literacy and lack of education has been found to affect savings behavior and habits. Researchers have come to the conclusion that financial education programs will help the individuals about their financial decision making and to their saving habits.

Mandell and Klein studied the effect of financial literacy training on financial behavior in their study of high school students. When the students who took the personal finance course were compared with the students who did not take the finance course, it was

found that the students who took the finance course did not exhibit the better financial behavior compared to the students who did not take the course.

Individual attitudes and behaviors have a significant impact on the level of financial wellbeing. For this reason, it is crucial to determine the attitudes and behaviors of individuals in the measurement studies related to financial literacy. For example, it is suggested that if individuals have a negative attitude towards saving for the future, they will have a lower tendency to show such behavior. If they prioritize meeting their short-term needs in a similar way, they are less likely to save for emergency situations or make long-term financial plans. Financial attitudes and behaviors are influenced by socio-demographic, sophisticated markets, financial products, and cultural factors as well as individual knowledge, skills and personality traits.

Financial information

Financial information is a form of human capital that requires the lifelong learning of financial abilities such as income, expenditure and savings management, and is developed through the acquisition and dissemination of financial information within a group.

Financial information consists of two dimensions. The first dimension is the financial information at the microeconomic level; while the second dimension provides financial information at the macroeconomic level. At macro-economic level, financial information is information that provides the transfer of information such as texts, charts, and etc. that have been learned, investigated, or obtained through observation through events that affect the economic and financial structure of all businesses and households, whether the facts created by various elements refer to the whole. Financial information at the macroeconomic level refers to the financial information of the economy as a whole, such as the current account deficit of an economy, annual budget plans, total and sectoral foreign trade figures.

Chen and Volpe studied the financial literacy levels of students, the relationship between financial literacy and the characteristics of their students, and the influence of financial literacy on students' thinking and decisions in their study of the level of financial literacy among university students. Participants answered about 53% of the questions correctly. It has been found that the financial knowledge levels of those who are educated in non-business areas, women, students in first grades of universities, people under 30 years of age and those who do not have experience are lower. It has been determined that students who do not have enough knowledge are inclined to wrong thinking, which in turn leads to wrong decisions. As a result, it is stated that university students are not informed about personal finance, and as a result, they can experience problems in informed decision-making.

According to a study by Atkinson and Messy (2012), is a financially literate individual who has some simple information on financial matters. As a result of the work carried out in 14 countries, it turns out that individuals cannot calculate the simple interest rate on a savings account over a year and cannot describe the effect of compound interest over five years.

Financial literacy requirements

The low level of financial literacy in society is based on many different factors. These include the lack of general awareness of financial needs, the lack of knowledge of the performance and existence of different financial products, and the inadequate knowledge of where and how to obtain information on financial products and services. In a sense, these reasons explain why financial literacy is a domain that interests society and is needed by individuals.

Financial literacy conditions begin at a basic level with no knowledge of financial concepts and products. The committee, which prepares a report to the US President on financial literacy in the United States, states that individuals should bear the following abilities in order to be considered financial literate:

- Capital market system and financial institutions
- Cash flow management and provision of continuity
- Making a spending plan based on resources and priorities
- Funding and reasons for emergencies
- Homeowner and house lease decision process
- Identification and differentiating of various financial risks
- Protection from situations such as theft or financial fraud
- Necessary investment instruments, risk, and return relationship, investing the right reasons at the right time
- Individual retirement and retirement planning
- Plan and insurance for unexpected situations such as death, disability.

Financial Literacy and Financial Education:

Financial education has become an essential concept in terms of managing individuals' budgets, regulating their income and expenses, managing investments and savings effectively and protecting them from possible damages. Today it has become even more critical to ensure that diversity and complexity are being used appropriately for the purpose of increasing financial services and products and that individuals are not aware of the increased responsibilities and risks they face. It is clear that particular importance and priority should be given to financial education in order to create financial awareness in this framework.

Financial education is the process by which consumers develop insights into financial products and concepts, informing and educating them about financial risks and opportunities, making conscious choices, learning where to go for help, and developing trust and talent to improve financial well-being "(OECD, 2008). Financial education encompasses a wide range of activities from raising awareness of this issue, improving

financial access and providing knowledge in financial matters, to making changes in consumption, investment and saving behavior of individuals, and reflecting these changes in the country's economy and social refinement. Hence, a wide variety of definitions can be made for financial education in different styles.

