

Bibliometric Insights into Behavioral Finance: An Analysis of Publication Growth and Scholarly Impact (1988–2024)

Nitika Chaudhary^{1*}, Jasvir Singh Sura²

^{1*}Research Scholar, Department of Management, Chaudhary Ranbir Singh University, Jind, India

²Dean and Chairperson, Department of Management, Chaudhary Ranbir Singh University, Jind, India

Abstract

Purpose – This study aims to look into changes in the publication trends of behavioral finance research papers published between 1988 and 2024. This paper uses Bradford's rule to identify which journals are well-known for their scholarly production on behavioral finance context and Lotka's law to assess the writers' output.

Design/methodology/approach – This paper combines bibliometric analysis, which uses The Lens database to perform an accurate and comprehensive statistical analysis of publications to examine the trends in behavioral finance over the years. 125 articles from 96 sources were selected for the present research out of 1000 articles retrieved from 433 sources.

Findings – The results have confirmed that the field of behavioral finance is expanding, and more scholars are paying attention to it. There was only one published paper between 1988 and 1992. It became well-known in 2007, and in 2023 and 2024, thirty-five articles were published. A list of the most popular articles in the database was included in the results. Samuelson (1988) tops the list with 4724 citations for his 1988 Journal of Risk and Uncertainty article.

Originality/value–This paper reviewed relevant literature that is available on The Lens Database. It covers an extended time frame of almost five decades (1988-2024). This paper attempts to look into changes in the publication trends of behavioral finance research papers. This study builds a solid theoretical framework for researchers and academicians by demonstrating the available literature on behavior finance.

Keywords – Behavioral finance; Bibliometric analysis; Lotka law; Bradford law; Risk aversion

Paper type – Literature review

1. INTRODUCTION

Since the mid-1950s, the field of finance has been dominated by the traditional finance model developed by the economists. The conventional finance model's basic assumption is that individuals are rational, meaning they make decisions that are in their best interest and based on all available information. According to standard finance theories, Investors operate rationally, and stock and bond markets are efficient. Financial economists assume that people (investors) behave rationally while making financial decisions, whereas psychologists have discovered that economic decisions are made irrationally, and they challenged this traditional finance premise. Investors can make poor financial judgments due to cognitive mistakes and severe emotional bias, so they act irrationally. Over the last few decades, behavioral finance has emerged to address how personal and societal psychology influence financial decisions and investment behavior. Psychologists who suggested the Behavioral Finance model were met with disbelief in the finance profession. The psychologist Daniel Kahneman and economist Vernon Smith, who were given the Nobel Prize in Economics in 2002, were the first to address behavioral finance. At this point, financial economists began to believe that investors act irrationally. Our brains use shortcuts and emotional filters to absorb information even when making financial decisions. It explains how psychological factors influence individual investors' investment decisions and how perception affects the mutual fund market. It is

worthwhile to investigate whether the discipline of psychology can assist investors in making more rational financial decisions.

The study of investors' psychology when making financial decisions is known as behavioral finance (BF). It is the study of the impact of psychology and sociology on financial practitioners' behavior and the consequent impact on the market. Behavioral finance is an add-on concept of finance that aims to enhance traditional financial theories by including behavioral components in the decision-making process. Behavioral finance deals with individuals and ways of gathering and using information. At its core, behavioral finance evaluates how individuals make financial decisions. Behavioral finance helps understand and anticipate the financial market implications of psychological decision-making processes. Furthermore, it used psychological and economic principles to improve financial decision-making. Scholars and experts describe the term Behavioral finance in a variety of ways.

"Behavioral Finance is the study of psychology's influence on financial practitioners' behavior and the subsequent effect on markets. Behavioral finance is interesting because it explains why and how markets might be inefficient." Sewell (2011)

Several behavioral biases affect investors, resulting in psychological errors and poor decision-making. When faced with complex and confusing judgments, investors use rules of thumb, or heuristics, to make probable, inefficient conclusions. Theoretically, behavioral biases are described similarly to systematic errors in judgment formation. Over time, researchers compiled an extensive list of explicit biases, which they then applied to individual investor behavior to see how it affected their decisions. Various studies refer to these biases as heuristics, thinking, judgments, and cognitive and psychological errors. Although this categorization of prejudice is valuable, the fundamental theory of why investors are prone to certain biases has yet to be developed.

With time, research has shifted from traditional to modern research with the help of the latest tools. Several academics have previously carried out SLR and bibliometric analyses in related fields, such as Costa, Carvalho and Moreira (2018), Punia and Ahmed (2023), and Costa et al. 2017, using the Web of Science and Scopus databases. However, there is a scarcity of bibliometric analysis papers on the subject conducted using The Lens Database. This scarcity has prompted us to use the Lens Database for the current study, which we believe is a significant contribution to the field, given the novelty and importance of our research in this area. The current study, with its unique approach, promises to provide fresh insights into behavioral finance.

This study aims to investigate how publication trends in behavioral finance research papers, published between 1988 and 2024, have changed. The study applied Lotka's law to examine the authors' output and Bradford's law to determine which journals are prominent in behavioral finance context and their scientific production. These laws, known for their robustness and reliability, will help us determine the gaps in the literature's research and recommend paths for further study, ensuring the rigour and thoroughness of our research.

The current study have organized the remaining portions in the following manner: the methodology part comes after the introduction in the first section. The study then presented the results. The final section covers the conclusion and future research directions.

2. METHODOLOGY

In terms of methodology, the current study is quantitative and descriptive. It is a bibliometric analysis that investigates the publication trends in behavioral finance through a robust and trustworthy statistical analysis of publications. As highlighted by Liu, Gu, Hu, Li, Liao, Tang and Shapira (2014), bibliometric analysis is a valuable and trustworthy tool for assessing scientific output, including the social sciences Carlson and Ji (2011). The study's article collection was sourced from The Lens database, an agglomeration database that deduplicates and unifies search syntax by combining bibliometric data from different databases (like PubMed and Crossref). No

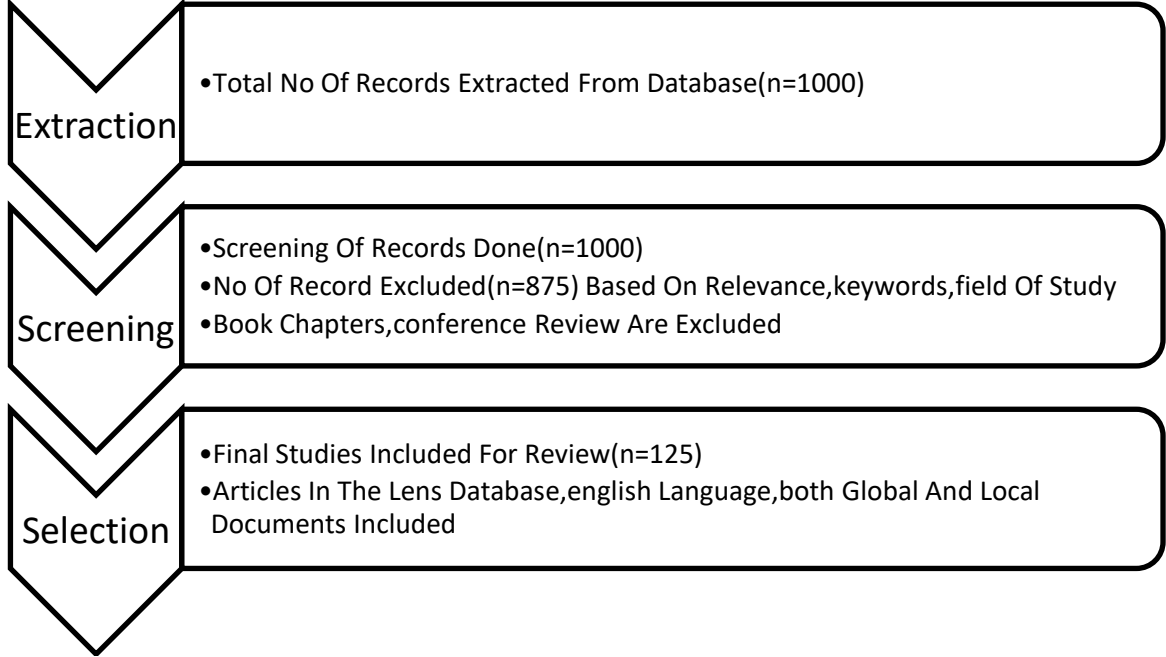
limitations were imposed during the publication refinement to ensure the study received quality content. After extracting 1000 articles from 433 sources, 125 research papers from 96 sources were chosen for this study based on their relevance, field of study, and keyword analysis. The sample of this study includes data from 1988 through 2024. We employed bibliometric analysis with R studio 4.4.1 and statistical methods for our findings with biblioshiny, further underscoring the trustworthiness and validity of our research process.

3. RESULTS : Bibliometric Analysis

3.1 Data extraction process

Based on our research, we extracted 1000 papers from The Lens database in CSV format and then applied the screening process. We included documents based on the study's relevance, keywords, and subject of study in English. We excluded books, conference reviews, seminars, for our study. After screening, a total of 125 research papers were selected. It could be seen in figure 1.

Figure 1



It can be seen from Table 1 that there are a total of 249 authors who have contributed to the publication of 125 articles in 96 reputable journals that have been subjected to peer review. These authors come from various fields, including business, management, accounting, economics, econometrics, finance, arts and humanities. 30 authors have a single research document. The study activity was associated with the period from 1988 to 2024. The total references were 2429—resulting in a collaboration index 2.18 between the co-authors per document. Scientific productivity is increasing at a rate of 8.52% per year. The average age per year for documents is 5.9, whereas the average citation per document is 69.5%.

