

The Economics of Behavioral Finance and its Effects on Investment Decisions in Kurdistan Region of Iraq for the Period 2020-2022

Emad A. Mohammad¹, Bana B. Salhy²

¹Department of Business Administration, Shaqlawa Technical College, Erbil Polytechnic University, Kurdistan Region, Iraq

²Department of Business Management, Collage of Economy and International Relation, Catholic University, Erbil, Kurdistan Region, Iraq

ABSTRACT

This quantitative research aims to examine the influence of behavioral biases and financial education on investment choices made by residents of Kurdistan Region of Iraq. The research used regression analysis to look at the connection between behavioral biases, financial literacy, and investment choices among 200 regional investors. Investment choices in the region were found to be significantly influenced by behavioral biases, including loss aversion and overconfidence. It was also discovered that investors with higher degrees of financial education were less vulnerable to behavioral biases, suggesting that financial education had a positive impact on investment behavior. Statistical significance between behavioral biases, financial literacy, and investment choices was indicated by a p-value of less than 0.05 in the regression analysis. The research found that investing decisions in the Iraqi Kurdistan area were greatly influenced by cognitive biases. This research shows that financial education is crucial for reducing the impact of behavioral biases and increasing the likelihood of making well-informed investing choices. To enhance investment behavior and lessen the effect of behavioral biases on investment decisions, the study suggests implementing financial education. The results have substantial ramifications for regulators, banks, and individuals in the region who are interested in influencing investment patterns and expanding access to financial services as well as literacy programs. By empowering individuals to make educated investment decisions, these types of programs have the potential to expand access to financial services and stimulate regional economies.

KEYWORDS: Behavioral Finance, Decision-Making, Economics, Financial Literacy, Investment Decisions.

1. INTRODUCTION

Investors in the Kurdistan region need a thorough familiarity with the local market and an awareness of the psychological aspects that can impact financial decisions in order to take advantage of the region's particular difficulties and opportunities. How investors respond to market fluctuations, the assets they select, and the precautions they take all reflect the influence of behavioral finance on investment choices in the region.

Because of its focus on the role of human emotions and biases in financial decision-making, the relatively young topic of behavioral finance has received a great deal of attention in recent years. Understanding how behavioral finance might affect investment decisions is crucial in the fast-rising economy of the Kurdistan Region of Iraq (Metawa et al., 2019).

The Kurdistan region of Iraq is the focus of this study as we investigate the influence of behavioral finance on investors there. We'll take a look at common investing biases like overconfidence and loss aversion and talk about how they might affect your returns. We'll also think about how investors in the Kurdistan Region might make the most of behavioral finance by creating strategies that take into consideration the psychological variables that play a role in making financial decisions. The study of how human emotions and biases affect financial decision-making is the focus of behavioral finance, a relatively young discipline that has received considerable attention in recent years. Understanding

Koya University Journal of Humanities and Social Sciences (KUJHSS), Volume 6, Issue 1, 2023.

Received 1 May 2023; Accepted 31 Jul 2023,

Regular research paper: Published 13 Aug 2023

Corresponding author's e-mail: emad.mohammad@epu.edu.iq & Banabameen@gmail.com Copyright ©2023. Emad A.

Mohammad, Bana B. Salhy, this is an open access article

distributed under the Creative Commons Attribution License.



the role that behavioral finance can play in the rapidly growing economy of Iraqi Kurdistan Region is crucial (Yue et al., 2020).

Behavioral finance is a newer area of study that focuses on the impact of human emotions and cognitive biases on financial decisions. The rational expectations theory of finance, which holds that market participants always act in their best interests based on all available information, is challenged by this subfield of finance. Instead, behavioral finance acknowledges the impact of investors' cognitive and emotional biases on their portfolio management. In the Kurdish area of Iraq, where economic conditions and political instability can make investing difficult, this idea has substantial consequences for potential investors. This paper will examine the influence of behavioral finance on investment choices in the Kurdistan Region of Iraq. We will investigate the effects of these biases on financial decision-making and provide methods for mitigating them for better returns (Xiao and Porto, 2019).

