

**Navigating the New Frontier by Mapping the Intersection of Financial, Investment, and Robo Advice for Individual, Retail, and Household Investors: A Bibliometric Analysis**

**Zahid Bashir**

University of Gujrat, Pakistan, Hailey College of Commerce, University of Punjab

[zahid.bashir@uog.edu.pk](mailto:zahid.bashir@uog.edu.pk)

**Fouzia Hadi Ali**

Hailey College of Commerce, University of the Punjab

[fozia.hcc@pu.edu.pk](mailto:fozia.hcc@pu.edu.pk)

**Sabra Munir**

University of Technology Malaysia, Malaysia

[munir.sabra@graduate.utm.my](mailto:munir.sabra@graduate.utm.my)

[sabra\\_munir@hotmail.com](mailto:sabra_munir@hotmail.com)

**Kausar Takreem**

Professor College of Home Economics University of Peshawar

[ktakreem@gmail.com](mailto:ktakreem@gmail.com)

**Abstract**

The study aims to connect financial advice with individual investors, utilizing influential authors, countries, journals, and publications, while addressing research gaps and proposing future directions. Using Scopus, titles and abstracts containing the terms "financial advice" and "individual investors" were retrieved and analyzed using the VOS viewer program. The search results were ranked according to the number of publications, citations, Cite Score, and h-index. Uthe emerged as the most influential author, followed by Adra, Brooks, Gerken, and Golubov. The top five journals in this field were Finance, Corporate Finance, Banking and Finance, Financial Counseling and Planning, and Wealth Management, with high citation rates for research on financial advice and individual investors. Behavioral biases, Fintech, robo-advisors, behavioral finance, and artificial intelligence are proposed as important areas for future research. Additionally, longitudinal studies that examine market efficiency, decision-making dynamics, information asymmetries, and investor intelligence can improve financial advice and investment outcomes. This research provides the basis and recommendations for future researchers in domain of financial advice especially for retail investors.

**Keywords:** financial advice, individual investors, bibliometric analysis, VOS-viewers, Scopus database

**JEL Classifications:** C81, D14, D83, D91, G11, G14, G40, G41, G51

## Introduction

Numerous individual investors need more information, skill, and time to effectively manage their finances, resulting in poor investment decisions, missed opportunities, and financial catastrophes (Moss et al., 2022). Financial advisers can assist individual investors in navigating the intricacies of the financial markets, developing individualized investment plans, and efficiently managing risk. Individual investors can handle a variety of financial difficulties and make well-informed decisions that can help them accomplish their long-term financial goals by seeking financial assistance (Hunt et al., 2023; Miller et al., 2021). Financial advice refers to the recommendations and direction given to clients by financial specialists on how to manage their financial resources successfully.

According to Marsden et al. (2011), investment management, tax planning, retirement planning, estate planning, risk management, and budgeting may be included in financial advising. The purpose of financial advising is to assist clients in achieving their financial objectives and making educated financial decisions. The benefits of seeking financial advice include (a) unbiased advice customized to the client's circumstances, (b) decisions based on specific knowledge and expertise, (c) effective risk management, (d) alignment of financial objectives and goals, and (d) review and monitoring of decisions (Fan, 2021; Gerrans & Hershey, 2017; Winchester & Huston, 2015). Financial advice does not generally apply to a specific group of people but should be personalized to the individual's unique financial situation (Vlaev et al., 2015). Financial advisors consider income, assets, debt, age, financial goals, and other relevant factors to provide customized solutions that align with the client's needs and objectives (Chatterjee & Fan, 2023; Fan, 2021; Liu et al., 2019).

Several studies provide the contextual gaps in financial advice, including (a) the socioeconomic status of clients in different regions, (b) cultural variations of clients within and across economies, (c) gender differences between clients and advisors, (d)

age differences of clients, (e) Trust on the advisor (Dockery et al., 2022; Fan et al., 2022; García et al., 2022; Nourallah, 2023).

The study aims to determine the most influential authors, countries, and journals researching linking financial advice with individual investors. The study also aims to examine the research gap in linking financial advice with individual investors. More specifically, the study has the following objectives.

1. To identify key writers doing research for financial advice and retail investors.
2. To analyze the leading countries' studies on financial advice and retail investors.
3. To identify influential journals publishing the research on financial advice and retail investors.
4. To identify financial advice research gaps and recommendations.

Financial guidance helps people make smart financial decisions that match their goals and risk tolerance. Financial advisors can help novice investors navigate complex financial markets and build strategies. Financial counsellors also help with estate taxes, retirement planning, and more. Financial coaching helps people manage their resources and build wealth to achieve long-term financial goals. Financial coaching can help people make smart financial decisions that improve their well-being.

### Methods and Material

Bibliometric analysis quantifies scientific literature's influence by studying publishing, citation, and author collaboration patterns (Donthu et al., 2021). This method helps researchers find the most prominent authors, institutions, and research subjects in an area and their relationships. In scientific research evaluation, funding allocation, and strategic planning, bibliometric analysis provides useful insights into the productivity and effect of researchers, institutions, and scientific areas (Costa et al., 2019). Ultimately, bibliometric analysis helps inform scientific research decision-making and promotes more effective and efficient knowledge dissemination. Researchers examined the 1979–2023 Scopus database in 2023. To evaluate past investigations, a long duration was needed. Scopus collects enriched scholarly data

and literature from many disciplines, making it unique and inclusive. Scopus' abstracts from over 17,000 publications and 5,000 publishers enable international multidisciplinary integration (Effah et al., 2023). Economics, econometrics, and finance publications were our focus.

### Source and Searching Strategy of Data

The researcher conducted data mining from the Scopus database between May 18 and 19, 2023. The central theme of this research revolved around the publication documents that featured both "financial advice" and "individual investors" in their respective titles and abstracts. The researchers analyzed the search results of the central theme by utilizing bibliometric indicators such as total publications, total citations, Cite score, and h-index for ranking purposes. The data was categorized based on source, author, affiliation, country, subject area, document type, and top 10 Australian Business Dean Council (ABDC) journal categorization. Figure 1 summarizes the flow of collecting and limiting the documents for this study.