Table 1: Information about Data

Parameters	Results
Time span	1988:2024
Sources (Journals, Books, Etc)	96
Documents	125
Annual Growth Rate %	8.52
Document Average Age	5.9
Average Citations Per Document	69.5
References	2429
Document Contents	
Keywords Plus (ID)	3
Author's Keywords (DE)	3
Authors	249
Authors Of Single-Authored Documents	30
Authors Collaboration	
Single-Authored Documents	31
Co-Authors Per Documents	2.18
International Co-Authorships %	0
Document Types	
Journal Article	125

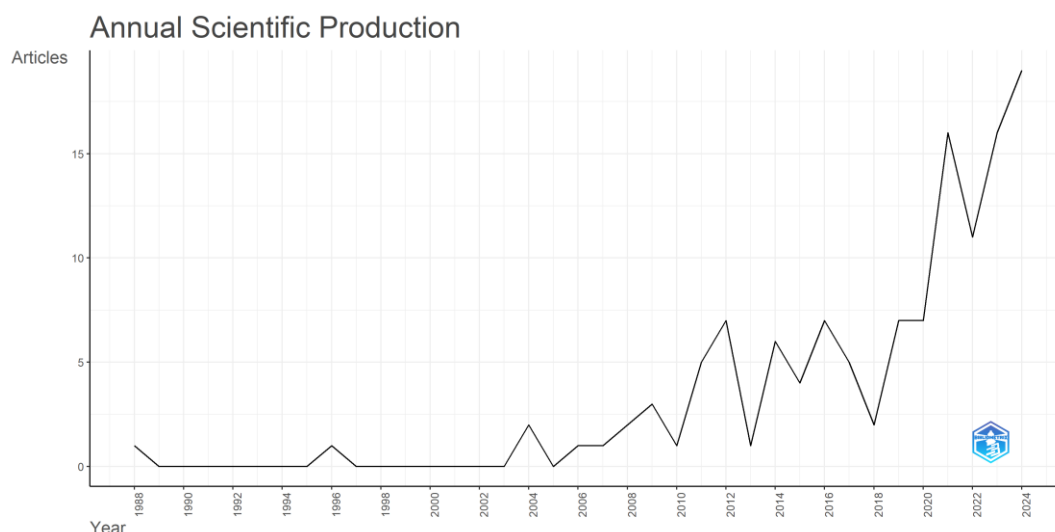
3.2 *Annual Scientific Production of Articles*

The evolution of publications about trends in behavioral finance throughout time is seen in Table 2. The number of research articles produced annually between 1988 and 2024 is displayed. According to the statistics, there was 1 research article published in 1988–1992 and 35 in the 2023–2024 year. This rise, which is especially noticeable from 2007 onward, signifies a growing interest and awareness of the subject. There has been an upward trend in publications since 2007, indicating a maturing field of study. In the first eighteen months of 2023–2024, 35 articles have been published. Figure 2, which illustrates the rise in papers published during the review period, clearly indicates the increasing significance of the topic. The pattern unequivocally demonstrates that interest in the subject is growing and that scholars are becoming more aware of it. This growing awareness among scholars in the field further emphasizes the importance of the topic, making the audience feel the increasing significance of the topic.

Table 2

Year	Article
1988-1992	1
1993-1997	1
1998-2002	0
2003-2007	3
2008-2012	18
2013-2017	23
2018-2022	43
2023-2024	35

Figure 2



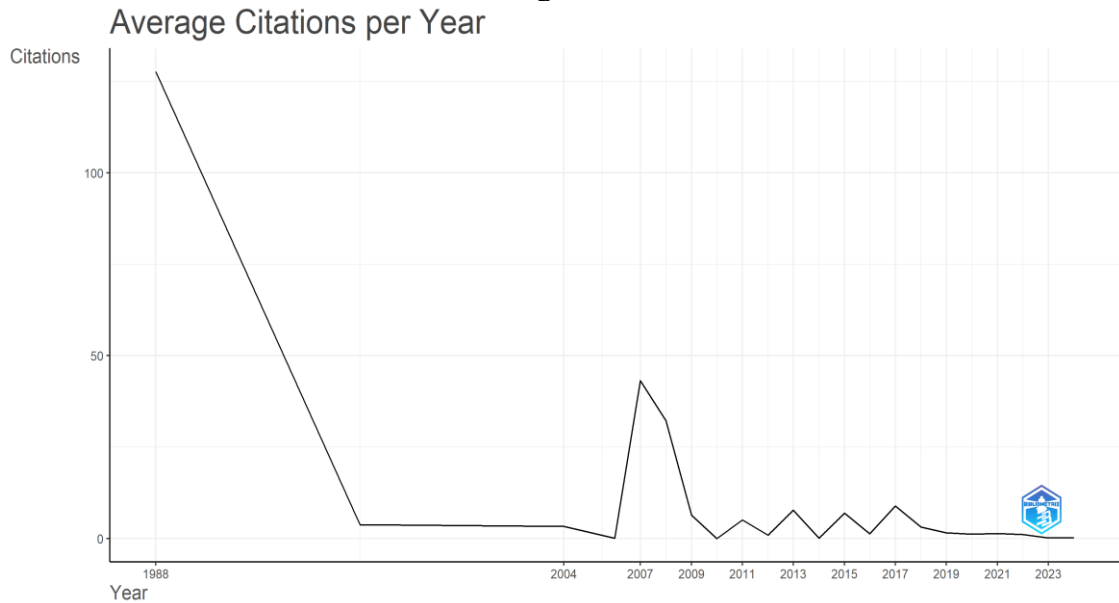
3.3 Annual Citations Per Year

Table 3 clearly shows that just one article was published in 1988, written by Samuelson (1988), who has 37 citable years and the most significant number of citations (4724), followed by 109 citations in 1996 and a promising 777 citations in 2007. Their citation pattern is dropping as the number of articles on the issue has increased. Figure 3 illustrates the dynamic nature of the average citation, which reached its maximum in 1988, a significant achievement, and then began to decline until 2007, when it increased again, signaling a bright future for the research. It shows 6.4 to—16 mean citations per year from 2009 to 2024, indicating a fluctuating trend in the field.

Table 3

Year	Mean TC per Article	N	Mean TC per Year	Citable Years
1988	4724	1	127.68	37
1996	109	1	3.76	29
2004	70	2	3.33	21
2006	1	1	0.05	19
2007	777	1	43.17	18
2008	548.5	2	32.26	17
2009	102.33	3	6.4	16
2010	0	1	0	15
2011	70.6	5	5.04	14
2012	12.29	7	0.95	13
2013	93	1	7.75	12
2014	0.83	6	0.08	11
2015	69	4	6.9	10
2016	11.57	7	1.29	9
2017	71.2	5	8.9	8
2018	22	2	3.14	7
2019	9.29	7	1.55	6
2020	5.86	7	1.17	5
2021	5.44	16	1.36	4
2022	3.27	11	1.09	3
2023	0.38	16	0.19	2
2024	0.16	19	0.16	1

Figure 3

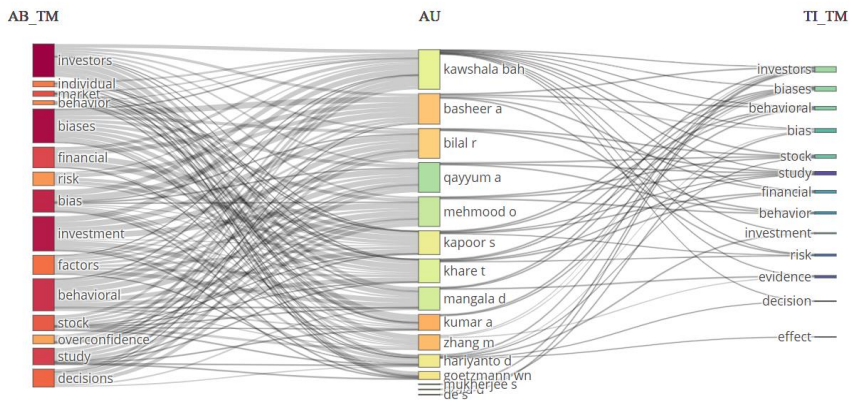


3.4 Three Fields Plot

Based on a Sankey diagram, a three-field plot beautifully illustrates the ties and connectivity between nations, writers, and sources. The height of the rectangular nodes not only indicates the frequency of occurrence of each country, author, or source in the collaboration network but also underscores the collaborative nature of our academic community, in which each of us plays a crucial role.

As seen in Figure 4, the Three-Field Plot shows the title in the right field, the abstract in the left field, and the authors in the middle field. The graphic illustrates a thorough examination of individual market behavior regarding the impact of behavioral biases on investors. Investments, risks, factors, stocks, and overconfidence all impact this. Kwashala (2021), who investigated investor decisions, including risk stock behavioural biases, is one of the authors who examined these effects. A few other authors, including Basheer (2020), Bilal (2024), Zhang (2023), and others, investigated related impacts.

