

A STUDY ON REGRET THEORY: FEAR OF REGRET IN FINANCIAL DECISIONS

Abstract

The purpose of this paper is to understand how the emotional psychological state of a person alters the decision-making process of a person. Depending upon the consequences of such decisions, there may be feelings of guilt or regret (Quiggin, J., 1994). This theory studies the intensity of regret an individual's mind faces that takes place due to the outcome of his/her way of doing a particular work and the alternatives that could have been taken in order to change the desired result.

Subsequently, this paper showcases how an individual makes certain financial decisions and investments under uncertain conditions, considering various aspects. It helps to predict and understand the mindset of humans on an extensive level with reference to regret and its factors chosen regarding any investments to be made. Moreover, it covers the probabilities and quantification of related expected and unexpected values or parameters with regard to various financial and money-related decisions.

Design Methodology: The methodology used in the paper is qualitative. The data regarding the topic has been collected considering past research done so far. During the research, various journals, literature reviews, etc have been cited with the main paper for future reference.

Findings: It has been found that there are various factors that influence and induce fear of regret and agony in the mindset of an individual. Regret depends upon the intensity of the decision so taken. Its impact varies up to what scale the decision is important. It covers the ifs and buts regarding an investment made by an individual. This

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includes how an investment is going to benefit an individual or becomes a trauma in the long run.

Originality: The findings have been solely found with reference to the objectives of the study. Past data have been collected by studying the research papers, and literature reviews based on the topic.

Research Limitations/Implications: Since the study is based upon secondary information, the past data thus available on the topic is the only source of information. This study will help the financial analyst to generalize the objectives in terms of implementing them on a large scale. The general public will be able to recognize the factors because of which they feel a sense of destitution and can pave their future decisions. This will also help psychologists to keep track of the situations that arise in their course of action while dealing with various patients.

Keywords: Behavioral finance, Regret theory, Financial decisions, factors of regret, Investment

I. INTRODUCTION

Behavioral finance is typically understood as the application of psychology to understand human behavior in finance and investing. It is a field that aims to explain why people make certain economic decisions (Singh, R., 2019). Regret theory is one of the many theories in the area of behavioral finance which has been evolved out of a behavior known as 'fear of regret'. Uncertainty in decision-making might lead to the realization that a different course of action would have been preferable after learning the pertinent results. A sense of loss or regret could result from this information (Bell, D., 1982). The premise of behavioral finance is that people make illogical decisions which may be biological, psychological, and or sociological in nature. Many researchers have found that behavioral biases influence financial decisions (Nkukporu, 2020). This bias restricts investors to take necessary action due to the regret of a previous failure.

This study is an attempt to find out various parameters of Regret theory and their influence on financial decisions. Further, it intends to find the basic relationship between how the financial decisions are influenced by theory of regret and also to understand how the emotional psychological state of a person alters the decision-making process of a person. Depending upon the consequences of such decisions, there may be feelings of guilt or regret (Quiggin, J., 1994). This theory studies the intensity of regret an individual's mind faces that takes place due to the outcome of his/her way of doing a particular work and the alternatives that could have been taken in order to change the desired result. The study also tends to cover the parameters and the variables related to regret and its impact on financial decisions.

II. LITERATURE REVIEW

1. Behavioral Finance: The phrase "behavioral finance" refers to a better knowledge of the thought processes that investors use, including the emotional factors at play and the extent to which they affect their ability to make decisions. Fundamentally, behavioral finance aims to relate the what, why, and how of money and investing to a human perspective. This topic schedules the very psychological and sociological factors that influence the financial decision-making process of groups, entities and individuals. These two terms form the base of whole behavioral finance. They argue that some individual investors as well as big entities may experience dissonance during various investment process, specifically, the decision to buy, sell, or hold. (Ricciardi, & Simon, 2000). (Barberis et al., 2001).

Subsequently, in order to provide answers for why people make illogical financial decisions, the area of behavioral finance aims to blend behavioral and cognitive psychological theory with traditional economic and finance. It is often used in the stock market around the world for making investment decisions. Including stock markets, there are various personal and professional decisions where people tend to face this cognitive sense of selection from a various given options or choices. (Chaudhary, 2013; Kumar & Lee, 2006; Singh, R. 2019).

