THE IMPACT OF BEHAVIORAL FINANCE ON INVESTMENT DECISIONS

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Abstract: *The concept of a rational investor is defined as the fact that investing individuals act based on a more fixed and straightforward idea. There are experts in the field of psychology who conduct detailed research on this subject by examining the behavior of individuals investing in Traditional Finance Theories. As a result of psychologists' studies, it is revealed that individuals who invest have personal biases and tendencies in their investment decisions. In this study, the relationship between behavioral finance and the biases of investing individuals in their investment decisions was reviewed.*

Key words: behavioral finance; investor decision; traditional finance

JEL Classification Codes: G40, G41

1. INTRODUCTION

Traditional Finance Theories, which have continued from the past, continue for long periods. The concept of a rational investor is defined as the fact that investing individuals act based on a more fixed and straight-forward idea. There are experts in the field of psychology who conduct detailed research on this subject by examining the behavior of individuals investing in Traditional Finance Theories. As a result of psychologists' studies, it is revealed that individuals who invest have personal biases and tendencies in their investment decisions.

With the emergence of Behavioral Finance at this point, it has been determined that the prejudices of investing individuals are largely effective in their investment decisions. As a result of the joint work of economists and psychologists over time, it has been observed that the prejudices of individuals investing are differentiated into cognitive, emotional and social prejudices. Among these prejudices, it has been determined that the prejudices of individuals who invest have both positive and negative effects as a result of the studies

2. FROM TRADITIONAL FINANCE TO BEHAVIORAL FINANCE

Traditional finance theories are theories that argue that people increase their personal earnings to the maximum level with the new data they have and that they are rational people who do not make the mistakes made before. Traditional finance theories have proposed the idea that individuals weigh the positive effects of making a choice about an investment against the negative effects of that choice, and that when individuals have a level of understanding, they can assume the consequences of the choices they make. (Ormancı, 2023).

Scientific research has been carried out many times over the years within the scope of traditional finance theories. Today, although these researches seem to have been replaced by the study of behavioral finance theories, traditional finance theories are still used today to observe the attitudes and expectations of individuals investing. These studies, based on traditional finance theories, assume that individuals are rational, assume that negligence in previous investment decisions will not be repeated, and the choices of investing individuals are based on mathematics and have renewed and corrected the expectations of investing individuals to reflect the information they have.

Traditional finance theories begin with the Expected Utility Theory proposed by Neumen & Morgenstern (1944), and continue with the Modern Portfolio Theory designed by Henry Markowitz and finally the Efficient Markets Hypothesis proposed by Fama (1970; 1991). By examining how investing individuals normally behave with these theories, they have determined how they should behave rather than revealing their behavior. Psychologist Daniel Kahneman began to study individuals' intuition and decision-making processes in 1979.

With these studies, a new era has begun that is so important that it cannot be ignored, not only in the field of psychology but also in both finance and economics. These studies and developments initiated by psychologist Daniel Kahneman were considered the beginning of Behavioral Finance theories and enabled new foundations to be laid. As a result of these studies, questions have arisen and discussions have begun in the field of systematic approaches preferred by investing individuals in their choices and traditional finance theories in which individuals act as a result of rational decisions. It has been concluded that investing individuals do not think within the framework of logic when making investment decisions, and therefore cannot reach effective decisions when making calculations (Barak, 2006).

In addition to revealing the Prospect Theory, Daniel Kahneman and Amos Nathan Tversky also had a great impact on the formation of Behavioral Finance theories. People need certain intuitions and facilities to adapt their complex decisions to an easy choice. Behavioral Finance Theories argue that the decisions that emerge against the uncertainty resulting from this complexity and intuition are based on some beliefs. Therefore, while some shortcut options make the decision-making processes more clear, they also cause some inaccuracies and the results of investment decisions to be lower than expected (Kahneman & Tversky, 1979).

As a result of this information, the term Behavioral Finance was first introduced into the literature in its true sense by Daniel Kahneman and Amos Nathan Tversky, with their article titled "Prospect Theory: An Analysis of Decision Making Under Risk" published in Econometrica in 1979. The subject of this study article is on how decision-making under uncertainty affects human behavior (Kıyılar & Akkaya, 2016).