Figure 4



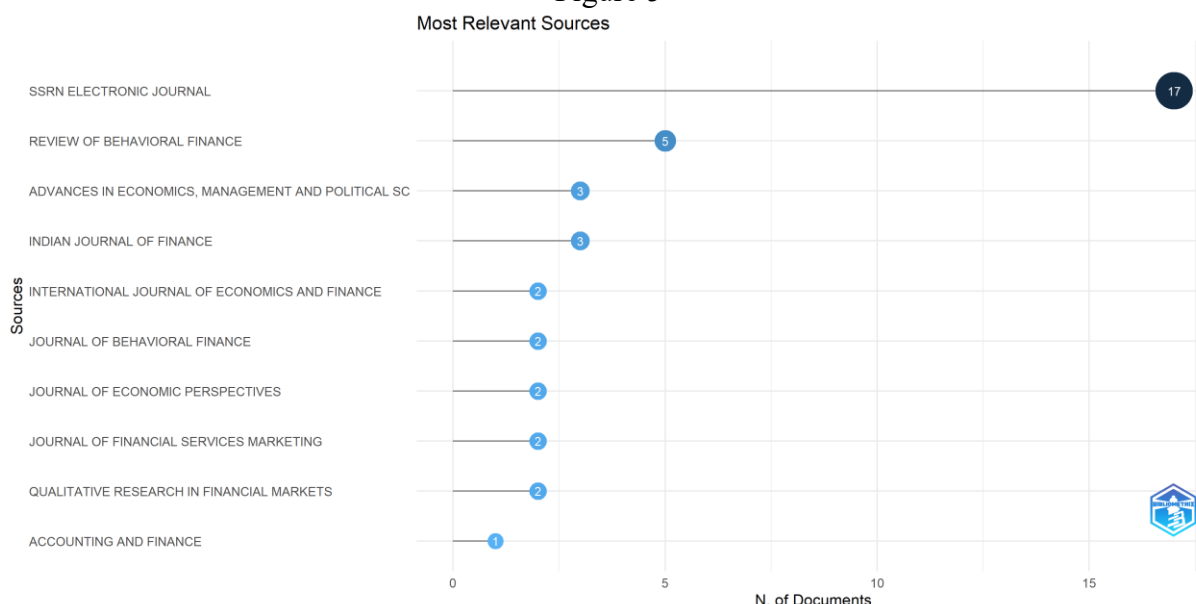
3.5 Most Relevant Sources

Altogether, 96 journals published 125 publications, a significant contribution to our understanding. The top ten most pertinent journal sources, as shown in Table 4, have provided valuable insights. Of the 17 papers in the sample, the SSRN Electronic Journal published the most articles, a noteworthy finding. The most well-known journal in the sample is Review of Behavioral Finance, which comes in second with five papers, and Advances in Economics, Management and Political Sciences, Indian Journal of Finance, which comes in third with three papers apiece. In the chosen dataset, five eminent sources released two articles apiece, each adding to the significance of our research. However, only accounting and finance published one paper during the allotted time, but its contribution is not to be underestimated.

Table 4

Sources	Articles
SSRN Electronic Journal	17
Review Of Behavioral Finance	5
Advances In Economics, Management And Political Sciences	3
Indian Journal Of Finance	3
International Journal Of Economics And Finance	2
Journal Of Behavioral Finance	2
Journal Of Economic Perspectives	2
Journal Of Financial Services Marketing	2
Qualitative Research In Financial Markets	2
Accounting And Finance	1

Figure 5



3.6 Bradford Law

The scientific output of literature is described in the context of core journals by Bradford's Law—table 5 lists 13 journals in zone 1, classified as a core journal. The top-ranked SSRN Electronic Journal is followed by the Review of Behavioral Finance and Advances in Economics,

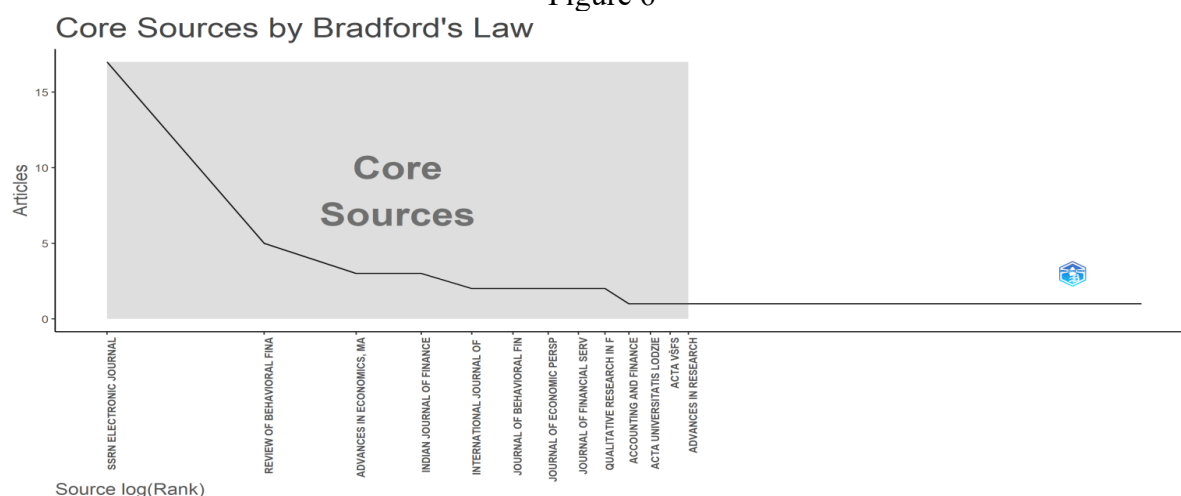
Management, and Political Sciences, which comes in second and third place, respectively. The last items on this list are Advances in Research and ACTA VSFS.

Figure 6 presents a graphical presentation of the core journals, with 13 top journals in zone 1 and 17 journal articles on the x-axis. The SSRN Electronic Journal demonstrated the highest productivity compared to all other journals.

Table 5

Source	Rank	Freq	Cum Freq	Zone
SSRN Electronic Journal	1	17	17	Zone 1
Review Of Behavioral Finance	2	5	22	Zone 1
Advances In Economics, Management And Political Sciences	3	3	25	Zone 1
Indian Journal Of Finance	4	3	28	Zone 1
International Journal Of Economics And Finance	5	2	30	Zone 1
Journal Of Behavioral Finance	6	2	32	Zone 1
Journal Of Economic Perspectives	7	2	34	Zone 1
Journal Of Financial Services Marketing	8	2	36	Zone 1
Qualitative Research In Financial Markets	9	2	38	Zone 1
Accounting And Finance	10	1	39	Zone 1
Acta Universitatis Lodziensis. Folia Oeconomica	11	1	40	Zone 1
Acta Vřfs	12	1	41	Zone 1
Advances In Research	13	1	42	Zone 1

Figure 6



3.7 Sources Local Impact

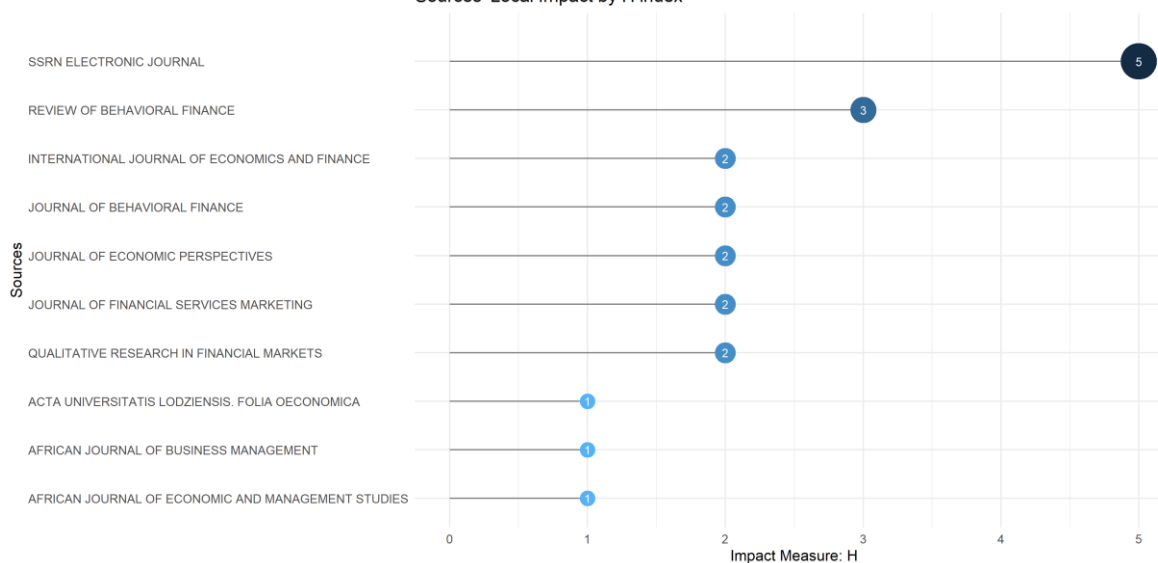
Table 6 showcases the competitive nature of our field, with the Journal of Economic Perspectives leading in total citations with 1001, and the SSRN Electronic Journal taking the lead in H-Index with 5. Figure 7 further highlights this, showing that the Journal of Behavioral Finance has an H-index of 3, while the H-indices of the following five journals are as follows: the International Journal of Economics and Finance, the Journal of Financial Services Marketing, and Qualitative Research in Financial Markets have h-index of 2.

Table 6

Source	H Index	G Index	M Index	TC	NP	PY Start
SSRN Electronic Journal	5	15	0.238	226	17	2004
Review Of Behavioral Finance	3	5	0.5	54	5	2019
International Journal Of Economics And Finance	2	2	0.142	103	2	2011
Journal Of Behavioral Finance	2	2	0.125	108	2	2009
Journal Of Economic Perspectives	2	2	0.111	1001	2	2007
Journal Of Financial Services Marketing	2	2	0.222	6	2	2016
Qualitative Research In Financial Markets	2	2	0.142	55	2	2011
Acta Universitatis Lodziensis. Folia Oeconomica	1	1	0.1	1	1	2015
African Journal Of Business Management	1	1	0.071	31	1	2011
African Journal Of Economic And Management Studies	1	1	0.25	9	1	2021