2. Regret Theory: A recurring subject in behavioral finance is "Regret Theory". According to the theory of regret, a person assesses the responses they anticipate having to a future occurrence or circumstance (Inman & McAlister, 1994). Regret theory is also applicable to the financial market's investor psychology. Whether an investor has thought about

buying a company or fund that has fallen in value or not, buying the planned security will still result in an emotional response from the investor. Investors may avoid selling stocks that have declined in value in order to avoid the regret of having made a bad investment choice and the discomfort of reporting the loss. (Zeelenberg & Pieters, 2007; Hirshleifer & Jiang, 2008; Kahneman & Tversky, 1992).

An alternate framework for making decisions in uncertain situations is regret theory. According to the theory, people take into account both the possibility for regret and the anticipated effects of their decisions. It looks at the psychological concept of regret, how it affects judgement, and how it affects risk aversion and preference reversals. Regret is a negative emotion that results from contrasting the actual outcome of a situation with a better-case scenario. The process of cognition entails creating alternative scenarios and analyzing how they might have produced a more advantageous result. (Bell, D. E. 1982; Singh, R., 2009; Connolly & Zeelenberg, 2002).

The regret theory allows for transitivity violations. There is no one solution that applies to all problems. Different people react to things in different ways, and they also have varied ways of evaluating them. It seems to favor qualitative transitivity most of the time. Because of this, every circumstance has a unique result. (Bleichrodt, et al., 2010; Loomes & Sugden, 1982).

When an order is executed as opposed to not completed, regret has a bigger impact on the subsequent order. The previous order constituted an uncommon trading technique for the person if they lost money on it. Even worse outcomes for investors emerge from emotionally charged judgements made out of regret, and the bad returns brought on by these mistakes last for several months. Realized remorse does have a significant impact on behavior moving forward. The performance of the most recent order in relation to how it would have fared if a different sort of order had been made is a critical factor in determining the type of order that investors would make in the future. (Deuskar, et al., 2013).

When one expresses hazy regrets over having purchased a certain car instead of another or over having decided to watch one movie over another, they are expressing the merely cognitive or judicial sense of regret. These regret-related components just involve "cool" cognitive processes of recall, judgement, or appraisal and do not always involve "warm" emotional sensations. (Landman, 1987; Shefrin & Statman, 1985).

- 3. Parameters of Regret Theory:** A behavioral decision-making paradigm known as regret theory takes into consideration people's emotional reactions to the results of their decisions. Regret theory, in contrast to conventional rational choice theory, acknowledges that when people think they have made poor judgements, they feel regret or anticipate feeling regret. (Zeelenberg, et al., 1998)

The parameters of regret theory include:

- **Reference Point:** In regret theory, the reference point is a significant variable. It serves as the standard by which people measure the success of their decisions. The reference point could be arbitrary and different for different people or circumstances.

Usually, people's expectations, prior experiences, or societal standards have an impact on it. (Xue, et al., 2021).

- **Decision Weights:** Individuals' subjective assessments of the likelihood that certain events would occur are reflected in decision weights. Regret theory allows for the potential of decision weights deviating from objective probabilities, in contrast to anticipated utility theory, where probabilities are objectively allocated. The likelihood of an outcome is reflected in decision weights, which can affect how people make decisions. (Maxwell, 1990).
- **Loss Aversion:** One important component of regret theory is loss aversion. It speaks to people's propensity to greatly favor avoiding losses over achieving gains of comparable size. According to the idea of regret, people regret losses more than they regret missing out on similar-sized benefits. Loss aversion can affect how people take risks and motivate them to make choices that would limit prospective losses. (Yechiam, 2019; Abdellaoui, et al., 2007).
- **Anticipated Regret:** According to the notion of regret, people's anticipation of future regret influences their decisions. People assess their choices in light of the potential regret they might feel if the outcome is unfavorable. Remorse that is anticipated might affect risk aversion and cause people to be more careful in their decisions. (Abraham, 2003).
- **Asymmetric Preferences:** The regret hypothesis recognizes that when evaluating results, people sometimes have asymmetrical preferences. Particularly, people could prioritize losses over comparable benefits. This unequal preference for losses can affect choice-making and cause people to reject possibilities with a higher chance of losses. (Scott, 2016).
- **Diminishing Sensitivity:** Regret theory involves the idea of diminishing sensitivity, which contends that as an outcome's magnitude rises, so does its emotional impact. This suggests that people might be less regretful as outcomes grow more extreme and more responsive to modest changes in the outcome. (Sharma, et al., 2020; Evangelidis, 2022).

These parameters collectively shape the decision-making process within the framework of regret theory. By considering individuals' reference points, decision weights, loss aversion, anticipated regret, asymmetric preferences, and diminishing sensitivity, regret theory provides insights into the psychological factors that influence decision-making under uncertainty.