The most common definition used for financial education is the OECD's 2005 definition: "Financial education requires consumers to be aware of financial risks and opportunities through informing and teaching, improving their understanding of financial products and concepts, making informed choices, is a process that provides a confidence and talent development that will improve financial well-being. "

The importance of financial education

The importance of financial education is increasing due to demographic, economic and market changes in society. The increasing complexity of financial instruments and financial markets makes financial education necessary. The prospect of individuals having a longer retirement life due to the length of their life leads to more prosperous retirement life expectancies. Due to these expectations, accumulation and investment in working life have become inevitable. All these reasons make it necessary for individuals to pass through the process of financial education.

Chapter 5: Benefits of financial education

The increasing function and diversity of financial markets in recent years are closely related to individual investors as well as countries and enterprises. However, research shows that the lack of financial information on the individual level is high.

Research shows that; The level of knowledge of individual investors and potential individual investors regarding financial markets and financial instruments is not sufficient. The importance of individual investors for financial markets and country economies is inevitable.

From the line, it can be determined that the investments made unconsciously or the savings that have not been invested in any investments are a loss for the economy and financial markets. This finding is a necessity for financial education.

Benefits of financial education can be examined under three headings: individual refinement, financial markets, and financial stability, and the whole economy and contribution to social refinement.

Individual Contribution:

Financial education can benefit all individuals of all ages and income groups. Financial education increases the awareness of individuals in financial matters, ensures that they have knowledge about financial products and services, and thus increases the effective use of financial products. In addition, with this consciousness, consumers are able to avoid both fraud and false misrepresentations of financial products and are encouraged to use the most appropriate product for themselves. Parallel to this, with financial education, individuals are directed to be more accountable in financial matters. It is foreseen that financial education will plan the situation of the asset and liability side more carefully when individuals make budget plans in particular. For example, on the liability side, careful handling of individual borrowers' use of credit will directly affect their indebtedness. Likewise, careful management of their savings and/or retirement plans on the asset side will contribute to making a less than necessary, more than adequate, but balanced life plan. Financial education is complementary to consumer rights at the same time.

Financial education should be an ongoing process starting from an early age throughout the life of the individual. Thus, while financial literacy increases, individuals can effectively use their financial products and services. They can act with sufficient knowledge when dealing with daily financial problems and transactions. The living conditions that have evolved and changed over the years bring about changes in private pensions and insurance. As a result, it was inevitable for individuals to change their

plans for the future. Individuals who can adapt quickly to the conditions of the day will not have difficulty in creating their future plans.

According to research, financially educated individuals are more likely

• To have more income,

• To save more,

• To make more savings for retirement,

• To manage debts well,

• To take debts smartly,

• To be more realistic about financial targets,

• To be more active in financial markets,

• To have confidence in financial matters,

• To choose products more accurately, knowing consumer rights, financial planning, and budgeting

Financial Education Programs in the World

Financial education has gained rapid importance all over the world as a result of its effects on economies. This awareness brought international and national studies together. The necessity of creating financial education studies in the world according to the economic and social structures of the countries has revealed different educational strategies. It is possible to examine the studies conducted in the world about financial education under two headings as international and national education studies.

Financial Education Programs of International Organizations:

Under this heading are the financial education programs carried out by the Organization for Economic Cooperation and Development (OECD), the World Bank, the European

Commission, the International Forum for Investor Education (IFIE), and the International Organization for Securities Commissions (IOSCO).

OECD:

The Organization for Economic Co-operation and Development (OECD) started to work on financial education in 2003 as a result of concerns expressed by members about the adverse effects of low financial education level. The OECD, which has continued to increase its research and publications on financial education up to the present day, supports studies to develop financial education standards and strategies within the framework of inter-country cooperation. OECD's Financial Literacy Fundamental Studies, Women's Financial Education and Awareness, Measurement of Financial Literacy, National Strategies in Financial Education, National Pension Systems, Savings and Investments in Financial Education, India (2006), Indonesia, USA (2008) , Brazil, France (2009), Lebanon, Italy (2010), South Africa, Canada (2011), Spain, Philippines, Colombia, Hong Kong (2012) organized in countries such as Financial Education and Financial Literacy on international conferences on education and contributions to education continues. The OECD aims to increase awareness and improve international co-operation.