Figure 7

Sources' Local Impact by H index



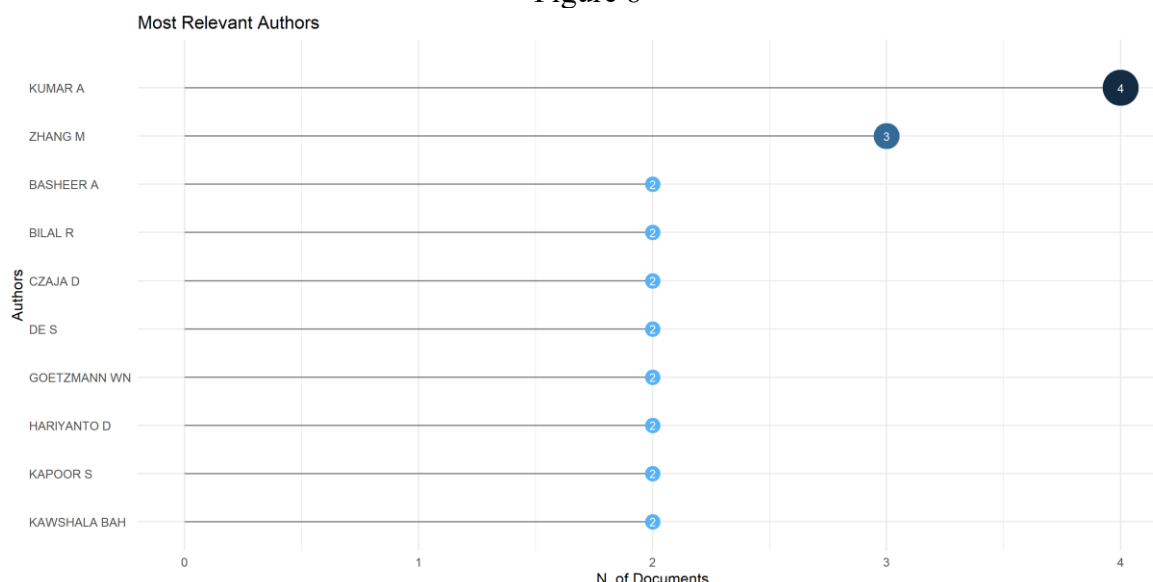
3.8 Most Relevant Authors

Table 7 presents the most well-known authors in the current study on behavioral biases among investors, showcasing their dedication to research. Kumar (2004) has published four articles between 1988 and 2024. Zhang (2023) known for his thorough research, has contributed three articles in 2023, while Basheer (2020) has added two in 2020. In terms of article fractionalization, Kumar (2004), Zhang (2023), and Basheer (2020) have 3, 2, and 1 articles fractionalization, respectively. Figure 8 further highlights their commitment, with Kumar (2004) leading the pack with the most publications (4), followed by Zhang (2023) 3 publications in 2023 and the following authors: Basheer (2020), Bilal (2024), Czaja (2017), De (2012), Goetzmann (2004), Hariyanto (2024), Kapoor (2024), and Kawshala (2022) with 2 publications.

Table 7

Authors	Articles	Articles Fractionalized
Kumar A	4	3
Zhang M	3	2
Basheer A	2	1
Bilal R	2	0.4
Czaja D	2	1
De S	2	1
Goetzmann Wn	2	1
Hariyanto D	2	1
Kapoor S	2	0.833
Kawshala Bah	2	1

Figure 8



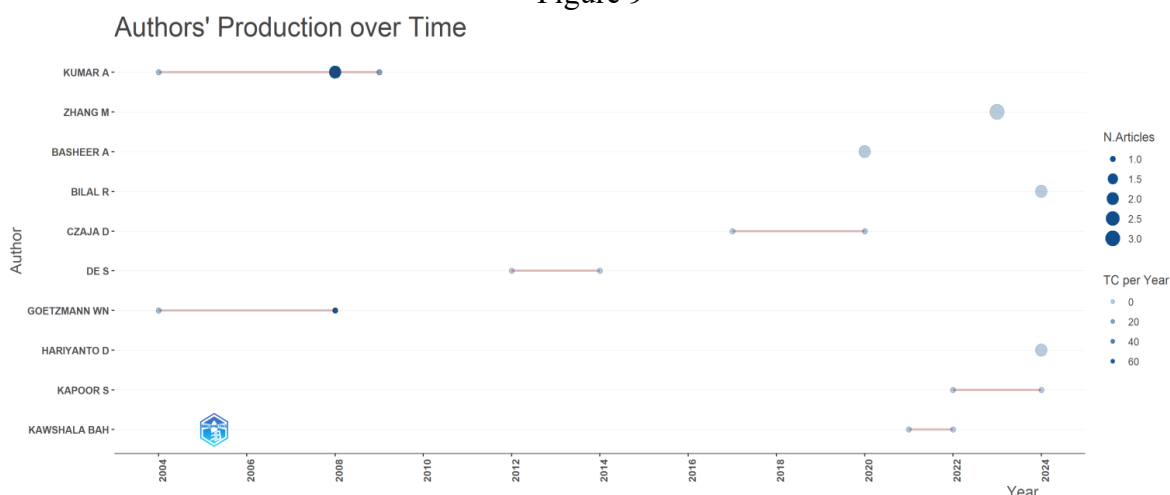
3.9 Authors Productivity Over Years

Table 8 illustrates the writers' output over time. Kumar (2008) and Goetzmann (2008) have the most significant number of citations (1056 each) for their publications, and the total number of citations per year was 62.11. Kumar (2004) and Goetzmann (2004) have 133 total citations each for their articles published in the SSRN Electronic Journal in the year 2004, or 6.33 citations annually. Kumar (2009) article in the Journal of Financial and Quantitative Analysis from 2009 has 292 total citations, or 18.25 citations annually. Figure 9 demonstrates that Zhang (2023) published three papers in 2023 but received no citations. In 2020, Basheer (2020) published two publications with zero to twenty citations. Regarding authors' production over time, Kumar (2008), who produced two articles in 2008 with more than sixty total citations annually, is at the top, indicating a sustained level of interest in his work. Bilal (2024) and Hariyanto (2024) authored 2 paper in 2024 with zero total citations annually, suggesting a lack of immediate impact but potential for future recognition

Table 8

Author	Year	Source	TC	TC PY
Kumar A	2009	Journal Of Financial And Quantitative Analysis	292	18.25
Kumar A	2008	SSRN Electronic Journal	41	2.411
Kumar A	2008	Review Of Finance	1056	62.117
Kumar A	2004	SSRN Electronic Journal	133	6.333
Zhang M	2023	Advances In Economics, Management And Political Sciences	0	0
Hariyanto D	2024	Journal Dimensie Management And Public Sector	0	0
Kapoor S	2024	The Journal Of Investing	0	0
Bilal R	2024	Bahria University Journal Of Management & Technology	0	0
Kawshala Bah	2022	South Asian Journal Of Finance	2	0.666
Kapoor S	2022	Review Of Behavioral Finance	4	1.333
Basheer A	2020	Business And Economic Research	2	0.4
Czaja D	2020	The Quarterly Review Of Economics And Finance	14	2.8
Czaja D	2017	SSRN Electronic Journal	2	0.25
De S	2012	SSRN Electronic Journal	2	0.153
Goetzmann WN	2008	Review Of Finance	1056	62.117
Goetzmann WN	2004	SSRN Electronic Journal	133	6.333

Figure 9



3.10 Lotka's Law

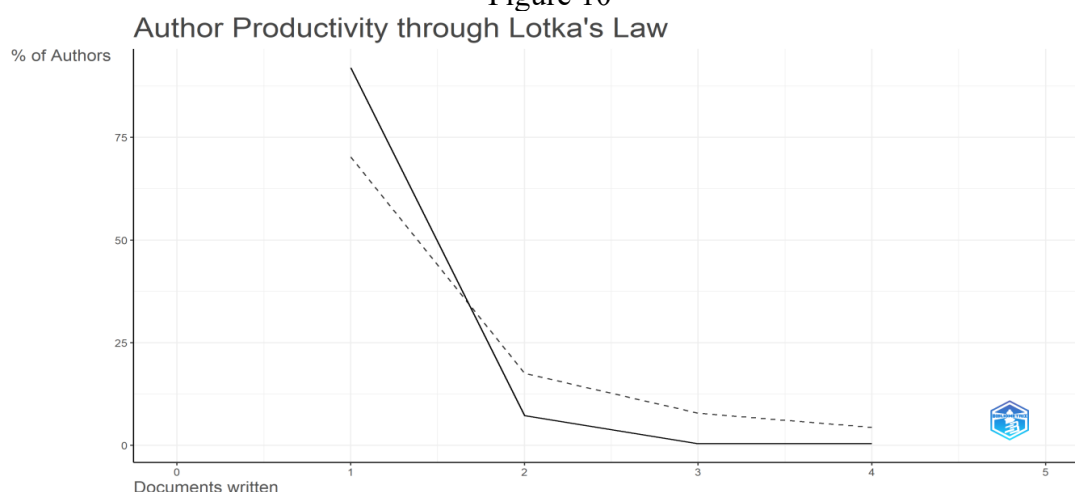
In each given field, the frequency of publishing by writers is described by Lotka's law. Table 9 indicates that 229 authors, with a frequency of 0.919, have contributed to a single publication. The

frequency of contributions from the 18 writers in the two articles is 0.072, while the frequency of contributions from the 1 author in the three and four papers is 0.004 each. Figure 10 presents Lotka's law graphically, with the percentage of writers on the X axis and the number of documents authored on the Y axis. Findings indicate that around 92% of authors have contributed to a single document, 7.2% to two publications, and 0.4% to three and four papers, respectively.