4. **Financial Decision:** It makes sense that individuals and professionals believe psychological considerations have played a major influence in the often-illogical behavior of the market. In reality, the data points to the notion that psychological variables influence financial markets constantly (Akerlof & Shiller, 2009). Psychological aspects represent regularities in how people process information and act on it, rather than being "irrational," albeit they are not always the case. However, some circumstances go beyond a person's ability to weigh probability and make wise choices. Many modern behavioral

finance academics (Shefrin, 2000; Shleifer, 2000) believe that humans frequently lack the ability to act rationally in financial markets. This has a significant impact on how financial decisions are made. People's minds are conflicted over what is right and wrong, which leads to conflict. (Garling, et al., 2009; Taleb, 2004)

According to financial decision concept, firms prioritize financing through retained earnings, followed by debt issuance, and finally equity issuance, due to the costs and signaling implications associated with external financing. It also highlights the importance of asymmetric information and the preference for internal financing over external financing. (Myers, 1984).

Financial decisions are those that people or organizations make about the distribution, control, and application of financial resources. These choices may have a big impact on maximizing wealth, controlling risk, and reaching financial objectives. (Venezian, 1986)

Here are some common types of financial decisions:

- **Investment Decisions:** Funds are allocated to various assets or projects as part of investment decisions with the hope of earning returns. Taking into account aspects like asset classes, diversification, risk tolerance, and time horizons, people and organizations must evaluate the possible risks and rewards linked to different investment decisions. (Nickell, 1978; Amiram, 2012).
- **Financing Decisions:** Decisions about financing affect how people or organizations raise money to support their operations. This may entail selecting between several financial sources, such as debt financing (such as borrowing money or issuing bonds) or equity financing (such as issuing stocks). Costs of capital, risk profiles, leverage ratios, and the effect on ownership and control are all things to think about. (Modigliani & Miller, 1958; Jensen, 1986).
- **Budgeting and Expense Management:** Making financial resource allocation plans and decisions in order to fulfil objectives and pay bills are known as budgeting. This entails determining spending priorities, developing a budget, and properly managing cash flow. Three crucial components of financial decision-making in budgeting include keeping expenditures under control, saving for future needs, and balancing income and spending. (Hansen, et al., 2003; Merchant, 1985; Kaplan & Norton, 1996).
- **Risk Management Decisions:** Identification, evaluation, and mitigation of financial risks are all part of risk management decisions. This involves choices on risk tolerance, diversification, hedging tactics, and insurance coverage. Individuals and organizations can protect their assets and deal with uncertainty by evaluating and managing risks. (Goedhart, et al., 2015; Beasley, et al., 2013).
- **Retirement Planning:** Making decisions on how to save and invest money for a safe retirement involves retirement planning. This entails making financial decisions that

are in line with retirement goals as well as determining future expenses and defining retirement goals. (Ameriks, et al., 2011; Mitchell, et al., 1999).

- **Tax Planning:** Making financial decisions that minimize tax liability while adhering to applicable tax legislation involves tax planning. To efficiently manage the tax burden, this entails making the most of deductions, tax credits, and allowances, thinking about tax-efficient investment plans, and engaging in tax planning activities. (Dyreg, et al., 2010; Hanlon & Slemrod, 2009).
- **Estate Planning:** Making decisions about estate planning involves deciding how to manage and distribute assets when someone passes away. This entails drafting wills, setting up trusts, choosing beneficiaries, and employing techniques to reduce estate taxes. Estate planning seeks to fulfil the individual's preferences for the orderly transfer of wealth and asset preservation. (Hughes & Susanto, 2019; Miller & Rhode, 2012).

5. Regret Theory and its Effect on Financial Decisions: Finance and regret theory's connection reveals how regret affects key financial market investment choices. When an agent's investment in the financial market's ex post performs worse than a clear alternative investment they could have made, they will be sorry they made it. People in the market are more motivated by possible gains than they are by losses. This may cause investors to behave in a risk-averse manner in the financial markets, where they may be reluctant to make hazardous bets even though the potential benefits are substantial since they are more concerned with preventing losses. These markets often exhibit herding behavior, where investors choose to make decisions based on the actions of others rather than their own. People compare gains and losses to a benchmark, either their initial investment or a previous high. This may affect how people view and respond to market changes, which may result in illogical purchasing or selling decisions. (Michenaud, & Solnik, 2008; Weber & Johnson, 2009).