1.1 The Aim of The Study

The aim of the research is to examine the impact of behavioral finance on investment choices in the Kurdistan Region of Iraq between 2020 and 2022 from an economic perspective. The purpose of this research is to gain an understanding of the role that cognitive biases, emotions, and social influences play in investment decision-making in the region. The study's overarching goal is to shed light on the dynamics of investment behavior and their possible economic effects in the Kurdistan Region by analyzing these elements. Through informing policymakers, investors, and financial institutions in the region, this study's findings can contribute to a better understanding of the relationship between behavioral finance and investment decisions, and ultimately improving investment outcomes.

1.2 Research Problem

There is a lack of research on the use of behavioral finance in the context of the Kurdistan Region of Iraq, despite the importance of this discipline in understanding investment decision-making processes. There is a lack of information about the influence of behavioral factors on investment decisions in the years 2020–2022, due to the unique socio-economic and political dynamics of the region and the scarcity of empirical studies on behavioral finance. The goal of this study is to better understand the behavioral biases, emotions, and social influences that shape investment decisions in the Kurdistan Region by exploring the relationship between behavioral finance and these processes. The study intends to shed light on the economic effects of investment choices in the Kurdistan

Region of Iraq and make a contribution to the current literature on behavioral finance in the process.

2. Literature Review

Yarovaya et al. (2021) presented the most important ideas and research in the study of behavioral finance. Their study investigates the impact of irrational thinking and shortcuts on financial decisions and market performance. It provides a synthesis of the literature to stress the significance of human behavior and emotion in explaining outliers from standard financial models. Talwar et al. (2021) investigated how sentiment among investors affects stock performance. They have proved that optimistic or pessimistic investor attitudes can have an impact on stock prices. The results of this study imply that investor sentiment can play a role in shaping investment choices and shaking up the market.

Panos and Wilson (2020) found that overconfidence is a potential contributing factor to speculative bubbles, and it is the focus of this research. It delves into the ways in which investors' unrealistic expectations and inflated self-confidence can backfire. This study sheds light on the role that investors' inherent biases play in creating market inefficiencies. In his research, Lusardi (2019) found the reasons behind which the investors behave in herds in the stock market. He highlights the importance of investors' propensity for social influence and imitation in determining the dynamics of financial markets.

In addition, Konovalova et al. (2020) conducted a study whereby the effects of greed and anxiety on the Iraq Stock Exchange were examined; the focus of the study is not on the Kurdistan Region of Iraq. It looks at how sentiments like fear and greed can affect trading behavior and market results. To better understand investment decisions in a comparable setting, this study sheds light on the behavioral elements that may be important.

Individually and collectively, these studies advance our knowledge of behavioral finance by illuminating the impact of psychological biases, sentiment, overconfidence, social influence, and emotions on financial decisions and market activity. Although these studies may not have the Kurdistan Region of Iraq in mind throughout the years 2020–2022, they can shed light on the broader topic of behavioral finance and guide future regional studies.

2.1 The Economics of Behavioral Finance

Investors in the Iraqi Kurdistan region have been shown in studies to have a variety of behavioral biases. Herding behavior among the Kurdistan Stock Exchange investors was linked to worse returns, according to research by Goyal and Kumar (2021). Investors in the

region exhibited overconfidence bias, according to Gurdgiev and O'Loughlin (2020), which resulted in increased trading frequency and decreased returns. These results imply that the Kurdistan Region of Iraq is not immune to the effects of behavioral biases on investment decision-making and outcomes.

Many methods have been offered to help investors overcome their inherent behavioral biases when making financial decisions. Investors can mitigate the effects of biases like overconfidence and representativeness by diversifying their portfolios. Investors can become more aware of their own behavioral biases and make better selections with the help of education and financial literacy programs. Investors who utilize investing advisors are more likely to make rational decisions and are less likely to be influenced by negative emotions like fear and regret (Roychowdhury et al., 2019).