Table 9

No. of Articles	No. of Authors	Frequency
1	229	0.919
2	18	0.072
3	1	0.004
4	1	0.004

Figure 10



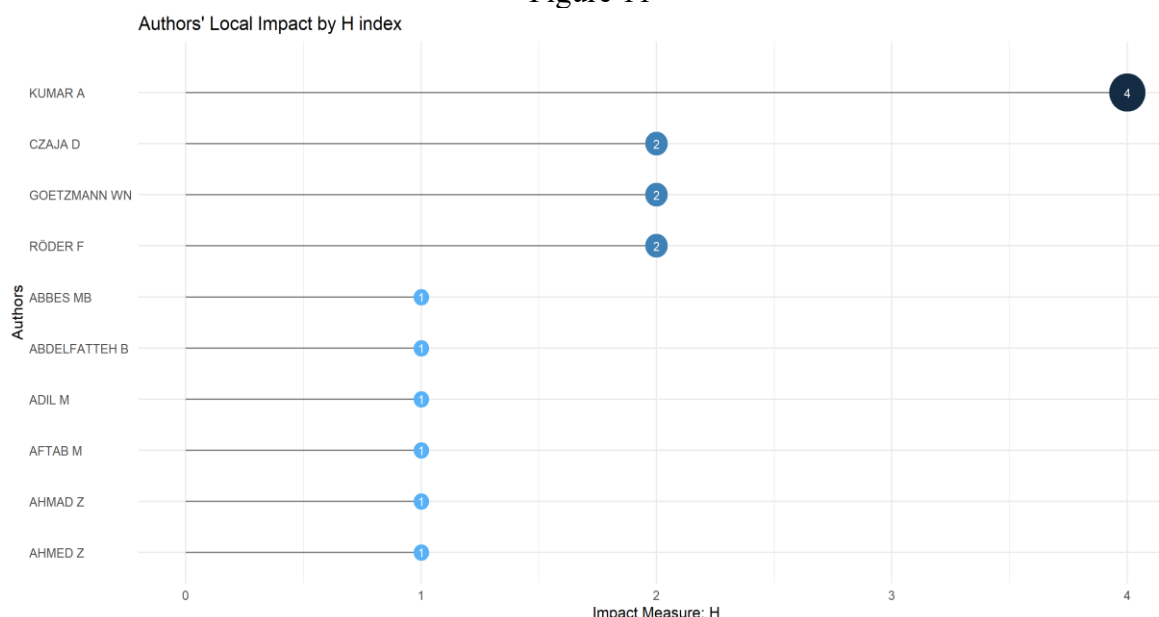
3.11 Authors Local Impact

The number of articles an author has received at least that many citations from other authors is used to compute the H-index. Table 10 shows that Kumar (2004), with a h index of 4, is at the top of the list. Czaja (2017), Goetzmann (2004), and Roder (2017) are next on the list, all with h indexes 2. With 1522 citations overall, Kumar (2004) has the most, followed by Goetzmann (2004) with 1189 citations and Ahmad (2017) with 35 citations. Once more, Kumar (2004) leads in the overall number of publications, with four, beginning in 2004. Czaja (2017), Goetzmann (2004), and Roder (2017) are next, with two each, starting in 2017 and 2004, respectively.

Table 10

Author	H Index	G Index	M Index	TC	NP	PY Start
Kumar A	4	4	0.190	1522	4	2004
Czaja D	2	2	0.25	16	2	2017
Goetzmann WN	2	2	0.095	1189	2	2004
Röder F	2	2	0.25	16	2	2017
Abbes Mb	1	1	0.076	32	1	2012
Abdelfatteh B	1	1	0.076	5	1	2012
Adil M	1	1	0.333	7	1	2022
Aftab M	1	1	0.2	1	1	2020
Ahmad Z	1	1	0.125	35	1	2017
Ahmed Z	1	1	0.333	15	1	2022

Figure 11

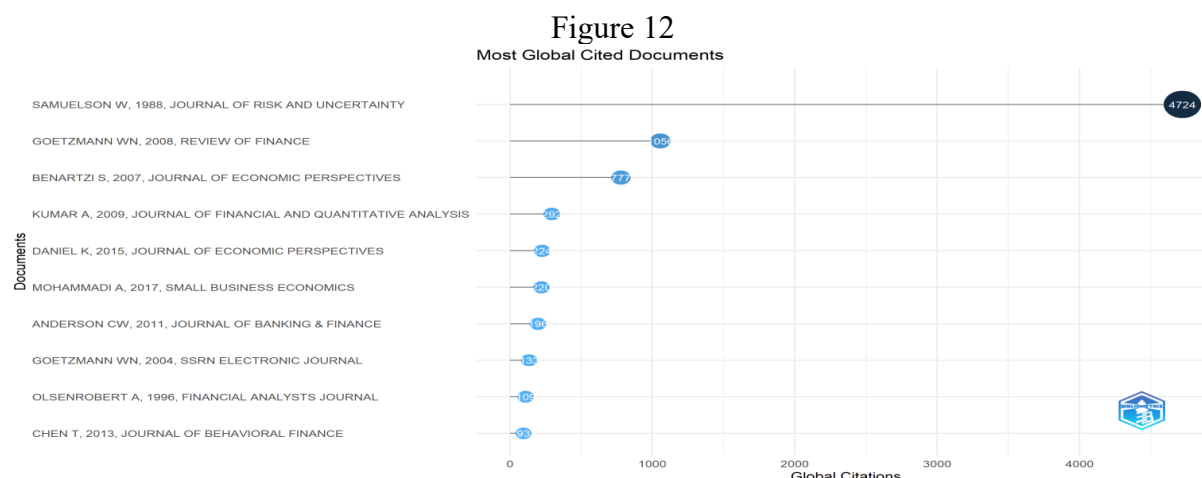


3.12 Most Global Cited Paper

Table 11 lists the most frequently cited articles in the database. Samuelson (1988) whose 1988 essay in the *Journal of Risk and Uncertainty* received 4724 citations overall, is at the top of the list. These high citation counts indicate the significant impact of his work on the field. Goetzmann (2008), whose 2008 piece in the *Review of Finance* received 1056 citations overall, is second. Third place goes to Benartiz (2009), whose 2009 essay in the *Journal of Economic Perspectives* received 777 citations overall. These citation counts reflect the influence and relevance of their respective works. Kumar (2009), whose 2009 piece in the *Journal of Financial and Quantitative Analysis* received 292 citations, is next. Chent (2013) total citation count was the lowest at 93, with a work published in the *Journal of Behavioral Finance* and an annual citation count of 7.75. The graphical representation of these sources is seen in Figure 12.

Table 11

Paper	Total Citations	TC Per Year	Normalized TC
Samuelson W, 1988, <i>Journal Of Risk And Uncertainty</i>	4724	127.675	1
Goetzmann WN, 2008, <i>Review Of Finance</i>	1056	62.117	1.925
Benartzi S, 2007, <i>Journal Of Economic Perspectives</i>	777	43.166	1
Kumar A, 2009, <i>Journal Of Financial And Quantitative Analysis</i>	292	18.25	2.853
Daniel K, 2015, <i>Journal Of Economic Perspectives</i>	224	22.4	3.246
Mohammadi A, 2017, <i>Small Business Economics</i>	220	27.5	3.089
Anderson CW, 2011, <i>Journal Of Banking & Finance</i>	196	14	2.776
Goetzmann WN, 2004, <i>SSRN Electronic Journal</i>	133	6.333	1.9
Olsen Robert A, 1996, <i>Financial Analysts Journal</i>	109	3.758	1
Chen T, 2013, <i>Journal Of Behavioral Finance</i>	93	7.75	1



4. CONCLUSION

Comprehending prevalent behavioral biases is crucial while making financial decisions. These prejudices may cause investors to make less-than-ideal investment choices, resulting in poor results. Through comprehension of these biases, investors can steer clear of costly errors. Being conscious of one's biases is the first step towards lessening its effects, even though some are hard to prevent. Thus, researchers carried out a bibliometric analysis to comprehend earlier studies and create a framework for the existence of term behavioral finance over the years. The Lens database was used to gather articles for the study from 1988 to 2024. Based on the data, it is evident from the publishing pattern that the issue is growing and that more researchers are focusing on it. From 1988 to 1992, there was only one published article. It gained popularity in 2007 and reached 35 published pieces in 2023 and 2024. 1988 saw the highest annual citation total of 4724, with 109 citations in 1996 following suit.

The SSRN Electronic Journal published the most articles out of the 17 papers in the sample. Review of Behavioral Finance, a highly respected journal, ranks second in the sample with five papers. Advances in Economics, Management and Political Sciences, Indian Journal of Finance, which ranks third with three papers each, is also well-regarded. These two journals are known for their high-quality research and are trusted sources in the academic community. Five distinguished sites published two articles each from the selected dataset. However, in the allocated time, only one article was published by the Accounting and Finance Journal. According to Lotka's Law, which measures author production, renowned scholar Kumar (2004) wrote four publications between 1988 and 2024. Famous for his extensive study, Zhang (2023) has written three articles in year 2023, and Basheer (2020) has added two in 2020. Basheer (2020), Zhang (2023), and Kumar (2004) have 1, 2, and 3 articles fractionalization, respectively, in terms of article fractionalization. Kumar (2004) was first in line with four publications, followed by Zhang (2003) and the writers Basheer (2020), Bilal (2024), Czaja (2017), De (2012), Goetzmann (2004), Hariyanto (2024), Kapoor (2024), and Kawshala (2022) with 2 publications.

Lastly, the results showed a list of the database's most frequent articles. At the top of the list is Samuelson (1988) whose 1988 article, published in the Journal of Risk and Uncertainty, earned 4724 citations. These citations show how much his work has impacted the field. In second place is Goetzmann (2008) whose 2008 article in the Review of Finance earned 1056 citations. Benartzi (2009) ranked third with 777 citations for his 2009 essay published in the Journal of Economic Perspectives. The number of citations for any work reflects its importance and influence. Next is Kumar (2009) whose 2009 Journal of Financial and Quantitative Analysis paper garnered 292 citations. With a paper published in the Journal of Behavioral Finance and an annual citation count of 7.75, Chent (2013) total citation count was the lowest at 93.

One of the most significant areas for improvement in this research is bibliometric analysis, which is currently limited to gathering citations. Its findings could be more transparent regarding whether they were used favourably or unfavourably. Despite being one of the most extensive databases, not all studies on behavioral biases are included in the Lens. As a result, it's possible that other foreign databases like PubMed or Scopus were used. Future research is advised to do a more thorough content analysis due to the limitations of bibliometric analysis. This could potentially have a significant impact on the field. It does not display articles based on the country of the current study or the fundamental biases influencing investors' investment decisions. The bibliometric analysis reveals relationships, but a more thorough content examination is advised to determine the positive or negative impact.