The emergence of Behavioral Finance and Prospect Theory indicates that there is a different option to traditional finance. It becomes very important due to the deficiency of classical economic theories in explaining the movements and behaviors of investing individuals and thus anomalies in the market (Sancarbarlaz, 2022). Investing individuals in Prospect Theory determine various weights for their gains and losses at different probabilities. The main point to be conveyed by this theory is that the losses of individuals who invest are actually more important than their gains (Kıyılar & Akkaya, 2016).

Behavioral Finance Theories have gained great recognition in academic fields, with Vernon Smith, who carries out activities and studies in the economic sector, and psychologist Daniel Kahneman, who has furthered studies in this field by examining the decision-making stages, receiving the Nobel Prize in 2002. With the Nobel Prize being won, the studies on this subject gained importance and provided great support and encouragement to the researchers who carried out the work. The Nobel Prize won, in a way, guided the beginning phase of the studies to demonstrate the functioning of the mechanism in order to explain how Behavioral Finance progresses. Another important name who added gains to the developments in the field of Behavioral Finance is Richard Thaler. Between 1987 and 1990, he made significant contributions to the appreciation and development of the field of Behavioral Finance by providing contradictory examples about traditional finance in his column called Anomalies.

Throughout these studies, he held many events and seminars with Robert Shiller (Ateş, 2007; The Gurdian, 2017).

3. PREJUDICES AFFECTING INVESTORS IN BEHAVIORAL FINANCE

The main subject of behavioral finance is that investors cannot make investment decisions by choosing only certain methods. Investors have many psychological biases that influence their investment decisions. When making investment decisions, not only financial and economic values are taken into consideration. In addition to these values being an important factor, the personal experiences and knowledge of individuals who invest also greatly affect their investment decisions (Tamer & Akyaka, 2005).

3.1. Tendency to Deceive Oneself

The issue that reveals the direction in which investors handle the preferences they encounter in the decision-making stages, how they combine these preferences, and includes more than one action bias is seen as a cause for Self-Deception Tendency. Investors see themselves as more talented, smarter and at a higher level than other investors. It is determined that economists working in the rational field use the experiences they gained from their wrong actions in the past in their future periods. (Ozcan, 2011).

3.2. Cognitive Tendencies

Cognitive Tendencies can be explained as cognitive contrasts where individuals who invest suddenly move away from rational behavior in decision-making. There are clear indications from cognitive psychologists and behavioral economists that investing individuals are constantly subject to irrational and systematic tendencies in their decision-making processes. Cognitive tendencies can be seen not only in thoughtless and uneducated individuals, but also in highly educated individuals (Hanson & Kyser, 1999).

3.2.1. Framing Effect

The Framing Effect is explained by the way that investors explain and frame a similar problem in different ways, perceive it differently and create different reactions in their decision-making processes (Pompian, 2006).

It is shown as a tendency for individuals who invest to express different reactions depending on the way some situations are presented. Thus, individuals who invest cannot make rational measurements on all options at the choice stage and decide within these preferences by framing some preferences that interest them (Sewell, 2010).

3.2.2. Availability Trend

The fact that investors value the information they can easily obtain less than other information is defined as Accessibility Tendency. This tendency is the most common tendency among investors. It is also known as Presence Bias. Investing individuals who tend to be approachable enable the internalization of impossible or very risky events in the field of investment. Therefore, the risk rate increases in the accepted provisions. For individuals who invest, their previous experience becomes a risk criterion. (Ciftci, 2017).

3.2.3. Anchoring Tendency

According to Daniel Kahneman, Anchoring Tendency is defined as the idea that investing individuals think about possibilities, mark a reference point that they determine within themselves, and reveal the possibilities they think about according to this reference point. While estimating this baseline, the past experiences and experiences of the investing individuals are used. Individuals who invest in Anchoring Tendency choose a starting point and continue their actions in the future according to this point (Furnham & Boo, 2011).

3.2.4. Gambler Tendency

Gambler's Tendency is known as the possibility of a situation being found more likely by chance. This tendency occurs when investors predict that their markets will be in a bad or good situation as a result of the returns they receive (Korkmaz & Ceylan, 2006).

3.2.5. Loss Aversion

Loss Aversion Tendency is defined as a tendency that affects the actions of investors in case of possible risks. Individuals who invest actually avoid losses rather than risk (Kojabad, 2012). Investors want to earn more income than the initial amount they offered by not giving up their profit wishes calculated in the investment they started operating. When examined from the psychological perspective, the feeling that makes it difficult to convince investors of their losses is known as the desire to compensate (Dom, 2003).