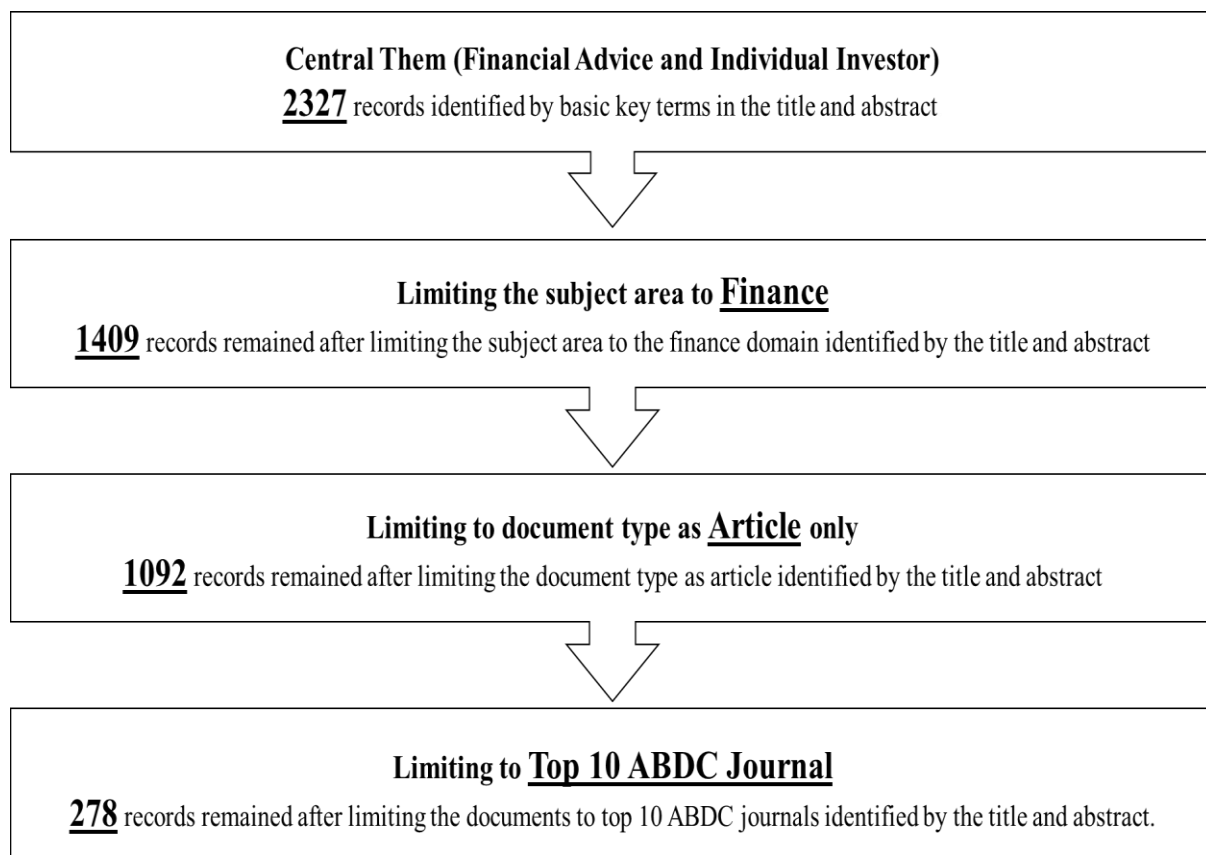


Figure 1: Flowchart of gathering data of publications for central and sub-themes

Table 1 summarizes each analysis stage's specific strings. We used all synonyms of financial advice and individual investors in stage 1. Finance, economics, and econometrics were subject category limits. In stage 3, we limited document types. Finally, in stage four, we limited the top 10 ABDC journals.

**Table 1 Four-stage search strategies and query strings used in Scopus**

Refinement Search Stage	Theme	Search For?	Query String Search	Search Output (Documents Number)
Stage 1	Central	Financial advice and Individual investors with all possible synonyms	TITLE-ABS ( "Financial Advice" OR "Investment advice" OR "Robo-Advice" ) OR ( "financial advisor" OR "investment advisor" ) OR ( "AI financial advisor" OR "robo Advisor" ) AND ( "investors" OR "individual investors" OR "retail investors" OR "household investors" )	2327
Stage 2	Central	Economics, Econometrics, and Finance	TITLE-ABS ( "Financial Advice" OR "Investment advice" OR "Robo-Advice" ) OR ( "financial advisor" OR "investment advisor" ) OR ( "AI financial advisor" OR "robo Advisor" ) AND ( "investors" OR "individual investors" OR "retail investors" OR "household investors" ) AND ( LIMIT-TO ( SUBJAREA, "ECON" ) )	1409
Stage 3	Central	Document type 'Article'	TITLE-ABS ( "Financial Advice" OR "Investment advice" OR "Robo-Advice" ) OR ( "financial advisor" OR "investment advisor" ) OR ( "AI financial advisor" OR "robo Advisor" ) AND ( "investors" OR "individual investors" OR "retail investors" OR "household investors" ) AND ( LIMIT-TO ( SUBJAREA, "ECON" ) ) AND ( LIMIT-TO ( DOCTYPE, "ar" ) )	1092

<p>Stage 4</p>	<p>Central</p>	<p>TITLE-ABS ( "Financial Advice" OR "Investment advice" OR "Robo-Advice" ) OR ( "financial advisor" OR "investment advisor" ) OR ( "AI financial advisor" OR "robo Advisor" ) AND ( "investors" OR "individual investors" OR "retail investors" OR "household investors" ) AND ( LIMIT-TO ( SUBJAREA , "ECON" ) ) AND ( LIMIT-TO ( DOCTYPE , "ar" ) ) AND ( LIMIT-TO ( EXACTSRCTITLE , "Journal Of Wealth Management" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Banking And Finance" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Corporate Finance" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Finance" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Financial Counseling And Planning" ) OR LIMIT-TO ( EXACTSRCTITLE , "Qualitative Research In Financial Markets" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Behavioral And Experimental Finance" ) OR LIMIT-TO ( EXACTSRCTITLE , "International Review Of Financial Analysis" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Financial Economics" ) OR LIMIT-TO ( EXACTSRCTITLE , "Journal Of Financial Services Marketing" ) )</p>	<p>278</p>
		<p>Top 10 ABDC Journal A*/A categorized journals</p>	

Figure 2 shows the rise in financial counseling and individual investor literature after its 1979 Scopus database. After 2003 and a 2006 drop, published articles have grown steadily. Despite variations, financial advice and individual investor articles peaked in 2021. The increased scope of financial advising, individual investor research, and

researchers' dedication to finding gaps and undertaking studies to help stakeholder decision-making drove 2021 publishing growth.

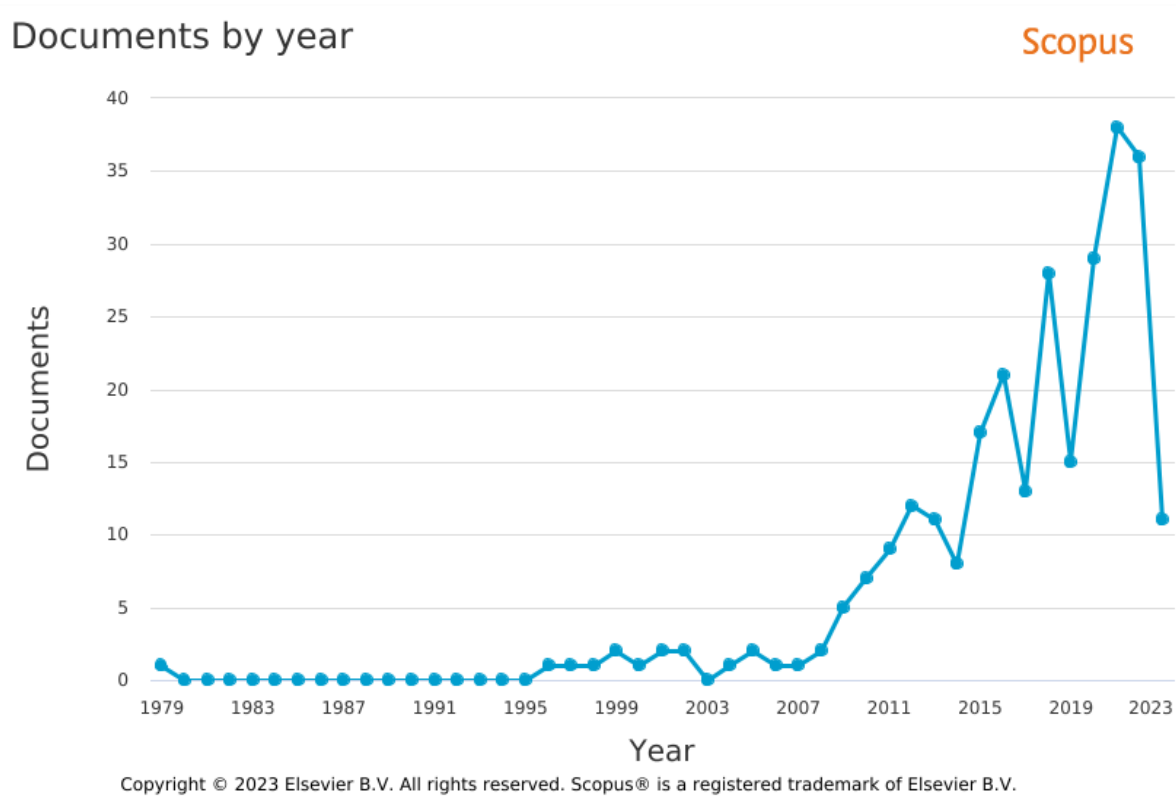


Figure 2: Publication Growth by Year

Financial advice, individual investors, retail investors, gender, financial literacy, risk-taking, financial education, behavioral biases, robo-advice, Artificial Intelligence (AI) in financial advice, investment behavior, trust, and personality traits were studied in 2021–2023 (Akhtar & Malik, 2023; Back et al., 2023; Baeckström et al., 2021; Barthel & Lei, 2021; Fan, 2021; Fong & Lee, 2023; Hagen & Malisa, 2022; Hsu, 2022; Monne et al., 2023; Northey et al., 2022; Piehlmaier, 2022; Reiter-Gavish et al., 2021; Zhang et al., 2023).