In addition to regret theory, other theories and ideas like cognitive biases, heuristics, and market sentiment also have a big impact on how investors behave and how the markets function. When dealing with the erratic market and its attendant distractions, all of these factors together have a significant impact on individuals' and any entity's overall decisions.

In the short term, errors that result from action or errors of commission are more regrettable than errors that result from inaction or errors of omission. It has been observed that whereas an untreated activity blisters over time, a regretting action's discomfort lessens over time. This affects the investor's inner certainty and thinking and also fosters a sense of constrained action. The situations where financial decisions are most likely to cause regret, emphasizing that regret is more intense when the decision was active, personal, and made in the face of other possibilities. Additionally, they examine temporal factors, demonstrating that regret is more prevalent and potent for outcomes that occurred more recently. This theory also examines the content of regret, highlighting recurrent themes including wasted opportunities, passivity, and errors in action or speech (Gilovich & Medvec, 1995; Zindel, et al., 2014).

Although many conventional theories hold that an individual's actions should be evaluated according to their rationality, the regret theory in terms of financial markets suggests a different approach. It demonstrates how various illogical causes and circumstances impose cognitive constraints on people, causing them to obey simple rules rather than critically analyzing situations. In the instance of the stock market, a buyer would prefer to accept the advice of his peers and consider their returns over using his own abilities and market expertise. This causes the process of being reasonable and pragmatic to deviate (Opaluch & Segerson, 1989).

Investors' financial decisions were discovered to be significantly influenced by their level of risk tolerance. In addition, a vast number of research have discovered that age and gender affect risk tolerance and people's financial decisions. They discovered that women take less risks than males do. If women are working, have a larger net worth, and are expected to inherit property, they are more likely to own riskier investments. Men who were risk-takers, divorced, older, and college graduates invested in riskier investments (Ritov & Baron, 1990). Risk tolerance has a nonlinear relationship with age, gender, and wealth. According to several research, age and married status are adversely correlated with risk tolerance, while wealth, income, and gender are positively correlated. Numerous scholars hypothesized that certain psychological biases like loss aversion and regret also have an impact on people's desire to avoid risk. People are more sensitive to losses than benefits, which is referred to as loss aversion. When compared to the joy of making the same amount of money, the anguish of losing any amount of money is worse. The status quo bias, predicted and experienced regret, the endowment effect, the disposition effect, the equity premium puzzle, and the overtime premium mystery are only a few examples of anomalies that are also explained by loss aversion (Arora & Kumari, 2015).

Stock selection process is a tedious work and it requires advice from a professional or someone who knows the market in and out. During the process there are possibilities of arising numerous possibilities of conflicting attributes and these are directly linked with the complex and changeable financial system. These attributes largely affect the selection process of funds and stocks for an individual. Any wrong step can end up in a state of dissonance which will lead to breakdown in the confidence of the person and furthermore he/she won't be able to take any such decisions in near future. This led to adverse downfall and thus psychological mind going down with every unavoidable loss. (Gong, et al., 2019; Ruenzi & Ungeheuer, 2013).

By taking the investor's regret aversion into consideration, regrets have an impact on portfolio decisions and, consequently, the behavior of stock returns. The regret theory examines how increased stock market accessibility for regular investors impacts the behavior of the stock returns and forecasts how the high dispersion of realized stock returns would favorably impact future trading volume. The investor feels sorrow when comparing his return to the return on any other realistic portfolio, especially when the comparison does not go in his favor. The investor actually feels worse the more his portfolio returns deviates from the best ex post return he could have earned had he chosen a different investing strategy. (Dodonova & Khoroshilov, 2005).

The potential for greater regret than ordinary behavior is another conclusion of the regret hypothesis. According to this prediction, the impact of regret is greatly increased if

the preceding order constituted a departure from the person's typical trading approach. For instance, if a person who typically uses patient orders makes a desperate order that doesn't work out, they are far more likely to switch to using patient orders the next time than if they had a lengthy history of using desperate orders. Deuskar, et al., 2013).

III. OBJECTIVES

1. To study how regret theory affects the financial decisions and investment.
2. To study the parameters of regret theory with regard to various financial and money related decisions.

IV. RESEARCH METHODOLOGY

The methodology used in the paper is qualitative. The data regarding the topic has been collected considering past research done so far. During the research, various journals, literature reviews, etc. have been extracted from Google scholar, and ResearchGate and cited in the main paper for future reference.