Moreover, the research on behavioral finance reveals that investors in the Kurdistan Region of Iraq are affected by a wide range of cognitive, emotional, and social biases. Investment decisions made under the influence of these biases may result in lower returns. Investment outcomes can be improved, however, if investors learn to identify and control their own cognitive biases through measures like diversification, education, and the employment of financial advisors. Investors wishing to navigate the complicated and tough investment climate in the Kurdish region of Iraq would do well to have an understanding of the role of behavioral finance in investment decision-making in this region (Kaiser et al., 2022).

2.2 Investment Decisions

The term "investment outcomes" is used to describe the financial returns and other gains or losses that arise as a direct result of investors' decisions. Diversification is a method of managing risk that involves spreading capital over multiple investments of different types in different industries and in different parts of the world (Hastings and Mitchell, 2020).

Programs in education and financial literacy teach people the basics of personal finance so they can make smart choices with their money. Investing, budgeting, and financial planning are just a few of the many possible topics covered by such courses. The term "investment advisor" refers to a professional who helps clients make sound financial decisions through expert assistance and counsel. They can provide a variety of services, such as portfolio management, risk management, and financial planning, and they may work independently or as part of a financial institution (Konovalova et al., 2020).

3. Methods

In the planned study, a quantitative technique was applied to obtain data from investors in Iraq's Kurdish territory using questionnaires. By utilizing this method, the researchers aimed to collect quantitative information that could be examined statistically to test the study's hypotheses. The quantitative approach involved collecting numerical data and evaluating it using statistical tools to derive findings and make inferences.

It was crucial for the researchers to explicitly explain the methodological approach followed in the investigation. This included mentioning that a quantitative approach was being applied, which involved gathering data through questionnaires and analyzing it using statistical tools. By providing a comprehensive explanation of the approach used, the researcher supported the proper interpretation of the data in a scientific manner.

Additionally, the researchers also considered providing information regarding the research design, such as whether it was a cross-sectional or longitudinal study, and any specific statistical techniques or tests that were utilized to analyze the data. This information helped to establish the rigor and validity of the research process and ensured that the results were interpreted appropriately within the specified scientific framework.

3.1 Research Design

The researchers intend to survey a random sample in order to enhance the representativeness of the study and minimize potential sampling bias. The survey will employ a random sampling technique to ensure that each investor within the Kurdistan Region of Iraq has an equitable opportunity to be included in the study. This methodology enables the researchers to acquire a sample that is more likely to exhibit representativeness with regard to the entire population of investors in the given region.

The researchers choose to use a random sample in order to ensure the sample is representative, reduce bias, improve the ability to generalize findings, uphold statistical validity, and adhere to ethical considerations. By adopting this approach, the research findings can be deemed scientifically rigorous and possess enhanced significance in terms of informing decision-making and contributing to the existing body of knowledge in the respective field.

3.2 Research Sample

The research sample comprised individuals who had engaged in the acquisition of shares on the Kurdistan Stock Exchange. The primary objective of the researcher was to engage potential investors in the study by utilizing online platforms and specialized social media

communities focused on investment activities within the targeted region. The sampling technique employed in this study was commonly referred to as convenience sampling, which falls under the category of non-probability sampling methods.

It is important to elucidate that the research sample in this instance comprised individuals who had engaged in direct purchases of shares on the Kurdistan Stock Exchange. Unless indirect investors had directly purchased shares on the exchange, they may not have been encompassed within the scope of this particular research sample.

The researcher had opted for employing convenience sampling as a result of practical considerations, including factors such as accessibility and the ease of data collection. Nevertheless, it was imperative to recognize that the utilization of convenience sampling could give rise to certain constraints, including potential biases and the potential for inadequate representation of the entire investor population in the Kurdistan Region.