REFERENCES

1. Abbes, M. B. (2012). Does Overconfidence Bias Explain Volatility During the Global Financial Crisis. *Transition Studies Review*, 19(3), 291–312. <https://doi.org/10.1007/s11300-012-0234-6>
2. Aftab, M. (2020). Behavioral Biases as Predictors of Investment Decision of Individual Investors in Pakistan. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3619580>
3. Afzal, M., Rasheed, A., & Khalid, W. (2024). Behavioral Bias of Equity Investors in Different Market Conditions and Events in Pakistan Stock Exchange (PSX). *Qlantic Journal of Social Sciences and Humanities*, 5(1), 208–219. <https://doi.org/10.55737/qjssh.379018319>
4. Ahmad, Z., Ibrahim, H., & Tuyon, J. (2017). Institutional investor behavioral biases: Syntheses of theory and evidence. *Management Research Review*, 40(5), 578–603. <https://doi.org/10.1108/mrr-04-2016-0091>
5. Ahmed, Z., Rasool, S., Saleem, Q., Khan, M. A., & Kanwal, S. (2022). Mediating Role of Risk Perception Between Behavioral Biases and Investor's Investment Decisions. *SAGE Open*, 12(2), 215824402210973–215824402210973. <https://doi.org/10.1177/21582440221097394>
6. Alalade, S. Y., Okonkwo, I. E., & Folarin, N. A. (2014). Investors' Behavioral Biases and the Nigerian Stock Market Returns (2002—2012). *European Journal of Business and Management*, 6(30), 43–51.
7. Ali, I., Al-Sabaan, S., & Mandurah, S. (2016). Determinants of the Risk-Taking Attitude among Small Equity Investors. *International Journal of Applied Behavioral Economics*, 5(3), 1–13. <https://doi.org/10.4018/ijabe.2016070101>
8. Almansour, B. Y., & Arabyat, Y. (2017). Investment decision making among gulf investors: Behavioural finance perspective. *International Journal of Management Studies*, 24. <https://doi.org/10.32890/ijms.24.1.2017.10476>
9. Altaf, H., & Jan, A. (2023). Generational theory of behavioral biases in investment behavior. *Borsa Istanbul Review*, 23(4), 834–844. <https://doi.org/10.1016/j.bir.2023.02.002>
10. Amudha, D. R., & Chander, R. N. (2024). An Impact of Behavioral Bias on Investment Decision Making of Individual Investors. *International Journal of Innovative Research in Engineering and Management*, 11(2), 62–65. <https://doi.org/10.55524/ijirem.2024.11.2.12>
11. Anderson, C. W., Fedenia, M., Hirschey, M., & Skiba, H. (2011). Cultural influences on home bias and international diversification by institutional investors. *Journal of Banking & Finance*, 35(4), 916–934. <https://doi.org/10.1016/j.jbankfin.2010.09.006>
12. Aramrueng, T., & Tangtamaruk, P. (2021). An Experimental Economic Study of Loss Aversion in Stock Trading Decisions. *Humanities and Social Sciences Letters*, 9(4), 417–429. <https://doi.org/10.18488/journal.73.2021.94.417.429>
13. Arora, R., & Rajendran, M. (2023). Moored Minds: An Experimental Insight into the Impact of the Anchoring and Disposition Effect on Portfolio Performance. *Journal of Risk and Financial Management*, 16(8), 349–349. <https://doi.org/10.3390/jrfm16080349>

14. Ávila, L. A. C. de, Oliveira, A. S. de, Ávila, J. R. de M. S., & Malaquias, R. F. (2016). Behavioral Biases In Investors' Decision: Studies Review From 2006-2015. *Revista de Gestão, Finanças e Contabilidade*, 6(2), 112–131. <https://doi.org/10.18028/2238-5320/rgfc.v6n2p112-131>
15. Azofra-Palenzuela, V., Fernández-Alonso, B., & Vallelado, E. (2006). An Experimental Study of Herding and Contrarian Behavior among Financial Investors. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.932928>
16. Baker, H. K., Kapoor, S., & Khare, T. (2022). Personality traits and behavioral biases of Indian financial professionals. *Review of Behavioral Finance*, 15(6), 846–864. <https://doi.org/10.1108/rbf-11-2021-0246>
17. Basheer, A., & Siddiqui, D. A. (2020b). Explaining the Disposition Bias among Investors: The Mediatory Role of Personality, Financial Literacy, Behavioral Bias and Risk Tolerance. *Business and Economic Research*, 10(2), 290–314. <https://doi.org/10.5296/ber.v10i2.16827>
18. Benartzi, S., & Thaler, R. H. (2007). Heuristics and Biases in Retirement Savings Behavior. *Journal of Economic Perspectives*, 21(3), 81–104. <https://doi.org/10.1257/jep.21.3.81>
19. Briere, M., Calamai, T., Giansante, F. D., Huynh, K., & Novelli, R. (2023). Behavioral Biases Among Retail and Institutional Investors. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4467369>
20. Chandra, A., & Kumar, R. (2012). Factors Influencing Indian Individual Investor Behaviour: Survey Evidence. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2029642>
21. Chaubey, S. K., Goel, D. A., & Goswami, D. A. (2023). A preliminary investigation of the behavioral barriers to investing. *Asian Journal of Management and Commerce*, 4(2), 276–279. <https://doi.org/10.22271/27084515.2023.v4.i2c.224>
22. Chen, T. (2013). Do Investors Herd in Global Stock Markets. *Journal of Behavioral Finance*, 14(3), 230–239. <https://doi.org/10.1080/15427560.2013.819804>
23. Chiang, M. H., & Huang, H.-Y. (2009). Do Investment Flows Drive the Disposition Effect on Fund Managers. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1343650>
24. Costa, D. F., Carvalho, F. de M., Moreira, B. C. de M., & Prado, J. W. do. (2017). Bibliometric analysis on the association between behavioral finance and decision making with cognitive biases such as overconfidence, anchoring effect and confirmation bias. *Scientometrics*, 111(3), 1775–1799. <https://doi.org/10.1007/s11192-017-2371-5>
25. Czaja, D., & Röder, F. (2020). Self-attribution bias and overconfidence among nonprofessional traders. *The Quarterly Review of Economics and Finance*, 78, 186–198. <https://doi.org/10.1016/j.qref.2020.02.003>
26. Daniel, K., & Hirshleifer, D. (2015). Overconfident Investors, Predictable Returns, and Excessive Trading †. *Journal of Economic Perspectives*, 29(4), 61–88. <https://doi.org/10.1257/jep.29.4.61>
27. Devadas, M., & Vijayakumar, D. T. (2019). Investment Decisions, Herd Behaviour and Retail Investors. *International Journal of Innovative Technology and Exploring Engineering*, 8(10), 3291–3294. <https://doi.org/10.35940/ijitee.j1210.0881019>
28. Elmas, B., Demir, B., & Aydın, S. (2024). Analysis of Behavioral Biases Affecting Investment Decisions of Individual Investors using Analytical Hierarchy Process. *Trends in Business and Economics*. <https://doi.org/10.16951/trendbusecon.1506923>
29. Fernández, B., Garcia-Merino, T., Mayoral, R. M., Santos, V., & Vallelado, E. (2011). Herding, information uncertainty and investors' cognitive profile. *Qualitative Research in Financial Markets*, 3(1), 7–33. <https://doi.org/10.1108/17554171111124595>
30. Fitri, F. A., & Hariyanto, D. (2024). The Impact of Social Media, Herding Bias, Gambler's Fallacy, and Framing Effect on Investment Decisions among Gen Z Investors in Pontianak City.

- Proceedings Series on Social Sciences & Humanities*, 15, 202–207.
<https://doi.org/10.30595/pssh.v15i.1007>
31. Garcia, J. (2024). Herding the crowds: How sentiment affects crowdsourced earnings estimates. *Financial Markets and Portfolio Management*. <https://doi.org/10.1007/s11408-024-00447-4>
 32. Gavrilakis, N., & Floros, C. (2021). The impact of heuristic and herding biases on portfolio construction and performance: The case of Greece. *Review of Behavioral Finance*, 14(3), 436–462. <https://doi.org/10.1108/rbf-11-2020-0295>
 33. Goetzmann, W. N., & Kumar, A. (2008). Equity Portfolio Diversification. *Review of Finance*, 12(3), 433–463. <https://doi.org/10.1093/rof/rfn005>
 34. Goldreich, D. (2004). Behavioral Biases of Dealers in U.S. Treasury Auctions. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.545822>
 35. Guala, F. (2024). Daniel Kahneman (1934–2024). *Cognitive Processing*, 25(2), 189–191. <https://doi.org/10.1007/s10339-024-01195-z>
 36. Gunathilaka, R. C., & Fernando, J. M. R. (2021). Do behavioral biases differ among institutional and individual investors. *Accounting and Finance*, 2, 61–73. [https://doi.org/10.33146/2307-9878-2021-2\(92\)-61-73](https://doi.org/10.33146/2307-9878-2021-2(92)-61-73)
 37. He, Z. (2023). The Impact of COVID-19 on Investors Behavior: Evidence from Risk-aversion, Herding Behavior, and Availability Bias. *Advances in Economics, Management and Political Sciences*, 26(1), 93–101. <https://doi.org/10.54254/2754-1169/26/20230551>
 38. Hiraki, T., & Liu, M. (2021). Do global equity mutual funds exhibit home bias. *Journal of Behavioral and Experimental Finance*, 31, 100508-. <https://doi.org/10.1016/j.jbef.2021.100508>
 39. Im, M., & Oh, J. (2016). Effect of emotion regulation as a de-biasing mechanism on overconfidence in investment behavior. *Journal of Financial Services Marketing*, 21(3), 209–225. <https://doi.org/10.1057/s41264-016-0003-4>
 40. Isidore, R. R., & Christie, P. (2018). Investment Behavior of Secondary Equity Investors: An Examination of the Relationship Among the Biases. *Indian Journal of Finance*, 12(9), 7-. <https://doi.org/10.17010/ijf/2018/v12i9/131556>
 41. Jain, N., & Kesari, B. (2020). An Empirical Analysis of Investor Behavioral Biases, Investment Risk Tolerance and Decision-Making. *GIS Business*, 15(2), 46–57. <https://doi.org/10.26643/gis.v15i2.18897>
 42. Jaiswal -, D. V. K. (2023). Behavioural Biases in Equity, Futures, and Options Trading: Implications for Market Efficiency. *International Journal For Multidisciplinary Research*, 5(4). <https://doi.org/10.36948/ijfmr.2023.v05i04.4787>
 43. Jia, Y. (2023). A Literature Study of Behavior Finance and Investor Decision-Making. *Highlights in Business, Economics and Management*, 21, 262–267. <https://doi.org/10.54097/hbem.v21i.14382>
 44. Kakkar, B. H., & Hariharan, S. V. (2022). Heuristics, investments and planning among young investors of India. *International Journal of Health Sciences*, 8858–8868. <https://doi.org/10.53730/ijhs.v6ns3.8143>
 45. Kawshala, B. A. H., & Anuradha, P. A. N. S. (2021). Socio-economic, Trading Sophistication and Selfreflection on Investors' Overconfidence Bias: Evidence from Colombo Stock Exchange. *Proceedings of International Conference on Business Management*, 17. <https://doi.org/10.31357/icbm.v17i.5137>
 46. Khan, A. A., & Waqas, M. (2024). Behavioral Finance Factors Influence on Investment Decision Making of Individual Investors in PSX and PMEX. *Journal of Accounting and Finance in Emerging Economies*, 10(2). <https://doi.org/10.26710/jafee.v10i2.2932>
 47. Khan, D. (2020). Cognitive Driven Biases, Investment Decision Making: The Moderating Role of Financial Literacy. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3514086>