3.2.6. Mental Accounting

Mental Accounting is defined by Nobel Prize-winning economist Richard Thaler, who is interested in psychological research in the fields of economics and behavioral economics. It explains how investors allocate all the money in their minds to personal factors. It allows gains and losses to be stored in different areas in the mind and examined in a different way (Citilci, 2015).

3.3. Emotional Tendencies

3.3.1. Avoiding Regret

Many studies have been conducted on Regret Avoidance Tendency. As a result of research, it is determined that it causes two types of behavioral tendencies. First, regret is felt for the action taken, and secondly, regret is felt for the action not taken. As a result of the studies, it is determined that the regret felt by individuals who invest as a result of the action taken is greater than the regret felt as a result of the action that cannot be realized (Zeelenberg & Pieters, 2004).

3.3.2. Uncertainty Avoidance

When investing, individuals are undecided at the stage of investing, they generally avoid uncertain situations and primarily choose an area that is familiar to them and do not prefer a situation they are unfamiliar with. If there is a situation where they have to choose between two choices, they usually prefer the situation that they are already familiar with and about which they have knowledge. A situation without knowledge about the subject always involves a great deal of risk (Sonmez, 2010).

3.4. Herd Behavior

There are two basic approaches to Herd Behavior: Rational Herd Behavior and Irrational Herd Behavior. Rational Herd Behavior involves agency issues. Individuals at the management level copy the actions of other managers instead of spending the information they have in order not to diminish their personal reputation and interests. Irrational Herd Behavior seems to be an approach generally related to investing individuals. Individuals who invest ignore their own experience and knowledge by imitating the actions of other investors (Canbaş & Kandır, 2007).

4. CONCLUSION

Traditional Finance Theories argue that individuals who invest act rationally and pay important attention to all information during the investment decision-making stages. It shows that investing individuals behave rationally and make investment decisions as specified by the expected benefit theory. Over time, as theses against these theories emerged, they argued that individuals who lost their reality and invested did not act rationally.

Behavioral Finance Theories emerge because the personal emotions, psychology and thoughts of investing individuals, in addition to their rational behavior, also affect their investment decisions. Behavioral Finance Theories accept that individuals who invest are not rational but normal individuals. Within normal individual patterns, individuals making investment decisions have behaviors that include prejudices that express their psychological and moods in addition to economic findings.

The fact that psychological factors have an impact on the decisions of investing individuals shows that investors are irrational. In Traditional Finance Theories, since individuals who invest think and act rationally, they also make profits and losses without taking into account environmental and individual factors. Behavioral Finance Theories enable individuals investing in the field of finance to invest more consciously. Prejudices of investors, which are the basis of Behavioral Finance, cause a great development in the finance and investment sector. Investing individuals should consider their personal tendencies and support the work of experts in psychology. Raising the awareness of investing individuals about investor tendencies that have a negative impact on investments has a positive impact on investors' earnings.

In this study, information is given about Traditional Finance Theories. By determining in which area the Traditional Finance Theories are deficient, Behavioral Finance Theories are emerging to address this deficiency. It is necessary to examine the prejudices of individuals investing in the field of Behavioral Finance Theories in more detail and conduct more detailed research on these prejudices. An applied study should be carried out by examining the investment decision-making and investment implementation stages of investing individuals under observation. Individuals who invest should be trained by experts in the field of psychology and informed about the prejudices that negatively affect their investments.

REFERENCES

1. Ateş, A. (2007). *Finansal Yatırımların Davranışsal Finans Açısından Değerlendirilmesi Üzerine Bir Araştırma*. (Yüksek Lisans Tezi). Selçuk Üniversitesi/Sosyal Bilimler Enstitüsü, Konya.
2. Barak, O. (2006). *Hisse Senedi Piyasalarında Anomaliler ve Bunları Açıklamak Üzere Geliştirilen Davranışsal Finans Modelleri İMKB'de Bir Uygulama*. (Doktora Tezi). Gazi Üniversitesi/Sosyal Bilimler Enstitüsü, Ankara.
3. Canbaş, S. & Kandır, Y. S. (2006). Yatırımcı Duyarlılığının İMKB Sektör Getirileri Üzerindeki Etkisi. Dokuz Eylül Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi, 22(2), 219- 248.