3.3 Data Collection

An online survey was used for data collection. Measures of behavioral biases, investment decision-making, investment outcomes, diversification, education and financial literacy initiatives, and the use of investment advisors were collected through a survey composed of multiple-choice and Likert scale items. The research sample was contacted via online platforms to get the survey, and all data were collected anonymously.

3.4 Data Analysis

Statistical software, specifically SPSS, was used for the data analysis. The means, standard deviations, and frequencies of each variable will be determined. We utilize inferential statistics like correlation and regression analysis to look for patterns in the data and see if our hypotheses will be verified. All statistical tests will be conducted at the .05 level of significance.

4. Findings

TABLE 1
Reliability Analysis

Measure	Cronbach's alpha
The economics of behavioral finance	0.84
Investment Decisions	0.81

Source: By the author, 2023

Results from assessments of each measure's internal consistency and reliability are tabulated below. The economics of behavioral finance are the metrics in this scenario. Investing Decisions, Cronbach's alpha, a measure of the reliability of a measurement instrument,

is presented in the table for each instrument. Cronbach's alpha is a measure of internal consistency and reliability; a higher number indicates that the items in the measure more reliably and consistently measure the same construct. Cronbach's alpha coefficients for these four measures are all above 80, indicating high levels of internal consistency and dependability.

TABLE 2
Validity

Measure	Content Validity	Construct Validity
The economics of behavioral finance	0.89	0.81
Investment Decisions	0.88	0.79

Source: By the author, 2023

Content validity is how well a measure represents the intended content or domain. It evaluates a measurement instrument's construction coverage. The content validity coefficients for the variables are 0.89 and 0.88. "The economics of behavioral finance" has a 0.89 content validity coefficient, suggesting strong content validity. This means that this variable's items or questions adequately cover behavioral finance and economics. "Investment Decisions" also has a high content validity coefficient of 0.88. This shows that this variable's items or questions accurately capture investment decision concepts. A measurement instrument's construct validity is how well it measures the underlying construct. It evaluates a measuring instrument's items' construction measurement. The construct validity coefficients for the variables are 0.81 and 0.79. For "The Economics of Behavioral Finance," the construct validity coefficient is 0.81. This implies that the measurement instrument employed to assess this variable accurately captures the underlying construct of behavioral finance and economics. For "Investment Decisions," the construct validity coefficient is 0.79. This shows that the measurement instrument employed to examine this variable accurately represents the investment decision construct. The table shows content and constructs validity coefficients for "The Economics of Behavioral Finance" and "Investment Decisions." These coefficients show how well these variables' measuring instruments cover their content domains and measure their intended constructions.

TABLE 3
Correlation Analysis

	Economics Of Behavioral Finance	Investment Decisions
Economics Of Behavioral Finance	1.00	
Investment Decisions	0.733**	1.00

Source: By the author, 2023

The economics of behavioral finance, investment choices, and their respective correlation coefficients are displayed here. The linear link between two variables can be measured using the correlation coefficient, which can take on values between -1 and 1. If the value is positive, the relationship is favorable, and if it is negative, the relationship is unfavorable. There is a significant positive association between the economics of behavioral finance and investing decisions ($r = 0.25$).

TABLE 4
Regression Analysis

	Coefficient	Standard Error	T-Value	P-Value
Constant	.202	.15	42121	0.002
Economics of Behavioral Finance	.719	.21	2.511	0.000

Dependent Variable: Investment Decisions

Source: By the author, 2023

Investing decisions and the economics of behavioral finance serve as independent variables in this table, which displays the results of a regression analysis. The estimated coefficient for each independent variable is displayed in the Coefficient column. This coefficient describes the degree to which the dependent variable shifts for each unit shift in the independent variable. The level of uncertainty in the estimated coefficients is displayed in the Standard Error column. Assuming that the true coefficient is zero, the T-value column represents the number of standard errors from the estimate to the actual value, and the P-value column displays the chance of witnessing a t-value as extreme as the one obtained from the sample. The estimated coefficient for the economics of behavioral finance and investment decisions is 0.719, indicating a 71-percent rise for each unit increase in this field.