48. Khare, T., & Kapoor, S. (2024). Elucidating the Relationships among Demographics, Behavioral Biases, and Risk Factors: A Study of Financial Professionals. *The Journal of Investing*, 33(3), 109–131. <https://doi.org/10.3905/joi.2024.1.303>
49. Khilar*, R. P., & Singh, D. S. (2019). Influence of Behavioural Biases on Investment Decision Making in Bhubaneswar Region. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(3), 8297–8301. <https://doi.org/10.35940/ijrte.c6592.098319>
50. Kulal, A. (2022). Impact of Influenced Behavioral Biases on Investment Decision. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4233737>
51. Kumar, A. (2009). Hard-to-Value Stocks, Behavioral Biases, and Informed Trading. *Journal of Financial and Quantitative Analysis*, 44(6), 1375–1401. <https://doi.org/10.1017/s0022109009990342>
52. Kunwar, K. (2021). The Relationship of Behavioral Factors with Investment Performance of Individual Investors in the Nepali Stock Market. *Prithvi Academic Journal*, 4, 66–83. <https://doi.org/10.3126/paj.v4i0.37016>
53. Kuranchie-Pong, R., & Forson, J. A. (2021). Overconfidence bias and stock market volatility in Ghana: Testing the rationality of investors in the Covid-19 era. *African Journal of Economic and Management Studies*, 13(1), 147–161. <https://doi.org/10.1108/ajems-05-2021-0209>
54. Larni-Foоек, A., Sadjadi, S. J., & Mohammadi, E. (2024). Stochastic portfolio optimization: A regret-based approach on volatility risk measures: An empirical evidence from The New York stock market. *PloS One*, 19(4), e0299699–e0299699. <https://doi.org/10.1371/journal.pone.0299699>
55. Lebdaoui, H., Chetoui, Y., & Guechi, E. (2021). THE IMPACT OF BEHAVIORAL BIASES ON INVESTMENT PERFORMANCE: DOES FINANCIAL LITERACY MATTER? *International Journal of Economics and Financial Issues*, 11(3), 13–21. <https://doi.org/10.32479/ijefi.11318>
56. Lei, S., & Mathers, A. M. (2023). Familiarity bias in direct stock investment by individual investors. *Review of Behavioral Finance*, 16(3), 551–579. <https://doi.org/10.1108/rbf-03-2023-0074>
57. Lin, H.-W. (2011). Elucidating rational investment decisions and behavioral biases: Evidence from the Taiwanese stock market. *African Journal of Business Management*, 5(5), 1630–1641.
58. Makwana, C. (2016). Interaction between Demographic Variable and Behaviour Bias of Mutual Fund Investors. *Global Journal for Research Analysis*, 4(7). <https://lens.org/128-714-687-571-092>
59. Mangala, D., & Sharma, M. (2014a). A Brief Mapping of Theory and Evidence of Investors' Behavioural Biases. *Indian Journal of Finance*, 8(8), 44–56. <https://doi.org/10.17010/ijf/2014/v8i8/71855>
60. Mayora, null G. M., & Lestari, null W. (2024). The Effect of Risk Perception, Recency Bias, Herding Behavior and Regret Aversion Bias on Investment Decision Making Among The Younger Generation in Surabaya. *Ekspektra : Jurnal Bisnis Dan Manajemen*, 8(1), 80–94. <https://doi.org/10.25139/ekt.v8i1.7482>
61. Mehmood, F., Bashir, T., & Khan, A. (2019). Financial Literacy as a Life-Saver: Moderating the Contribution of Behavioral Biases towards Investment Decisions. *Global Social Sciences Review*, IV(III), 106–114. [https://doi.org/10.31703/gssr.2019\(iv-iii\).14](https://doi.org/10.31703/gssr.2019(iv-iii).14)
62. Metilda, M. (2011). Hindsight Bias and its Significance to Investor Decision Making. *Indian Journal of Applied Research*, 3(4), 246–247. <https://doi.org/10.15373/2249555x/apr2013/83>
63. Mohamed, E. B., & Abdelfatteh, B. (2012). Portfolio selection between rational and behavioral theories emergent markets case. *Management Science Letters*, 2(4), 1219–1232. <https://doi.org/10.5267/j.msl.2012.02.015>

64. Mohammadi, A., & Shafi, K. (2017). Gender differences in the contribution patterns of equity-crowdfunding investors. *Small Business Economics*, 50(2), 275–287. <https://doi.org/10.1007/s11187-016-9825-7>
65. Mohammadi, M., Naderian, A., Ashrafi, M., & Doji, J. G. (2022). Effect of financial literacy and risk aversion on the relationship between self-control and financial security of individual investors in Tehran Stock Exchange. *International Journal of Nonlinear Analysis and Applications*, 13(1), 2015–2024.
66. Mouna, A., & Jarboui, A. (2015). Financial literacy and portfolio diversification: An observation from the Tunisian stock market. *International Journal of Bank Marketing*, 33(6), 808–822. <https://doi.org/10.1108/ijbm-03-2015-0032>
67. Mukherjee, S., & De, S. (2012). Are Investors Ever Rational. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2156047>
68. Mulasi, A., Mathew, J., & Desai, K. (2022). Predicting the financial behavior of Indian salaried-class individuals. *Investment Management and Financial Innovations*, 20(1), 26–37. [https://doi.org/10.21511/imfi.20\(1\).2023.03](https://doi.org/10.21511/imfi.20(1).2023.03)
69. Musciotto, F., Marotta, L., Piilo, J., & Mantegna, R. N. (2018). Long-term ecology of investors in a financial market. *Palgrave Communications*, 4(1), 1–12. <https://doi.org/10.1057/s41599-018-0145-1>
70. Mushinada, V. N. C., & Veluri, V. S. S. (2019). Elucidating investors rationality and behavioural biases in Indian stock market. *Review of Behavioral Finance*, 11(2), 201–219. <https://doi.org/10.1108/rbf-04-2018-0034>
71. Mzioud, O., & Meknassi, S. (2021). Can Personality Traits, Risk Attitude, and Demographics Explain Fund Managers' Disposition Effect? *European Scientific Journal, ESJ*, 17(32), 303-. <https://doi.org/10.19044/esj.2021.v17n32p303>
72. N, V. P., M, S. K., & M, K. (2024). Effect of Behavioral Biases and Financial Literacy on Investors' Investment Decision-making in Kerala, India. *Advances in Research*, 25(3), 213–226. <https://doi.org/10.9734/air/2024/v25i31066>
73. Nair, P. S., & Shiva, A. (2023). Specifying and validating overconfidence bias among retail investors: A formative index. *Managerial Finance*, 50(5), 1017–1036. <https://doi.org/10.1108/mf-04-2023-0237>
74. Nguyen, T., & Schuessler, A. (2012). Investment Decisions and Socio-demographic Characteristics —Empirical Evidence from Germany. *International Journal of Economics and Finance*, 4(9), 1-. <https://doi.org/10.5539/ijef.v4n9p1>
75. Noch, M. Y., & Rumasukun, M. R. (2024). Understanding Human Behavior in Finance: A Qualitative Study on Cognitive Biases and Decision-making in Investment Practices. *Golden Ratio of Finance Management*, 4(1), 24–34. <https://doi.org/10.52970/grfm.v4i1.462>
76. Ofir, M., & Wiener, Z. (2012). Investor Sophistication and the Effect of Behavioral Biases in Structured Products Investment. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2193287>
77. OlsenRobert, A. (1996). Implications of Herding Behavior for Earnings Estimation, Risk Assessment, and Stock Returns. *Financial Analysts Journal*, 52(4), 37–41. <https://doi.org/10.2469/faj.v52.n4.2009>
78. Outouzzalt, A., Elouidani, R., Moutaouakil, L. E., & Fettahi, I. (2023). Behavioral Biases Affecting Decision-Making in the Financial Market. *SHS Web of Conferences*, 175, 1055–01055. <https://doi.org/10.1051/shsconf/202317501055>
79. Perera, A. M. (2016). Gender Attitudes and Investor Behaviour: Evidence from Individual Investors in North Western Province. *Sri Lanka Journal of Economic Research*, 4(1), 3–17. <https://doi.org/10.4038/sljer.v4i1.68>