The first stage of Scopus database analysis yielded the subject type of document distribution in Figure 3 for 1979–2023 using primary search keywords of financial advice and individual investors, including their synonyms. Finance, economics, and econometrics account for 34.1% of financial advice and individual investor research worldwide. With 27.7%, business, and management are second. Figure 1 shows that

other domains receive the remaining financial advice and individual investor research. The researchers used finance, economics, and econometrics for the bibliometric examination of financial advice and individual investors. Similarly, the exact figure indicates that more than 74% of documents are articles for the research area. Therefore, the researchers finalized 'articles' as the document type in stage 3.

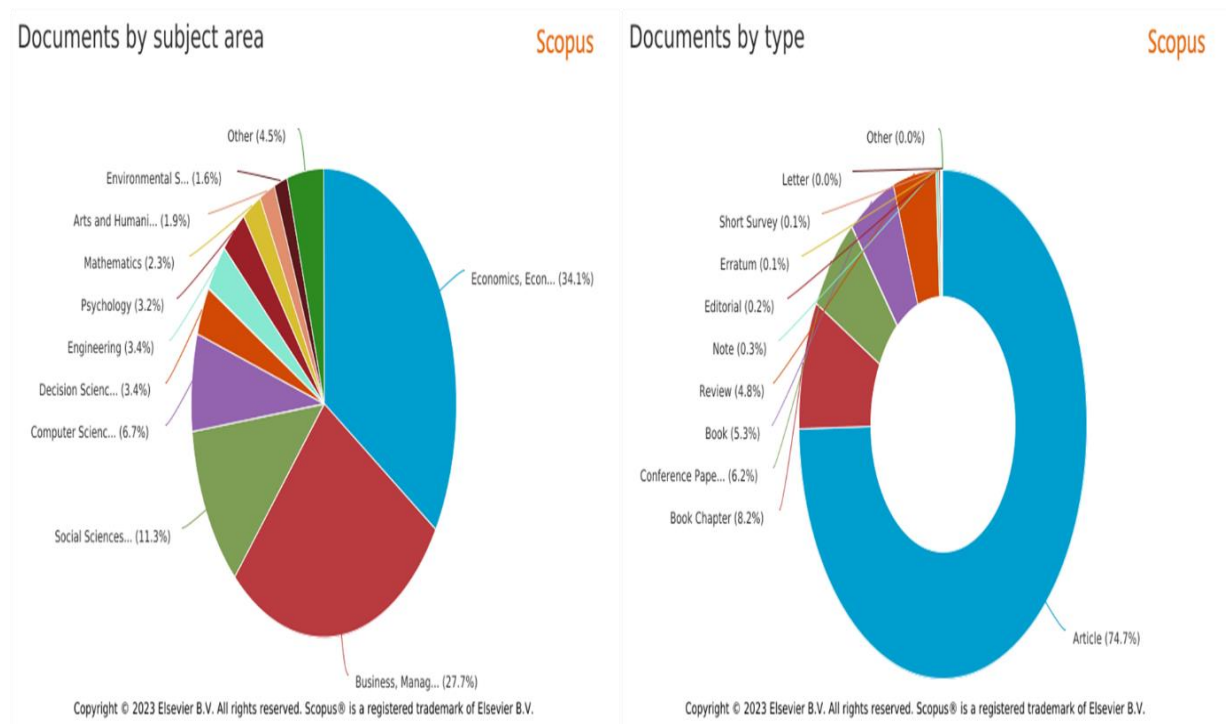


Figure 3: Subject and type of documents

### Results of Bibliometric Analysis

VOS- viewer imported citation, bibliographical, and author keywords information from 278 articles. VOS-viewer offers powerful features for visualizing and analyzing bibliometric networks, including network visualization, clustering and mapping, co-citation, and bibliographic coupling analyses, making it an essential tool for researchers seeking to gain valuable insights into large datasets (van Eck & Waltman, 2017). During bibliometric analysis, we visualized scholar-article links using VOS-viewer. Additionally, VOS-viewer represents things in a reduced dimensional space where map distance indicates similarity (Liu et al., 2013). Furthermore, VOS-viewer helps visualize research dynamics and organization across time (Vallaster et al., 2019).

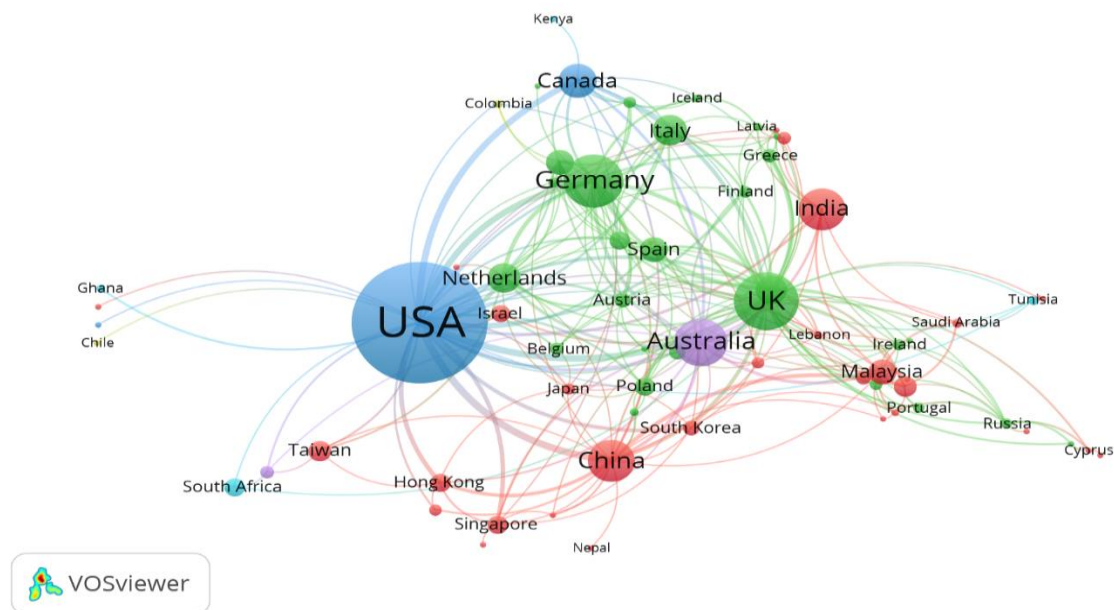


Similarly, VO-Sviewer helps us understand irregular patterns and the research field (Ding & Yang, 2022). Finally, VOS-viewer efficiently compares historical and present activity, revealing research area evolution (Oladinrin et al., 2023).

Our work uses bibliometric analysis to identify the primary authors, relevant keywords, citation and co-citation analysis, publishing sources, and country distribution. In this study, the researchers were interested in the objects, which were the countries or author keywords. Each pair of items could have a link or connection between them, and each link was represented by a positive numerical value that indicated its strength. The higher the numerical value, the stronger the link was. In co-authorship analysis, the researchers determined the link strength between countries based on the number of publications that two affiliated countries co-authored. The total link strength represented the overall strength of co-authorship links between a particular country and other countries. Similarly, in co-occurrences analysis, the link strength between author keywords indicated the number of publications in which two keywords appeared together.

### Co-authorship analysis

Co-authorship analysis examines author collaboration patterns and linkages in academic or scientific publications (De Stefano et al., 2013). It examines research article co-authorship networks (Kumar, 2015). Researchers can learn about collaborative networks, author-organization ties, and research effects by evaluating co-authorship patterns (Reyes-Gonzalez et al., 2016). Co-authorship analysis helps explain knowledge production, identify significant contributors, and examine scholarly collaboration (Ariel Xu & Chang, 2020). Co-authorship analysis compares research from organizations, countries, and writers (Molontay & Nagy, 2021). The closer the map, the closer the published works are (Oyewola & Dada, 2022). Each mark node's size represents its network impact (Gërkhani et al., 2023). VOSviewer was used to identify financial advice and individual investor research-friendly countries. Figure 4 reports the co-authorship analysis of the study.