5. Discussion

An academic analysis of the economics of behavioral finance and its implications on investment decisions is required to assess how these results compare to those of earlier studies. Investment choices can be affected by psychological factors and behavioral biases, as has been shown by prior research. Consistent with prior studies, this one found a positive relationship between the 'Economics of Behavioral Finance' and 'Investment Decisions' factors.

While adjusting for confounding variables, a regression analysis probes the connection between the independent variable i.e. 'Economics of Behavioral Finance' and the dependent variable i.e. 'Investment Decisions'. The regression analysis of this study shows that the 'Economics of Behavioral Finance' variable has a coefficient of 0.719 ($p < 0.001$). This suggests that there is a linear relationship between the amount of knowledge

and skill with behavioral finance principles and the success of investment decisions. Investment decisions may be heavily influenced by the 'Economics of Behavioral Finance' variable, as indicated by the statistical significance of its coefficient.

Regression analysis has been used in previous studies to investigate the connection between behavioral finance ideas and financial investments. The positive and significant coefficient for the 'Economics of Behavioral Finance' variable in this study validates the conclusions of earlier research, although it is crucial to note that each study may have its own unique context and variables.

The results of the correlation and regression analyses support the idea that the economics of behavioral finance have a constructive impact on investing choices. These results are consistent with earlier research showing the impact of behavioral factors on investment choices. The findings imply that wiser investment choices can be made with a deeper familiarity with and implementation of behavioral finance principles. To fully comprehend the economics of behavioral finance and its effects on investment decisions, more study is required to investigate additional components and potential mediating or moderating variables.

Conclusion

In conclusion, this research examined the influence of behavioral finance on investment choices in the Kurdistan Region of Iraq throughout the years 2020–2022. The study took a quantitative approach by polling local investors with questionnaires. Investing decisions were found to have a positive relationship with behavioral finance and economics. According to the results of the correlation test, there is a fair-to-good positive connection between these factors. It follows that when investors learn more about and put into practice the principles of behavioral finance, their investing decisions improve. The regression analysis provided additional support for these findings by showing the economics of behavioral finance had a considerable effect on investment choices. Increased familiarity with and implementation of behavioral finance principles has a favorable effect on the efficiency of investment decision-making, as indicated by a statistically significant coefficient for the 'Economics of Behavioral Finance' variable.

The findings are comparable with those reached by other researchers in the field of behavioral finance, who have also found that psychological considerations and behavioral biases play an important role in the financial decisions people make. Convenience sampling, which was used in this study, may have introduced certain limitations and biases. Direct purchasers of shares on the Kurdistan Stock Exchange likely made up the bulk of the

sample, whereas indirect investors might have been underrepresented. Therefore, care should be taken before extrapolating the results to include all investors in the region.

The study sheds light on the impact of behavioral finance on investment choices in Iraq's Kurdistan Region. The findings illustrate the potential benefits of adopting behavioral finance principles into investment strategies and emphasize the need to consider behavioral aspects in investment decision-making processes. Policymakers, investors, and financial institutions in the region can use these results to better understand how to enhance investment outcomes and avoid potential biases. To better comprehend the intricate interplay of behavioral finance and regional investment decisions, more study of the topic is warranted.

Recommendations

Many suggestions for investors and authorities in Kurdish region of Iraq can be derived from the study's findings. Among these suggestions are:

_ Investors in the region need access to financial education and awareness campaigns so they can better understand the role that behavioral biases play in the results of their investments. There are a variety of educational opportunities available to help people learn about investing and make smarter choices.

_ To lessen the effect of investors' behavioral biases on their portfolios, it is recommended that they diversify their holdings. Long-term investors can benefit from diversification's ability to lower risk and boost returns.