World Bank (WB):

The WB Family Network (WBFN) is at the heart of the World Bank's financial education activities. Within the scope of this network, with the financial literacy program, it continues its education activities all over the world. In this program, the importance of money: financial literacy education, family budget: creating a financial road map of the family, saving and investing in education such as education, online financial literacy classes, and individuals through the Internet allows you to participate in education. It also publishes statistical data on topics such as measuring financial literacy, financial access, and projects on these issues through comprehensive household surveys.

European Commission:

The Central Financial Education Expert Group Europe, established by the European Commission, is at the heart of the European Union financial studies. At the beginning of 2007, the European Commission held a conference on better financial education for EU consumers on the demands of the EU member states on financial education and published a communique on the importance of financial education to individuals, societies, and economies and the importance of financial education. Financial Training Expert Group (EGFE) was established in 2008 to carry out the studies in this field. EGFE conducts studies and meetings on financial education, tries to ensure the quality and standard of the programs, plays an active role in the resolution of legal regulations and administrative problems in the countries.

International Forum for Investor Education (IFIE):

Founding member of Australia, Canada, Japan Korea, UK and USA in 2005 was established to increase the effectiveness of financial education programs worldwide, encourage investor training and support the development of existing programs. IFIE, a not-for-profit organization, publishes educational activities of members, educational programs in different countries, academic studies and articles on the subject, and surveys conducted by members on the website where there is vast information flow. With this function, IFIE is a global center where information and information are exchanged between countries and education regulators.

Financial Stability and Financial Stability Contribution:

Financial education is not only for the individual but also for the financial system itself. With financial education, information about the products of more conscious consumers will be increased, so that they will be able to choose more appropriate products that can make better decisions for themselves. This will also contribute to increased market efficiency and competition in the financial sector. As the level of knowledge and

financial literacy of individuals increases, the amount of information they will demand from financial institutions will increase accordingly, which will partly increase transparency and openness in financial markets and thus reduce complaints and legal problems. In addition, consumers 'demand for products and services that meet their own needs contributes to the development of innovative and competitive financial products and services on the financial markets while reducing awareness of consumers' inability to pay debts, decreasing bankruptcy rates, increasing savings and investment rates. On the other hand, financially educated individuals will not hesitate to communicate their concerns about wrong and unfair practices because they know better how to protect their rights, which in a way will facilitate audit activities in the sector.

Contribution to All Economy and Social Well-being:

Just as the proper functioning of a wheel has a positive effect on the functioning of the whole system, financial education plays an important role primarily by contributing to the consumer and increasing individual welfare, then by improving efficiency and stability in the financial markets and then by improving the whole economy and improving social welfare. Financially trained individuals will have a positive impact on the investment level as they tend to save more. The savings of these individuals are particularly substantial in securing financing for small and medium-sized businesses and, consequently, in increasing economic growth and employment role. In addition, the contributions of individuals to the control of financial markets will indirectly lead to resource utilization by allowing the government to allocate relatively fewer resources. Positive repercussions of these and similar contributions of individuals will make it in the financial markets and in the whole economy as an increase in social welfare.

Conclusion

As you see from my research, my primary intention was to investigate the reasons for decision making. Why I researched because it is the central part of our life, people want to be wealthy, but they don't sufficient information about their financial situation. I hope to show the psychological and educational side of finance which completes each other. As human beings, we need to be aware of our feelings, and we need to increase our knowledge continuously. We are living in a world which is called an information era, and I think being wise about our decisions is very important, especially if we want to have a prosperous and comfortable life. I understand that saying words is easier than implementing, but at least this research reminds people of their current situation and how to manage it. We know individuals are part of our society and for having a better society, we shouldn't only focus on financial, educational or governmental institutions we should also try to increase the performance of our people one by one. I mean a lot of people believe in the power of investment, students here are investing in their human capital which will provide for them a better future. This kind of thinking might be considered accurate if the decision they make is right for them. All of us as rational human beings face countless decisions every day, but decisions about investment and finances play a long-term role in our life; therefore I think my essay is quite useful to people who need to be reminded the importance of decision making and financial education or awareness.

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