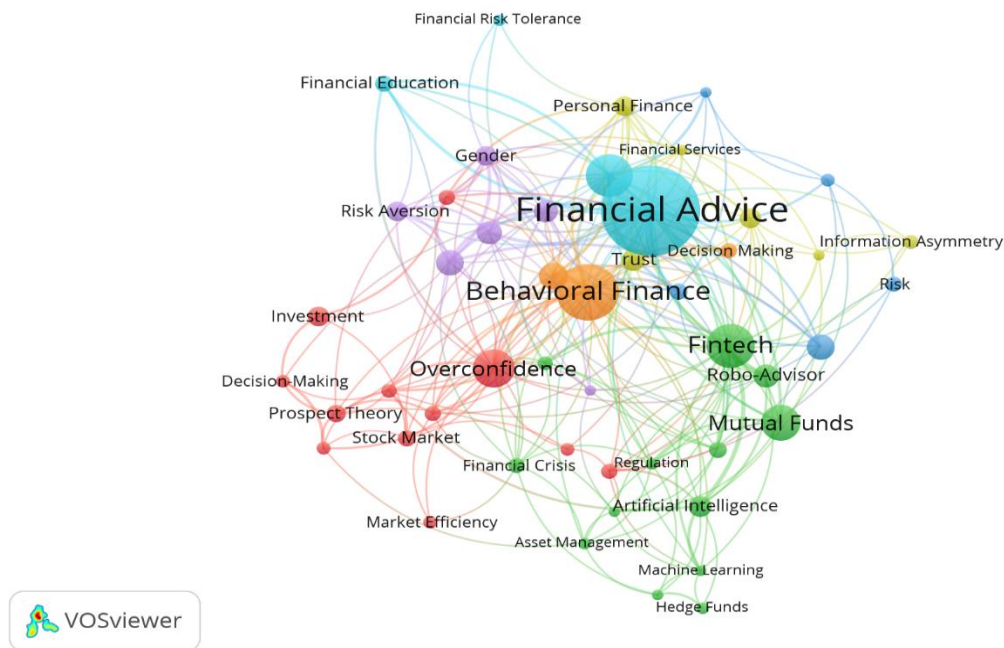
*Figure 4. Co-authorship analysis*

In VOS-viewer, as per Figure 4, a thicker line indicates a closer association between the two countries. Asia had 30, Europe 29, North America 4, South America 3, Africa 5, and Oceania 2. Co-authorship analysis shows that the United States (US) is more linked. One hundred eighty-three co-authorships with 41 countries and territories have produced 535 publications. Following the United States of America (USA), the United Kingdom (UK) has 37 links, 114 co-authorships, and 114 documents, while Australia has 25 links, 71 co-authorships, and 103 documents. China has 22 linkages, 71 co-authorships, and 82 documents, while Germany has 23 and 123. France finishes with 21 linkages, 51 co-authorships, and 41 documents. Over 2.3 countries collaborated on international publications with less than 20 countries. Research partner diversity, many foreign postgraduates and visiting academics, and significant research funding make international collaboration vibrant. International collaboration requires a flexible and consistent research policy.

### Co-occurrence analysis

VOS-viewer's keyword co-occurrence analysis reveals interesting dataset patterns. VOS-viewer lets researchers examine keyword correlations by creating a co-occurrence matrix from a collection of documents. This analysis can show thematic

structures, essential concepts, and keyword clusters. VOS-viewer helps researchers uncover and make educated decisions by visualizing keyword linkages and co-occurrence patterns using density maps and network diagrams.



*Figure 5. Co-occurrence analysis (network Visualization)*

Figure 5 reports that "Financial advice" occurred most often, with 76 occurrences and 35 links to other terms with 80 publications. "Behavioral finance" (46 occurrences, 23 links, and 43 publications), "fintech (Financial Technology)" (35 occurrences, 20 links, and 40 publications), and "household finance" (34 occurrences, 19 links, and 47 publications) were also used. "Financial advice" also co-occurred with "individual investors" (2 publications)," "investors" (2 publications), "robo-advisor (3 publications)," and "financial advisor" (5 publications).

Additionally, financial advice also co-occurred with several other keywords in different publications; financial education (4), risk tolerance (3), portfolio choice (4), household finance (16), retirement planning (2), financial planning (2), risk aversion (1), asset allocation (2), trust (1), investor sophistication (1), financial services (2), personal finance (2), investment (2), information asymmetry (1), decision making (1), machine learning (1), covid-19 (1), mutual fund (3), overconfidence (2), disposition

effect (1), regulation (1), investment decision (1), asset management (1), diversification (1), gender (4), behavioral biases (1).

The co-occurrence analysis (Figure 6) indicates a zero link strength of financial advice with retail investors, artificial intelligence, portfolio optimization, heuristics, market efficiency, private equity, wealth management, financial crises, stock market, and prospect theory.

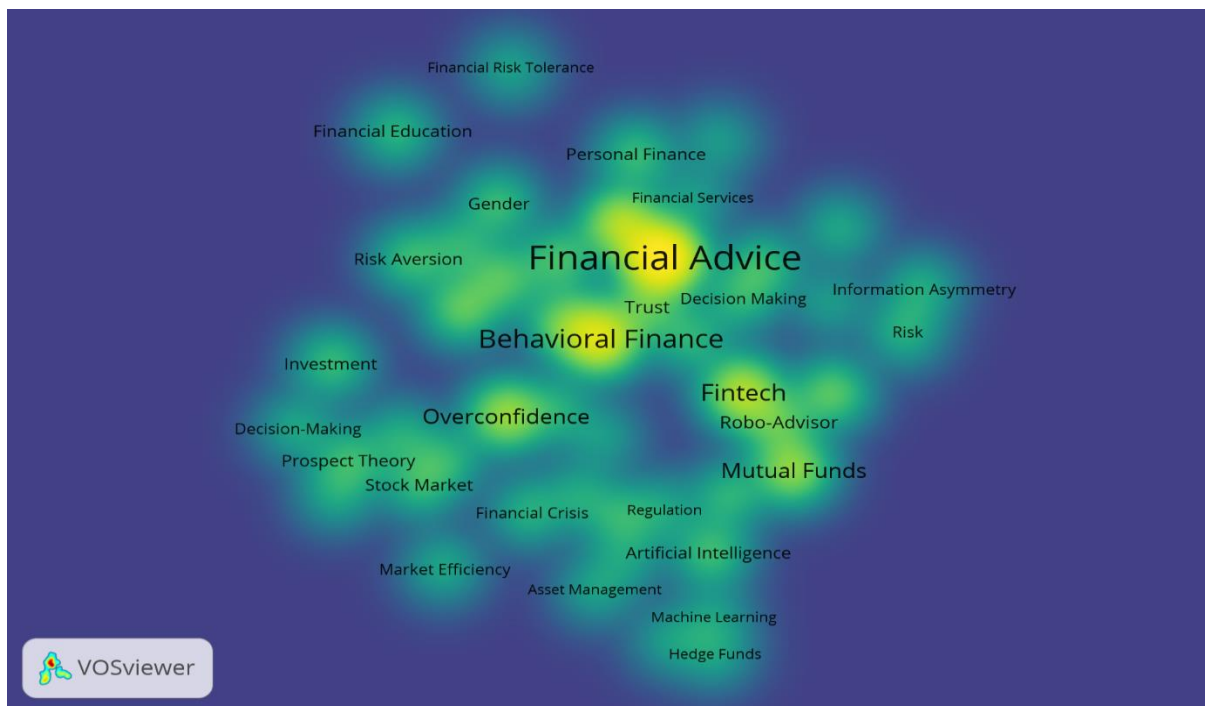


Figure 6: Co-occurrences analysis (Density Visualization)

### Financial Advice and individual investors

Financial advice and retail and individual investors can be inferred from Figures 6 and 7:

- Financial Advice and Individual Investors: Two publications mention "financial advice" and "individual investors" together, suggesting a relationship. However, the information does not describe this relationship. At least some publications mention financial advice for individual investors.