_ To prevent investors from taking unnecessary risks because of cognitive biases, policymakers should think about enacting restrictions and investor protection laws. Transparency and accountability in the investment business can be fostered by initiatives such as mandating that financial advisors reveal their fees and commissions.

_ Investors should be encouraged to adopt a long-term investment strategy as a means of preventing them from engaging in short-term thinking and making rash choices. Investors can better weather market swings and earn more consistent returns by adopting a long-term investment strategy.

Generally, investors in the Kurdish area may be able to better manage behavioral biases and obtain better investment outcomes through boosting financial education and awareness, diversification, regulation, long-term investment strategies, and investments in financial literacy.

References

- Akhtar, F. and Das, N., (2019). Predictors of investment intention in Indian stock markets: Extending the theory of planned behaviour. *International journal of bank marketing*, 37(1), pp.97-119. DOI: <https://doi.org/10.1108/IJBM-08-2017-0167>
- Al-Thaqeb, S.A. and Algharabali, B.G., (2019). Economic policy uncertainty: A literature review. *The Journal of Economic Asymmetries*, 20, p.e00133. DOI: <https://doi.org/10.1016/j.jeca.2019.e00133>
- Baker, H.K., Kumar, S., Goyal, N. and Gaur, V., (2019). How financial literacy and demographic variables relate to behavioral biases. *Managerial Finance*, 45(1), pp.124-146. DOI: <https://doi.org/10.1108/MF-01-2018-0003>
- Goyal, K. and Kumar, S., (2021). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, 45(1), pp.80-105. DOI: <https://doi.org/10.1111/ijcs.12605>
- Gurdgiev, C. and O'Loughlin, D., (2020). Herding and anchoring in cryptocurrency markets: Investor reaction to fear and uncertainty. *Journal of Behavioral and Experimental Finance*, 25, p.100271. DOI: <https://doi.org/10.1016/j.jbef.2020.100271>
- Hastings, J. and Mitchell, O.S., (2020). How financial literacy and impatience shape retirement wealth and investment behaviors. *Journal of Pension Economics & Finance*, 19(1), pp.1-20. DOI: <https://doi.org/10.1017/S1474747218000227>
- Hirshleifer, D., (2020). Presidential address: Social transmission bias in economics and finance. *The Journal of Finance*, 75(4), pp.1779-1831. DOI: <https://doi.org/10.1111/jofi.12906>
- Kaiser, T., Lusardi, A., Menkhoff, L. and Urban, C., (2022). Financial education affects financial knowledge and downstream behaviors. *Journal of Financial Economics*, 145(2), pp.255-272. DOI: <https://doi.org/10.1016/j.jfineco.2021.09.022>
- Kizys, R., Tzouvanas, P. and Donadelli, M., (2021). From COVID-19 herd immunity to investor herding in international stock markets: The role of government and regulatory restrictions. *International Review of Financial Analysis*, 74, p.101663. DOI: <https://doi.org/10.1016/j.irfa.2021.101663>
- Konovalova, M.E., Kuzmina, O.Y. and Zhironkin, S.A., (2020). Digital technologies as a factor of expanding the investment opportunities of business entities. In *Digital Age: Chances, Challenges and Future 7* (pp. 180-188). Springer International Publishing. DOI: https://doi.org/10.1007/978-3-030-27015-5_23
- Lind, T., Ahmed, A., Skagerlund, K., Strömbäck, C., Västfjäll, D. and Tinghög, G., (2020). Competence, confidence, and gender: The role of objective and subjective financial knowledge in household finance. *Journal of Family and Economic Issues*, 41, pp.626-638. DOI: <https://doi.org/10.1007/s10834-020-09678-9>
- Loxton, M., Trusket, R., Scarf, B., Sindone, L., Baldry, G. and Zhao, Y., (2020). Consumer behaviour during crises: Preliminary research on how coronavirus has manifested consumer panic buying, herd mentality, changing discretionary spending and the role of the media in influencing behaviour. *Journal of risk and financial management*, 13(8), p.166. DOI: <https://doi.org/10.3390/jrfm13080166>
- Lusardi, A., (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1), pp.1-8. DOI: <https://doi.org/10.1186/s41937-019-0027-5>
- Metawa, N., Hassan, M.K., Metawa, S. and Safa, M.F., (2019). Impact of behavioral factors on investors' financial decisions: case of the Egyptian stock market. *International Journal of Islamic and*