V. FINDINGS

It has been found that there are various factors that influence and induce fear of regret and agony in the mindset of an individual. Regret depends upon the intensity of the decision so taken. Its impact varies up to what scale the decision is important. It covers the pros and cons regarding an investment made by an individual. This includes how an investment is going to benefit an individual or it becomes a trauma in the long run. The degree of the regret that is experienced is greatly influenced by a number of factors, including the reference point and loss aversion. The emotional strain brought on by a loss yearns for the way forward. People consider the potential consequences of their activities and work to eliminate any unfavorable effects that may result during the action. In the context of finance, regret theory serves as a major roadblock when making decisions about financial values. The loss they experience in the initial trade determines the choice of stocks to be changed in the investing and withdrawal procedure. People make judgements by imagining any regret they might have in the future, given the amount of money they have invested.

VI. THEORETICAL CONTRIBUTION

On the basis of the findings of this study, following theoretical framework depicting the elements of behavioral finance is given:

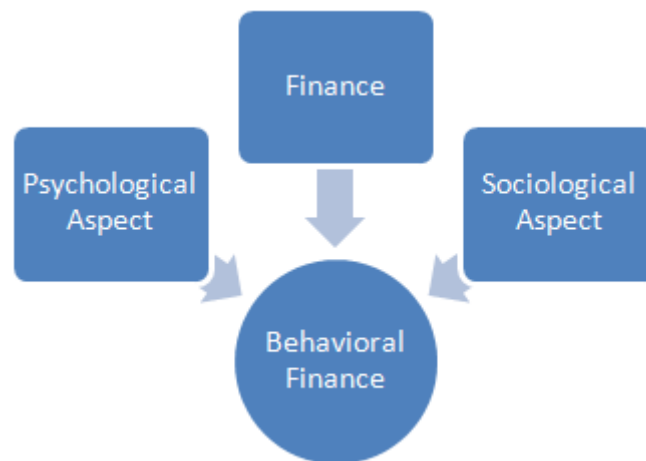


Figure 1

Above figure shows the significant relationship among the psychological, sociological and finance integrated in an inter-disciplinary concept of behavioral finance. Keeping traditional financial concept as the base, these areas are as much as important to understand the concept of behavioral finance in the modern context.

On the basis of the findings of this study, following theoretical framework depicting the elements of Regret theory is given:

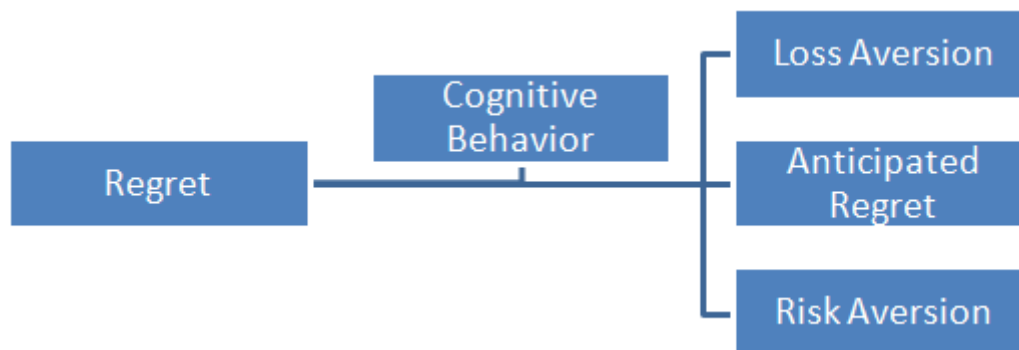


Figure 2

In the above figure, the various divisions of regret collectively influence the psychological and sociological state of an individual. Each selective points are also connected to the fact of how the financial decisions are taken into consideration. Furthermore, these divisions contribute to the study of regret theory since it forms the basis of the whole research process.

VII. SCOPE OF FUTURE RESEARCH AND CONCLUSION

This research is a review paper which is done on the basis of past literature available on the topic. In future, there is a scope of making it an empirical study by collecting data and facts through surveys and questionnaires. Alongside, this study will help the financial analyst to generalize the objectives in terms of implementing them on a large scale. The general

public will be able to recognize the factors because of which they feel a sense of destitution and can pave their future decisions. This will also help psychologists to keep track of the situations that arise in their course of action while dealing with various patients.

In conclusion, regret theory has a significant impact on people's risk preferences and choices, which is important for financial decision-making. It may result in a predisposition against taking risks in the pursuit of prospective profits, decisional inertia, or a preference for avoiding losses. Individuals and financial professionals can make better decisions and develop methods to reduce the negative impacts of regret aversion or impulsive decision-making by understanding the influence of regret on financial decision-making.

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