- Financial Advice and Retail Investors: Financial advice and investors are not linked. Financial advice is not directly linked to "retail investors," "portfolio optimization," "heuristics," or "market efficiency" in the context reviewed.

The data implies a relationship between financial advice and individual investors but needs to explain the details. Financial advice and retail investors need more studies to conclude.

### Preferred Journals and Publications

Table 2 lists the top 10 journals in the field of financial advice and individual investors by ABDC category, Cite Score, number of publications (%), and publisher. Wealth Management journal having an ABDC category B. It has the most publications (18.35%) yet a poor Cite Score (0.7). Similarly, the Journal of Banking and Finance has an ABDC category of A with 15.11% publications and a Cite Score 5.7. Furthermore, the Journal of corporate finance has an ABDC category of A\* with a Cite Score of 7.6 despite its 9.71% publication rate. Likewise, the Journal of Finance has an ABDC category of A\* and has 9.35% of all papers and an exceptional Cite Score of 11.4.

Similarly, the Journal of financial counseling and Planning has a moderate publication rate with an ABDC category of C with 8.63% publications and a Cite Score of 3.7. Additionally, Qualitative Research in Financial Markets has an ABDC category of B. It publishes 8.63% of the Journal of Financial Counseling and Planning but has a lower Cite Score 2.9. Furthermore, the Journal of Behavioral and Experimental Finance is an A-rated journal with a 7.91% publication rate and an 8.9 Cite Score. Similarly, the International Review of Financial Analysis is classified A by the ABDC; this Journal has a 7.55% publishing rate and a high Cite Score of 9.1. Furthermore, the Journal of Financial Economics has an A\*-category, which publishes 7.55% like the International Review of Financial Analysis but has a higher Cite Score of 11.2. Finally, the Journal of Financial Services Marketing has a B category in the ABDC ranking with a Cite score of 3.9 and a publication percentage of 7.19.

**Table 2 Summary of Top 10 Journals with Total Publication and Cite Score**

SOURCE TITLE	ABDC Category	Number of Publications (%)	Cite Score	Publisher
Journal Of Wealth Management	B	18.35	0.7	Portfolio Management Research
Journal Of Banking And Finance	A	15.11	5.7	Elsevier
Journal Of Corporate Finance	A*	9.71	7.6	Elsevier
Journal Of Finance	A*	9.35	11.4	Wiley-Blackwell
Journal Of Financial Counseling And Planning	C	8.63	3.7	Springer Publishing Company
Qualitative Research In Financial Markets	B	8.63	2.9	Emerald Publishing
Journal Of Behavioral And Experimental Finance	A	7.91	8.9	Elsevier
International Review Of Financial Analysis	A	7.55	9.1	Elsevier
Journal Of Financial Economics	A*	7.55	11.2	

Journal Of Financial Services Marketing	B	7.19	3.9	Springer Nature
--	---	------	-----	-----------------

It can be inferred from the above table that top journals in the research domain of financial advice and individual investor vary in ABDC category, publishing rate, and citation score. Wealth Management has the most publications (18.35%) yet a low Cite Score (0.7). The Journal of Finance has a high publication rate (9.35%) and a high Cite Score (11.4), while the Journal of Financial Counseling and Planning has a moderate rate (8.63%) and a lower score (3.7).

### Geographical distribution of research in financial advice and Individual Investors

Table 3 lists the top 10 document-publishing countries by continent.

- i. Asia: China and India lead with 82 and 80 documents, respectively, contributing 4.62% and 4.51% of the total. Hong Kong, Malaysia, Singapore, Taiwan, and South Korea contributed.
- ii. Europe: Germany contributed the most documents (123) at 6.93%. One hundred forty-four documents (8.11%) follow the UK. France, Italy, the Netherlands, Spain, and Switzerland all contributed.
- iii. North America: The USA leads with 535 documents, contributing 30.14%. 56 Canadian documents also appear.
- iv. South America: Australia/Oceania: 103 papers, 5.80%. Minor presence of New Zealand.
- v. Africa: With 19 documents, South Africa leads, followed by Ghana, Tunisia, and Kenya.

The table shows that the USA, China, Germany, and the UK publish the most documents in the field.

Table 3 Analysis of the geographical origin of research contributions

Continents	Countries	No of Documents	Contribution (%)
1. Asia	Armenia	1	0.06%
	Bahrain	2	0.11%
	Bangladesh	2	0.11%
	Brunei Darussalam	1	0.06%
	China	82	4.62%
	Cyprus	3	0.17%
	Hong Kong	18	1.01%
	India	80	4.51%
	Indonesia	12	0.68%
	Iran	2	0.11%
	Israel	17	0.96%
	Japan	9	0.51%
	Kazakhstan	1	0.06%
	Kuwait	2	0.11%
	Lebanon	5	0.28%
	Macau	2	0.11%
	Malaysia	33	1.86%
	Nepal	1	0.06%
	Oman	2	0.11%
	Pakistan	23	1.30%
	Philippines	2	0.11%
	Saudi Arabia	6	0.34%
	Singapore	18	1.01%
	South Korea	14	0.79%
	Taiwan	22	1.24%
	Thailand	8	0.45%
	Turkey	10	0.56%
United Arab Emirates (UAE)	4	0.23%	
Viet Nam	8	0.45%	



	Yemen	1	0.06%
2. Europe	Austria	14	0.79%
	Belgium	10	0.56%
	Czech Republic	8	0.45%
	Denmark	8	0.45%
	Finland	8	0.45%
	France	41	2.31%
	Germany	123	6.93%
	Greece	12	0.68%
	Iceland	5	0.28%
	Ireland	8	0.45%
	Italy	46	2.59%
	Latvia	5	0.28%
	Lithuania	5	0.28%
	Luxembourg	3	0.17%
	Malta	4	0.23%
	Monaco	1	0.06%
	Netherlands	45	2.54%
	Norway	7	0.39%
	Poland	19	1.07%
	Portugal	7	0.39%
	Romania	3	0.17%
	Russia	7	0.39%
	Serbia	2	0.11%
	Slovakia	13	0.73%
	Slovenia	1	0.06%
	Spain	34	1.92%
	Sweden	18	1.01%
	Switzerland	34	1.92%
	UK	144	8.11%
3. North America	Canada	56	3.15%
	Dominican Republic	1	0.06%

	Mexico	3	0.17%
	USA	535	30.14%
4. South America	Chile	2	0.11%
	Colombia	5	0.28%
	Ecuador	1	0.06%
5. Australia/Oceania	Australia	103	5.80%
	New Zealand	10	0.56%
6. Africa	Ghana	5	0.28%
	Kenya	2	0.11%
	South Africa	19	1.07%
	Tunisia	6	0.34%
	Zimbabwe	1	0.06%

### Leading Authors and Affiliations

Table 4 indicates that the authors have 5–143 publications. This shows research output and field contributions. The document Hirsch index (h-index), which gauges publication number and citation effect, ranges from 2 to 34 for writers. Authors with higher h-indexes have more influence. Citations range from 17 to 7,542. Citation counts indicate scholarly influence and impact. The authors work in UK, USA, Canada, Switzerland, Australia, and Greece universities. The field's research is global. The authors' first publications span from 1994–2015, indicating different career stages and experience levels. The table shows the top authors' output, impact, and affiliations, revealing their academic position.