80. Piotrowski, M., & Bünnings, C. (2022). How heuristics in judgement influence the securities investment decision process. *Journal of Financial Services Marketing*, 29(1), 97–105. <https://doi.org/10.1057/s41264-022-00184-7>
81. Pratiwi, P., & Hariyanto, D. (2024). The Influence of Representativeness Bias, Optimism Bias and Loss Aversion on Stock Investment Decision Making among Investors in Pontianak City. *Journal Dimensie Management and Public Sector*, 5(2), 8–17. <https://doi.org/10.48173/jdmps.v5i2.259>
82. Qayyum, A., Rashid, R., Usman, P. M., Bilal, R., & Mehmood, O. (2024b). Institutional Investor Behavior: A Comprehensive Study at the Pakistan Stock Exchange. *Bahria University Journal Of Management & Technology*, 7(1). <https://doi.org/10.62533/bjmt.v7i1.95>
83. Quaicoe, A., & Eleke-Aboagye, P. Q. (2021). Behavioral factors affecting investment decision-making in bank stocks on the Ghana stock exchange. *Qualitative Research in Financial Markets*, 13(4), 425–439. <https://doi.org/10.1108/qrfm-05-2020-0084>
84. Raheja, S., & Dhiman, B. (2020). How do emotional intelligence and behavioral biases of investors determine their investment decisions. *Rajagiri Management Journal*, 14(1), 35–47. <https://doi.org/10.1108/ramj-12-2019-0027>
85. Ranaweera, S. S., & Kawshala, B. A. H. (2022). Influence of Behavioral Biases on Investment Decision Making with Moderating Role of Financial Literacy and Risk Attitude: A Study Based on Colombo Stock Exchange. *South Asian Journal of Finance*, 2(1). <https://doi.org/10.4038/sajf.v2i1.32>
86. Rawat, B. (2023). Effect of Behavioral Biases on Investment Decision Making in Nepalese Stock Market with the Mediating Role of Investors' Sentiment. *Journal of Bhuwanishankar*, 2(1), 40–61. <https://doi.org/10.3126/jobs.v2i1.62195>
87. Rushdi, N. J., & Sushma, null. (2019). Establishing AN Association between Risk Tolerance and Behavioral Biases among Indian Investors. *International Journal of Engineering and Advanced Technology*, 9(2), 1378–1382. <https://doi.org/10.35940/ijeat.b2637.129219>
88. Rzeszutek, M., Czerwonka, M., & Walczak, M. (2015). Investor Expertise and the Rationality of Decision Making. *Acta Universitatis Lodziensis. Folia Oeconomica*, 1(310), 133–140. <https://doi.org/10.18778/0208-6021.310.10>
89. Sadi, R., Asl, H. G., Rostami, M. R., Gholipour, A., & Gholipour, F. (2011). Behavioral Finance: The Explanation of Investors' Personality and Perceptual Biases Effects on Financial Decisions. *International Journal of Economics and Finance*, 3(5), 234-. <https://doi.org/10.5539/ijef.v3n5p234>
90. Safaie, N., Sadighi, A., & Ghazani, M. M. (2024). Analyzing the interrelations among investors' behavioral biases using an integrated DANP method. *Decision Science Letters*, 13(1), 119–134. <https://doi.org/10.5267/j.dsl.2023.11.003>
91. Samuelson, W., & Zeckhauser, R. J. (1988). Status quo bias in decision making. *Journal of Risk and Uncertainty*, 1(1), 7–59. <https://doi.org/10.1007/bf00055564>
92. Sapkota, M. P. (2022). Behavioural Finance and Stock Investment Decisions. *Saptagandaki Journal*, 70–84. <https://doi.org/10.3126/sj.v13i1.54947>
93. Schulz, B. (2023). Behavioral Finance and how its Behavioral Biases Affect German Investors. *ACTA VŠFS*, 17(1), 39–59. <https://doi.org/10.37355/acta-2023/1-03>
94. Shafqat, sayed ibtasam, & Malik, I. R. (2021). ROLE OF REGRET AVERSION AND LOSS AVERSION EMOTIONAL BIASES IN DETERMINING INDIVIDUAL INVESTORS' TRADING FREQUENCY: MODERATING EFFECTS OF RISK PERCEPTION. *Humanities & Social Sciences Reviews*, 9(3), 1373–1386. <https://doi.org/10.18510/hssr.2021.93137>
95. Shafran, S., Benzion, U., & Shavit, T. (2009). Investors' Decision to Trade Stocks – An Experimental Study. *Journal of Behavioral Finance*, 10(2), 81–88. <https://doi.org/10.1080/15427560902902150>

96. Shandu, P., & Alagidede, I. P. (2022). The disposition effect and its manifestations in South African investor teams. *Review of Behavioral Finance*, 16(1), 167–185. <https://doi.org/10.1108/rbf-01-2022-0027>
97. Shantha, K. V. A. (2019). Individual Investors' Learning Behavior and Its Impact on Their Herd Bias: An Integrated Analysis in the Context of Stock Trading. *Sustainability*, 11(5), 1448-. <https://doi.org/10.3390/su11051448>
98. Silwal, P. P., & Bajracharya, S. (2021). Behavioral Factors Influencing Stock Investment Decision of Individuals. *International Research Journal of Management Science*, 6(1), 53–73. <https://doi.org/10.3126/irjms.v6i1.42339>
99. Singh, B. (2021). A Bibliometric Analysis of Behavioral Finance and Behavioral Accounting. *American Business Review*, 24(2), 198–230. <https://doi.org/10.37625/abr.24.2.198-230>
100. Singh, L. H., & Chaudhary, A. K. (2024). Behavioral Attributes Influencing Decision Making of Indian Derivative Market Investors. *Asian Journal of Economics, Business and Accounting*, 24(6), 464–476. <https://doi.org/10.9734/ajeba/2024/v24i61374>
101. Singh, Y., Adil, M., & Haque, S. M. I. (2022). Personality traits and behaviour biases: The moderating role of risk-tolerance. *Quality & Quantity*, 57(4), 1–3573. <https://doi.org/10.1007/s11135-022-01516-4>
102. Soni, K., & Desai, M. (2021). STOCK PRICES: EFFECT OF BEHAVIORAL BIASES ON INVESTOR'S MINDSET IN GUJARAT STATE, INDIA. *Copernican Journal of Finance & Accounting*, 10(1), 67–79. <https://doi.org/10.12775/cjfa.2021.004>
103. S.S, R., & Kaushala, H. (2021). Influence of Behavioral Biases on Investment Decision Making with Moderating Role of Financial Literacy and Risk Attitude: A Study Based on Colombo Stock Exchange. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4116979>
104. Tarim, E. (2012). Narrative as a Sensemaking Heuristic: Evidence from Individual Investors and Their Brokers. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2115215>
105. Tekçe, B., Yilmaz, N., & Bildik, R. (2016). What factors affect behavioral biases? Evidence from Turkish individual stock investors. *Research in International Business and Finance*, 37, 515–526. <https://doi.org/10.1016/j.ribaf.2015.11.017>
106. TEKIN, B. (2016). Behavioral Biases as An Effective Factor for the Firm Financial Decision-Making: A Literature Review. *JOURNAL OF SOCIAL SCIENCE RESEARCH*, 10(2), 2103–2115. <https://doi.org/10.24297/jssr.v10i2.4748>
107. Tirathdas, K. S. (2019). Gender differences in financial literacy and investment in SPSS. *Recent Trends in Management and Commerce*, 1(2), 75–81. <https://doi.org/10.46632/rmc/1/2/11>
108. Trisno, B., & Vidayana, null. (2023). Understanding herding behavior among Indonesian stock market investors. *E3S Web of Conferences*, 426, 1088–01088. <https://doi.org/10.1051/e3sconf/202342601088>
109. Ullah, S. (2015). An Empirical Study of Illusion of Control and Self-Serving Attribution Bias, Impact on Investor's Decision Making: Moderating Role of Financial Literacy. *Research Journal of Finance and Accounting*, 6(19), 109–118.
110. V, D. V. H., Rao, D. D., M, C. K. R., Rao, D. G. V. K., & M, M. R. (2024). Impact Of Demographic Factors On Emotional Behavioral Biases Of The Individual Investors: Empirical Study On Indian Stock Market. *Migration Letters*, 21(S6), 1648–1662. <https://doi.org/10.59670/ml.v21is6.8381>
111. Xu-guan, H. (2014). Research on the Correlation among Mental Account, Overconfidence and Anchoring Effect of Securities Regulators in China. *Journal of Beijing Technology and Business University*. <https://lens.org/071-982-587-629-431>
112. Yang, M., Mamun, A. A., Mohiuddin, M., Al-Shami, S. S. A., & Zainol, N. R. (2021). Predicting Stock Market Investment Intention and Behavior among Malaysian Working Adults

- Using Partial Least Squares Structural Equation Modeling. *Mathematics*, 9(8), 873-.
<https://doi.org/10.3390/math9080873>
113. Yue, L. (2010). An Empirical Study on the Overconfidence of Investors under the Overall Perspective. *Journal of Applied Statistics and Management*. <https://lens.org/196-789-871-613-267>
114. Zafar, S., Ashraf, S., & Raza, T. (2024). THE INVESTMENT DECISION-MAKING: UNDERSTANDING OVERCONFIDENCE, HERDING AND RISK AVERSION AMONG INDIVIDUAL INVESTORS. *March 2024*, 3(1), 32–44. <https://doi.org/10.53664/jssd/03-01-2024-03-32-44>
115. Zhang, M. (2023). Empirical Evidence of Cognitive Biases among Chinese Investors. *Advances in Economics, Management and Political Sciences*, 9(1), 205–210. <https://doi.org/10.54254/2754-1169/9/20230379>.
116. Zhao, D., & Fang, Y. (2014). Representation Bias, Return Forecast, and Portfolio Selection in the Stock Market of China. *Mathematical Problems in Engineering*, 2014, 1–8. <https://doi.org/10.1155/2014/686201>