4. Çiftçi, A. (2017). *Finansal Yatırım Kararlarında Davranışsal Eğilimlerin Davranışsal Finans Açısından İncelenmesi: Şanlıurfa İli Merkez İlçeleri Örneği*. (Yüksek Lisans Tezi). Batman Üniversitesi/Sosyal Bilimler Enstitüsü, Batman.
5. Çitilci, T. (2015). Para, Psikoloji. Beta Yayıncılık.
6. Döm, S. (2003). *Yatırımcı Psikolojisi*. İstanbul: Değişim Yayınları.
7. Fama, E. F. (1991). *Efficient Capital Markets*. The Journal of Finance. 46(5): 1575- 1617.
8. Fama, E. F.(1970). *Efficient Capital Markets: A Review of Theory and Empirical Work*. Papers and Proceedings of the Twenty-Eighth Annual Meeting of the American Finance Association.
9. Furnham, A., Boo, H. C. (2011). A Literature Review of the Anchoring Effect. The Journal of Social-Economics, 40(1), 35-42.
10. Hanson, J. D., Kysar, D. A. (1999). *Taking Behavioralism Seriously: The Problem of Market Manipulation.* New York University Law Review, 74, 632.
11. Kahneman, D., Tversky, A. (1979). *Prospect Theory: An Analysis of Decision Under Risk*, Econometrica, 47(2), 263-291.
12. Kıyılar, M., Akkaya, M. (2016). *Davranışsal Finans*, Literatür Yayınları, 1. Baskı, İstanbul.
13. Korkmaz T., Ceylan A., (2006). *Sermaye Piyasası ve Menkul Değer Analizi*. 3.Baskı, Ekin Kitapevi.
14. Kojabad, A. (2012). *Menkul Kıymetler Borsalarında Alınan Yatırımcı Kararlarına Davranışsal Finansın Etkileri: Tarhan Menkul Kıymetler Borsası Örneği ve İMKB Karşılaştırılması*. Yayınlanmamış Yüksek Lisans Tezi, Ege Üniversitesi.
15. Neumann, J. V., Morgenstern, O. (1944). *Theory of Games and Economic Behavior*. 60th Anniversary Commemorative Edition, Princeton University Press.
16. Ormancı, G. (2023). *Bireysel Yatırımcıların Yatırım Tercihlerine Etki Eden Faktörlerin Davranışsal Finans Kapsamında Değerlendirilmesi: Kastamonu İli Örneği*, Sosyal Bilimler Enstitüsü, Bankacılık ve Finans Ana Bilim Dalı, Yüksek Lisans Tezi, Kastamonu: Kastamonu Üniversitesi.
17. Özcan, H. (2011). *Davranışsal Finansın Bireysel Yatırımcıların Karar Mekanizmaları Üzerindeki Etkileri: Finansal Yatırımcıların Değerlendirilmelerine Yönelik Bir Araştırma*. (Yüksek Lisans Tezi). Nevşehir Üniversitesi/Sosyal Bilimler Enstitüsü, Nevşehir.
18. Pompian, M. (2006). *Behavioral Finance and Wealth Management – How to Build Optimal Portfolios That Accounts for Investor Biases*. Financial Markets and Portfolio Management, 21, 491-492.
19. Sancarbarlaz, D. (2022). *Bireysel Yatırımcıların Yatırım Kararlarında Etkili Olan Davranışsal Finans Eğilimlerinin Risk Tutumu Profilleri Açısından Değerlendirilmesi*, Lisansüstü Eğitim Enstitüsü, Yüksek Lisans Tezi, İstanbul: İstanbul Aydın Üniversitesi.
20. Sewell, M. (2010). *Behavioral Finance*. www.Behaviouralfinance.Net/Behaviouralfinance.pdf
21. Sönmez, T. (2010). *Davranışsal Finans Yaklaşımı: İMKB'de Aşırı Tepki Hipotezi Üzerine Bir Araştırma*. (Yayınlanmamış Doktora Tezi). Ankara: Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü.
22. Taner, B., Akkaya, G. C. (2005). *Yatırımcı Psikolojisi ve Davranışsal Finans Yaklaşımı*. Muhasebe ve Finansman Dergisi, 27, 47-54.
23. *The Gurdian* (2017). https://www.theguardian.com/world/2017/oct/11/richard-thaler-nobel-prize-winner-behavioural-economics
24. Zeelenberg, M. & Pieters, R. (2004). *Consequences of Regret Aversion in Real Life: The Case of the Dutch Postcode Lottery*. Organizational Behavior and Human Decision Processes, 93(2), 155-168.

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