**Table 4 Top 10 Authors and Affiliations**

Rank	Author Name	Scopus Author Id	Year Of 1st Publication	Total Publication	Document H-Index	Total Citation	Current Affiliation	Country
1	Adra, S.	56404529700	2015	18	5	79	Sheffield University Management	UK

---

2	Brooks, C.	57225796570	1995	143	34	4420	University of Bristol, Bristol	UK
3	Gerken, W.C.	6506534482	2003	13	6	200	University of Kentucky, Lexington Rotman School of Management, Toronto	USA
4	Golubov, A.	54899224800	2012	9	8	406	School of Management, Toronto	Canada
5	Meggison, W.L.	6602892219	1994	67	32	7542	University of Oklahoma	USA
6	Rohner, P.	55364720100	2012	6	3	33	Universität Zürich, Zurich	Switzerland
7	Santacruz, L.	36447779400	2009	5	2	17	University of Southern Queensland, Toowoomba	Australia
8	Travlos, N.G.	6507156082	1994	40	22	3403	ALBA Graduate Business School, Athens	Greece

9	Uhl, M.W.	52365358 500	2011	17	7	173	Universität Zürich, Zuri ch	Switzer land
10	Zeng, Y.	56019036 500	2014	12	8	226	Durham University Business School, Dur ham	UK

### Most Cited Articles in target journals

Table 5 lists the ten most-cited finance periodicals. The Journal of Wealth Management has 1055 citations—18.35% of all publications. This Journal's most-cited article, "Individualization of Robotic Advice," has 38 citations. "Conditional value-at-risk for general loss distributions," the Journal of Banking and Finance's most cited article, with 2344 citations. "Earnings management and corporate governance: The role of the board and the audit committee," the most referenced article in the Journal of Corporate Finance, has been cited 1344 times. "Portfolio Selection," the most cited article in the Journal of Finance, has been cited 14,323 times. The most cited article in the Journal of Financial Counseling and Planning is "In Charge Financial Distress/Financial Well-Being Scale: Development, Administration, and Score Interpretation," mentioned 320 times. Qualitative Research in Financial Markets has 2041 citations (8.63%), and its most cited article, "Behavioral Biases in Investment Decision Making:

A Systematic Literature Review," has 117 citations. "Prolific. Ac – A subject pool for online experiments," the Journal's most referenced article, has been cited 1073 times. The International Review of Financial Analysis has 27,689 citations (7.55% of total publications), with the most cited article, "COVID-19 pandemic, oil prices, stock market, geopolitical risk, and policy uncertainty nexus in the US economy: Fresh evidence from the wavelet-based approach," cited 723 times. "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," from the Journal of Financial Economics, has been referenced 30,245 times. Finally, the Journal of

Financial Services Marketing has 2611 citations (7.19% of total publications), and its most cited article, "Consumer Adoption of Internet Banking in Jordan: Examining the Role of Hedonic Motivation, Habit, Self-Efficacy, and Trust," has 167 citations. These statistics show that finance journal publications have different citation counts, suggesting their importance and impact.

**Table 5 Top 10 Journals with the Most cited article**

Journal Name	Total Citation	Total Publication%	The most cited article	Time cited
Journal Of Wealth Management	1055	18.35	Individualization of robo-advice	38
Journal Of Banking And Finance	102225	15.11	Conditional value-at-risk for general loss distributions	2344
Journal Of Corporate Finance	43328	9.71	Earnings Management and corporate governance: The Role of the Board and the audit committee	1344
Journal Of Finance	217424	9.35	PORTFOLIO SELECTION	14323
Journal Of Financial Counseling And Planning	4684	8.63	In Charge financial distress/financial well-being scale: Development, administration, and score interpretation	320
Qualitative Research In Financial Markets	2041	8.63	Behavioral biases in investment decision making - a systematic literature review	117
Journal Of Behavioral And Experimental Finance	6342	7.91	Prolific.ac – A subject pool for online experiments	1073

International Review Of Financial Analysis	27689	7.55	COVID-19 pandemic, oil prices, stock market, geopolitical risk and policy uncertainty nexus in the US economy: Fresh evidence from the wavelet-based approach	723
Journal Of Financial Economics	187706	7.55	Theory of the firm: Managerial behavior, agency costs, and ownership structure	30245
Journal Of Financial Services Marketing	2611	7.19	Consumer Adoption of Internet Banking in Jordan: Examining the Role of hedonic motivation, habit, self-efficacy, and Trust	167

### Co-occurrence analysis of Keywords

The table shows financial advice and individual investor keyword co-occurrences. Color-coded groups reflect distinct themes. For example, Cluster 1 (Red) includes keywords like overconfidence, investment, prospect theory, and behavioral biases that have high link strength (e.g., 31) and incidence (30). Similarly, cluster 2 (Green) includes the keywords like Fintech, mutual funds, and robo-advisors. Fintech is the cluster's highest link strength (39) and occurrence (35). Furthermore, cluster 3 (Blue) includes the keywords like financial advisers and individual investors have greater connection strength and occurrence values (12 and 16, respectively). Likewise, cluster 4 (yellow) includes the keywords like Trust, financial planning, and personal finance. This cluster has strong links (18 and 13) and occurrence (14 for both) for personal finance and financial planning.

The table also indicates cluster 5 (Purple) includes risk tolerance and gender as the critical keywords, with stronger connection strength (25 for gender, 24 for risk

tolerance) and incidence (14 for both). Additionally, cluster 6 (Sky-Blue) includes financial advice, and household finance is an essential keyword in this cluster, with the highest link strength (74 and 46, respectively) and incidence (76 and 34, respectively). Finally, cluster 7 (Orange) includes the keyword Behavioral finance dominates this cluster with 43 link strength and 46 occurrences.

These keywords reveal each cluster's fundamental concepts and links, revealing financial advice and individual investor study trends.

**Table 6 Co-occurrence analysis of Keywords**

Cluster	Keywords	Occurrence	Total link strength
1. Red	Overconfidence	30	31
	Investment	14	6
	Prospect Theory	13	11
	Stock Market	12	7
	Disposition Effect	11	13
	Investors	11	15
	Wealth Management	11	13
	Behavioral Biases	10	17
	Covid-19	9	4
	Decision-Making	9	9
	Heuristics	9	10
2. Green	Market Efficiency	9	3
	Fintech	35	39
	Mutual Funds	28	17
	Robo-Advisor	17	21
	Artificial Intelligence	15	20
	Asset Allocation	12	13
	Financial Crisis	11	12
	Financial Markets	10	12
Asset Management	8	8	
Hedge Funds	8	4	

	Regulation	8	11
	Machine Learning	7	12
	Portfolio Optimization	7	9
	Private Equity	7	7
3. Blue	Financial Advisors	19	12
	Individual Investors	12	16
	Risk	11	5
	Retirement Planning	9	7
	Investor Sophistication	7	9
4. Yellow	Trust	16	9
	Financial Planning	14	13
	Personal Finance	14	18
	Information Asymmetry	10	5
	Financial Services	7	11
	Robo-Advice	7	6
5. Purple	Risk Tolerance	19	24
	Portfolio Choice	17	15
	Retail Investors	16	16
	Gender	14	25
	Risk Aversion	14	11
	Diversification	7	6
6. Sky-Blue	Financial Advice	76	74
	Household Finance	34	46
	Financial Education	12	14
	Financial Risk Tolerance	8	3
7. Orange	Behavioral Finance	46	43
	Investment Decisions	20	28
	Decision Making	11	6

The financial advice and individual investor keyword co-occurrence as per the above table infers the following. Firstly, the clusters suggest domain research areas such as behavioral biases, Fintech, financial advisers, personal finance, risk tolerance, and



behavioral finance. Each cluster covers a different subject. Secondly, keywords inside each cluster are linked by link strength. Keywords with higher link strength ratings may be related and interdependent. Thirdly, keywords in each cluster have similar themes and foci. For example, the red cluster highlights behavioral biases, decision-making, and market efficiency, whereas the green cluster emphasizes Fintech, robo-advisors, and financial AI. Fourthly, keywords with the more significant occurrence and link strength values inside each cluster are more important and prevalent in the study domain. These keywords reflect major research topics.