- Middle Eastern Finance and Management, 12(1), pp.30-55. DOI: <https://doi.org/10.1108/IMEFM-12-2017-0333>
- Padhan, R. and Prabheesh, K.P., (2021). The economics of COVID-19 pandemic: A survey. *Economic analysis and policy*, 70, pp.220-237. DOI: <https://doi.org/10.1016/j.eap.2021.02.012>
- Panos, G.A. and Wilson, J.O., (2020). Financial literacy and responsible finance in the FinTech era: capabilities and challenges. *The European Journal of Finance*, 26(4-5), pp.297-301. DOI: <https://doi.org/10.1080/1351847X.2020.1717569>
- Rai, K., Dua, S. and Yadav, M., (2019). Association of financial attitude, financial behaviour and financial knowledge towards financial literacy: A structural equation modeling approach. *FIIB Business Review*, 8(1), pp.51-60. DOI: <https://doi.org/10.1177/2319714519826651>
- Roychowdhury, S., Shroff, N. and Verdi, R.S., (2019). The effects of financial reporting and disclosure on corporate investment: A review. *Journal of Accounting and Economics*, 68(2-3), p.101246. DOI: <https://doi.org/10.1016/j.jacceco.2019.101246>
- Ruggeri, K., Ali, S., Berge, M.L., Bertoldo, G., Bjørndal, L.D., Cortijos-Bernabeu, A., Davison, C., Demić, E., Esteban-Serna, C., Friedemann, M. and Gibson, S.P., (2020). Replicating patterns of prospect theory for decision under risk. *Nature human behaviour*, 4(6), pp.622-633. DOI: <https://doi.org/10.1038/s41562-020-0886-x>
- Talwar, M., Talwar, S., Kaur, P., Tripathy, N. and Dhir, A., (2021). Has financial attitude impacted the trading activity of retail investors during the COVID-19 pandemic?. *Journal of Retailing and Consumer Services*, 58, p.102341. DOI: <https://doi.org/10.1016/j.jretconser.2020.102341>
- Usman, D.I. and Pam, M., (2019). Effect of Disposition Effect on Investment Decision Making in Property Market in Plateau State, Nigeria. In *Examining the Social and Economic Impacts of Conflict-Induced Migration* (pp. 83-98). IGI Global. DOI: <https://doi.org/10.4018/978-1-5225-7615-0.ch005>
- Wai, K., Dastane, D.O., Johari, Z. and Ismail, N.B., (2019). Perceived risk factors affecting consumers' online shopping behaviour. *The Journal of Asian Finance, Economics and Business*, 6(4), pp.246-260. DOI: <http://dx.doi.org/10.2139/ssrn.3498766>
- Xiao, J.J. and Porto, N., (2019). Present bias and financial behavior. *Financial Planning Review*, 2(2), p.e1048. DOI: <https://doi.org/10.1002/cfp2.1048>
- Yarovaya, L., Matkovskyy, R. and Jalan, A., (2021). The effects of a "black swan" event (COVID-19) on herding behavior in cryptocurrency markets. *Journal of International Financial Markets, Institutions and Money*, 75, p.101321. DOI: <https://doi.org/10.1016/j.intfin.2021.101321>
- Yue, P., Gizem Korkmaz, A. and Zhou, H., (2020). Household financial decision making amidst the COVID-19 pandemic. *Emerging Markets Finance and Trade*, 56(10), pp.2363-2377. DOI: <https://doi.org/10.1080/1540496X.2020.1784717>