Additionally, keyword distribution across clusters can indicate research trends. In the green cluster, Fintech, robo-advisors, and artificial intelligence may reflect an increasing interest in technological advances and their impact on financial advice and investing decisions. Furthermore, keywords spanning clusters may imply interdisciplinary links and a complex study domain. Behavioral finance is in the orange cluster but also connects to other clusters, showing its relevance in diverse contexts. The co-occurrence analysis reveals major subjects, relationships, and focus areas in financial counseling and individual investor research.

### **Discussion on Financial advice and individual investor behavior**

This study aims to investigate the connection between individual investors and financial advice by looking into notable writers, countries, and journals on this subject and the works that have received the most citations. According to the data, Adra, Brooks, Gerken, and Golubov are some of the authors with the most clout in financial counseling and among individual investors. The United States of America stands out as the country with the most influence, followed by Australia and the United Kingdom. The Journal of Finance, the Journal of Corporate Finance, the Journal of Banking and Finance, the Journal of Financial Counseling and Planning, and the Journal of Wealth Management are the five publications considered the most prestigious in this field. The most often referenced publications are "Portfolio Selection" from the Journal of Finance and "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure" from the Journal of Financial Economics.

Both of these are published in the Journal of Financial Economics. Although the findings reveal a connection between receiving financial guidance and individual investors, additional research is required to understand the particulars of this connection entirely.

### Gaps

Future research should concentrate on behavioral biases, Fintech, and robo-advisors; behavioral finance mixed with artificial intelligence; market efficiency; decision-making dynamics; and longitudinal study to track shifting patterns. These topics will help bridge the research gap that now exists. Investigating these topics can help improve the quality of financial advisory practices and the results that individual investors receive.

### Future Directions

Future research should concentrate on longitudinal studies to investigate the efficacy of various strategies and the ever-changing requirements of investors. This will allow researchers to get over the constraints of this study and move the field forward. In addition, research on market efficiency, decision-making dynamics, information asymmetry, and investor intelligence would improve existing approaches to providing financial advice. Finally, it is essential to recognize the limits of this study, even though it gave early insights into the significant elements and research gaps in linking financial advice with individual investors. It is necessary to do additional in-depth studies to get a more in-depth understanding of the link between individual investors and financial guidance and make more definite ideas for advancing this subject. Researchers can contribute to the improvement of financial advice and the achievement of better results for individual investors if they address the constraints that have been identified and carry out in-depth investigations.

### Limitations of the study

This study on the connection between individual investors and financial advice has significant shortcomings. The research focuses on determining which authors, countries, journals, and articles are the most influential; nevertheless, it does not offer

an in-depth investigation into the connection between individual investors and financial advice. The findings briefly summarize the influential factors without diving into the specifics of the connections between them. In addition, the nature of the connection between individual investors and financial advice must be made clear by the study, leaving it open to many interpretations. In addition, the scope of the study is restricted to a particular collection of keywords and a co-occurrence analysis, which means that it may ignore other significant aspects and variables that influence the relationship. In addition, the research gap and ideas for future research presented in the paper are quite general and need to provide specific directions for additional exploration. It would be helpful to incorporate additional in-depth analysis and empirical studies to address the research gap and offer actual proposals for expanding the understanding of financial advice and its influence on individual investors. This would help to close the knowledge gap that currently exists.

### Conclusion

This research aimed to identify the authors, countries, journals, and publications cited the most work investigating the relationship between financial advice and individual investors. The researcher mined Scopus for publications with "financial advice" and "individual investors" in their titles and abstracts to achieve the study's aims. Researchers ranked search results using bibliometric markers like total publications, citations, citation score, and h-index. Source, author, affiliation, nation, subject area, document type, and top 10 ABDC journal categorizations categorized the data. For analyzing the bibliometric data, the researchers used VOS viewer software. The findings drew attention to some of the most influential authors in the industry, such as Adra, Brooks, Gerken, and Golubov, who have made substantial contributions to the comprehension of individual investors and financial advice. The United States of America emerged as the country with the most significant influence in this field due to its significant cooperation and countless publications.

According to the survey findings, the Journal of Finance, the Journal of Corporate Finance, and the Journal of Banking and Finance are among the top five

most influential publications in individual investor research and financial advice, respectively. In addition, the research identified the articles in the area with the highest citations, proving the value and significance of these works for research on financial counseling and individual investors. Despite this, there were certain restrictions to the study. Identifying relevant components was the primary focus of the study, rather than offering in-depth research on the connection between professional financial guidance and individual investors. The nature of this relationship remained unclear, and it was necessary to do further investigation into it. In addition, the scope of the study was restricted to particular keywords and co-occurrence analysis, which meant that the researchers might have overlooked other significant variables and aspects.

Furthermore, the research gap and ideas for future research offered in the study were vague and lacked precise direction in their presentation. In order to fill in the research gap in a comprehensive manner, further research must consider carrying out in-depth analyses and empirical studies. There is much room for improvement in our understanding of financial advice and how it affects individual investors, particularly in areas such as behavioral biases in investment decision-making, the role of Fintech and robo-advisors in personalized financial advice, and the integration of behavioral finance and artificial intelligence. These are all areas that hold much promise.

### List of Abbreviations

<b>ABDC</b>	Australian Business Dean Council
<b>ABS</b>	Abstract
<b>AI</b>	Artificial Intelligence
<b>Fintech</b>	Financial Technology
<b>H-index</b>	Hirsch index
<b>VOS</b>	Virtual Operating System
<b>UAE</b>	United Arab Emirates
<b>US</b>	United States
<b>USA</b>	United States of America
<b>UK</b>	United Kingdom

## References

- Akhtar, M., & Malik, M. U. (2023). Personality traits and investor risk behavior: moderating role of financial literacy. *Managerial Finance*, 49(5), 884-905. <https://doi.org/10.1108/MF-08-2021-0387>
- Ariel Xu, Q., & Chang, V. (2020). Co-authorship network and the correlation with academic performance. *Internet of Things*, 12, 100307. <https://doi.org/https://doi.org/10.1016/j.iot.2020.100307>
- Back, C., Morana, S., & Spann, M. (2023). When do robo-advisors make us better investors? The impact of social design elements on investor behavior. *Journal of Behavioral and Experimental Economics*, 103, 101984. <https://doi.org/https://doi.org/10.1016/j.socec.2023.101984>
- Baekström, Y., Marsh, I. W., & Silvester, J. (2021). Financial advice and gender: Wealthy individual investors in the UK. *Journal of Corporate Finance*, 71, 101882. <https://doi.org/https://doi.org/10.1016/j.jcorpfin.2021.101882>
- Barthel, A.-C., & Lei, S. (2021). Investment in financial literacy and financial advice-seeking: Substitutes or complements? *The Quarterly Review of Economics and Finance*, 81, 385-396. <https://doi.org/https://doi.org/10.1016/j.qref.2021.06.020>
- Chatterjee, S., & Fan, L. (2023). Surviving in financial advice deserts: limited access to financial advice and retirement planning behavior. *International Journal of Bank Marketing*, 41(1), 70-106. <https://doi.org/10.1108/IJBM-01-2022-0022>
- Costa, D. F., Carvalho, F. d. M., & Moreira, B. C. d. M. (2019). BEHAVIORAL ECONOMICS AND BEHAVIORAL FINANCE: A BIBLIOMETRIC ANALYSIS OF THE SCIENTIFIC FIELDS [<https://doi.org/10.1111/joes.12262>]. *Journal of Economic Surveys*, 33(1), 3-24. <https://doi.org/https://doi.org/10.1111/joes.12262>
- De Stefano, D., Fuccella, V., Vitale, M. P., & Zaccarin, S. (2013). The use of different data sources in the analysis of co-authorship networks and scientific performance. *Social Networks*, 35(3), 370-381. <https://doi.org/https://doi.org/10.1016/j.socnet.2013.04.004>
- Ding, X., & Yang, Z. (2022). Knowledge mapping of platform research: a visual analysis using VOSviewer and CiteSpace. *Electronic Commerce Research*, 22(3), 787-809. <https://doi.org/10.1007/s10660-020-09410-7>
- Dockery, A. M., Bawa, S., Coffey, J., & Li, I. W. (2022). Secondary students' access to careers information: the role of socio-economic background. *The Australian Educational Researcher*, 49(5), 1001-1023. <https://doi.org/10.1007/s13384-021-00469-1>

- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285-296. <https://doi.org/https://doi.org/10.1016/j.jbusres.2021.04.070>
- Effah, N. A. A., Asiedu, M., & Otchere, O. A. S. (2023). Improvements or deteriorations? A bibliometric analysis of corporate governance and disclosure research (1990–2020). *Journal of Business and Socio-economic Development*, 3(2), 118-133. <https://doi.org/10.1108/JBSED-10-2021-0142>
- Fan, L. (2021). A Conceptual Framework of Financial Advice-Seeking and Short- and Long-Term Financial Behaviors: An Age Comparison. *Journal of Family and Economic Issues*, 42(1), 90-112. <https://doi.org/10.1007/s10834-020-09727-3>
- Fan, L., Lim, H., & Lee, J. M. (2022). Young adults' financial advice-seeking behavior: The roles of parental financial socialization [<https://doi.org/10.1111/fare.12625>]. *Family Relations*, 71(3), 1226-1246. <https://doi.org/https://doi.org/10.1111/fare.12625>
- Fong, J. H., & Lee, Z. (2023). Trust in Financial Institutions and Demand for Financial Advice. *Journal of Financial Counseling and Planning*(1), 81-95. <https://doi.org/10.1891/JFCP-2021-0054>
- García, J., Gómez, Y., & Vila, J. (2022). Financial overconfidence, promotion of financial advice, and aging. *Journal of Business Research*, 145, 325-333. <https://doi.org/https://doi.org/10.1016/j.jbusres.2022.02.068>
- Gerrans, P., & Hershey, D. A. (2017). Financial Adviser Anxiety, Financial Literacy, and Financial Advice Seeking [<https://doi.org/10.1111/joca.12120>]. *Journal of Consumer Affairs*, 51(1), 54-90. <https://doi.org/https://doi.org/10.1111/joca.12120>
- Gërkhani, K., Kulic, N., & Liehti, F. (2023). Double standards? Co-authorship and gender bias in early-stage academic evaluations. *European Sociological Review*, 39(2), 194-209. <https://doi.org/10.1093/esr/jcac045>
- Hagen, J., & Malisa, A. (2022). Financial fraud and individual investment behavior. *Journal of Economic Behavior & Organization*, 203, 593-626. <https://doi.org/https://doi.org/10.1016/j.jebo.2022.09.015>
- Hsu, Y.-L. (2022). Financial advice seeking and behavioral bias. *Finance Research Letters*, 46, 102505. <https://doi.org/https://doi.org/10.1016/j.frl.2021.102505>
- Hunt, K. H. M., Brimble, M., & Freudenberg, B. (2023). Practical Applications of A Move in the Right Direction: Client Relationships in Financial Advice. *Practical Applications*, pa.2023.pa2537. <https://doi.org/10.3905/pa.2023.pa537>

- Kumar, S. (2015). Co-authorship networks: a review of the literature. *Aslib Journal of Information Management*, 67(1), 55-73. <https://doi.org/10.1108/AJIM-09-2014-0116>
- Liu, F., Yilmazer, T., Loibl, C., & Montalto, C. (2019). Professional financial advice, self-control and saving behavior [<https://doi.org/10.1111/ijcs.12480>]. *International Journal of Consumer Studies*, 43(1), 23-34. <https://doi.org/https://doi.org/10.1111/ijcs.12480>
- Liu, X., Zhang, J., & Guo, C. (2013). Full-text citation analysis: A new method to enhance scholarly networks [<https://doi.org/10.1002/asi.22883>]. *Journal of the American Society for Information Science and Technology*, 64(9), 1852-1863. <https://doi.org/https://doi.org/10.1002/asi.22883>
- Marsden, M., Zick, C. D., & Mayer, R. N. (2011). The Value of Seeking Financial Advice. *Journal of Family and Economic Issues*, 32(4), 625-643. <https://doi.org/10.1007/s10834-011-9258-z>
- Miller, J., Balmuth, A., Brady, S., & Coughlin, J. (2021). Help When You Need It: Sources of Advice for Student Loan Borrowers Across the Life Course. *Families in Society*, 103(1), 49-64. <https://doi.org/10.1177/10443894211059137>
- Molontay, R., & Nagy, M. (2021). Twenty Years of Network Science: A Bibliographic and Co-authorship Network Analysis. In M. Çakırtaş & M. K. Ozdemir (Eds.), *Big Data and Social Media Analytics: Trending Applications* (pp. 1-24). Springer International Publishing. [https://doi.org/10.1007/978-3-030-67044-3\\_1](https://doi.org/10.1007/978-3-030-67044-3_1)
- Monne, J., Rutterford, J., & Sotiropoulos, D. P. (2023). Risk taking in the context of financial advice: does gender interaction matter? *The European Journal of Finance*, 1-20. <https://doi.org/10.1080/1351847X.2023.2201471>
- Moss, J., Rowlingson, K., & Lymer, A. (2022). Exploring the barriers to accessing personal financial planning advice. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-022-00180-x>
- Northey, G., Hunter, V., Mulcahy, R., Choong, K., & Mehmet, M. (2022). Man vs machine: how artificial intelligence in banking influences consumer belief in financial advice. *International Journal of Bank Marketing*, 40(6), 1182-1199. <https://doi.org/10.1108/IJBM-09-2021-0439>
- Nourallah, M. (2023). One size does not fit all: Young retail investors' initial trust in financial robo-advisors. *Journal of Business Research*, 156, 113470. <https://doi.org/https://doi.org/10.1016/j.jbusres.2022.113470>
- Oladinrin, O. T., Arif, M., Rana, M. Q., & Gyoh, L. (2023). Interrelations between construction ethics and innovation: a bibliometric analysis using VOSviewer. *Construction Innovation*, 23(3), 505-523. <https://doi.org/10.1108/CI-07-2021-0130>

- Oyewola, D. O., & Dada, E. G. (2022). Exploring machine learning: a scientometrics approach using bibliometrix and VOSviewer. *SN Applied Sciences*, 4(5), 143. <https://doi.org/10.1007/s42452-022-05027-7>
- Piehlmaier, D. M. (2022). Overconfidence and the adoption of robo-advice: why overconfident investors drive the expansion of automated financial advice. *Financial Innovation*, 8(1), 14. <https://doi.org/10.1186/s40854-021-00324-3>
- Reiter-Gavish, L., Qadan, M., & Yagil, J. (2021). Financial advice: Who Exactly Follows It? *Research in Economics*, 75(3), 244-258. <https://doi.org/https://doi.org/10.1016/j.rie.2021.06.003>
- Reyes-Gonzalez, L., Gonzalez-Brambila, C. N., & Veloso, F. (2016). Using co-authorship and citation analysis to identify research groups: a new way to assess performance. *Scientometrics*, 108(3), 1171-1191. <https://doi.org/10.1007/s11192-016-2029-8>
- Vallaster, C., Kraus, S., Merigó Lindahl, J. M., & Nielsen, A. (2019). Ethics and entrepreneurship: A bibliometric study and literature review. *Journal of Business Research*, 99, 226-237. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.02.050>
- van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, 111(2), 1053-1070. <https://doi.org/10.1007/s11192-017-2300-7>
- Vlaev, I., Nieboer, J., Martin, S., & Dolan, P. (2015). How behavioural science can improve financial advice services. *Journal of Financial Services Marketing*, 20(1), 74-88. <https://doi.org/10.1057/fsm.2015.1>
- Winchester, D. D., & Huston, S. J. (2015). All Financial Advice for the Middle Class is Not Equal. *Journal of Consumer Policy*, 38(3), 247-264. <https://doi.org/10.1007/s10603-015-9290-8>
- Zhang, Y., Lu, X., & Xiao, J. J. (2023). Does financial education help to improve the return on stock investment? Evidence from China. *Pacific-Basin Finance Journal*, 78, 101940. <https://doi.org/https://doi.org/10.1016/j.pacfin.2023.101940>