

A Global Perspective on Mutual Fund Research: A Bibliometric Investigation

P. Ummuhani¹, Dr. P.K. Abdussalam²

¹Research Department of Commerce, Research Scholar, Farook College (Autonomous), University of Calicut, Kozhikode, Kerala, India, 673632(Pincode).

²Research Department of Commerce, Faculty of Commerce & Management Studies, Farook College (Autonomous), University of Calicut, Kozhikode, Kerala, India, 673632(Pincode).

Abstract

This study tries to present a comprehensive overview of Mutual Fund research and pinpoints the broad trends in the field. The study uses bibliometric analysis techniques and a Systematic Literature Review to achieve the stated purpose. A bibliometric analysis was conducted to identify patterns and trends focusing on citation, co-authorship, and co-occurrence. The bibliometric analysis was conducted on 1506 articles from the top finance and economics journals accessed through the Scopus database over 35 years (1991-2025). Analytical tools such as Biblioshiny with R packages and VOS Viewer were utilized. The sharp increase in publications suggests a growing interest among researchers in Mutual fund model research. The current analysis reconciles several divergent findings from earlier studies on Mutual fund research, including the risk analysis and the low-risk anomaly. Also, it identifies potential research gaps for future studies.

Keyword: Mutual fund, Investments, Bibliometric, Biblioshiny, Vos viewer.

Introduction

Investment refers to the allocation of money or resources into financial instruments, assets, or ventures with the expectation of generating returns over time(Miao et al. 2006). It involves committing capital to stocks, bonds, real estate, mutual funds, or other financial instruments with the aim of wealth creation, income generation, or capital appreciation(Grinblatt, Titman, and Wermers 1995). Investments help in growing money over time through capital appreciation and compounding and provide financial stability for future needs like retirement, education, or emergencies(Wermers 2000). Investments in assets like equities and real estate can help beat inflation. Some investments generate regular income, such as dividends from stocks or interest from bonds. Investing in different asset classes reduces overall financial risk. Mutual funds pool money from multiple investors to invest in diversified portfolios of stocks, bonds, or other assets and are managed by professional fund managers(Brown and Goetzmann 1997).

Mutual funds emerged in the United States in 1924, marking the formal acceptance of the concept, which dates back to the early 20th century(Lounsbury and Rao 2004). Since then, legislative frameworks that facilitate investor participation have fuelled the mutual fund industry's explosive growth in size and complexity. Mutual funds, which offer investors diverse portfolios, expert management, and liquidity, have become a mainstay of the world's financial markets. Mutual funds significantly impact stock markets, business financing, and overall economic stability in both established and emerging economies(Frazzini

and Lamont 2008). Mutual funds, which facilitate cross-border investments and promote market efficiency, are a major force behind financial globalization, with assets under management (AUM) surpassing \$70 trillion globally (Fama and French 2010).

The global financial landscape is heavily influenced by regulatory changes aimed at improving transparency, investor protection, and market integrity (Ball et al. 1995). The implementation of initiatives such as the European Union's Markets in Financial Instruments Directive II (MiFID II) exemplifies the shift towards greater accountability in mutual fund operations (Annaert, De Ceuster, and Versteegen 2013). With their expert administration, accessibility for both institutional and individual investors, and diversity, mutual funds have emerged as one of the most well-liked investment vehicles (Kumar 2021). Fund managers constantly modify their strategies to maximize returns while controlling risks as markets change (Lubos Pastor a and Robert F. Stambaugh b 2001).

Mutual funds are widely used, but their performance varies greatly because of regional variations in investor behavior, market efficiency, and regulatory frameworks (Khorana and Servaes 1999). While emerging markets in Asia, Latin America, and Africa offer special opportunities and challenges, such as greater growth potential and increased volatility and governance concerns, developed markets like the US and Europe enjoy the advantages of sophisticated financial infrastructures and strict regulations (Lounsbury and Rao 2004). Mutual funds are an important part of the global financial scene since they provide a way for different people and organizations to aggregate their investments (Wermers 2000). Over the past few decades, this investment vehicle has acquired popularity in several jurisdictions due to its capacity to democratize access to a diverse portfolio of assets (Ali et al. 2023).

Mutual fund returns are the important drivers of economic development. High-performing mutual funds attract domestic and foreign investments, increasing capital flow into the economy (Wermers 1999). Investors, including individuals and institutions, benefit from wealth accumulation, which can boost consumption and savings rates (Bollen and Busse 2005; Capocci and Hübner 2004). A strong mutual fund industry promotes financial market stability and encourages broader participation in capital markets (Wermers 2000). Economic expansion through infrastructure investment, digital transformation, and industrial growth provides new opportunities for mutual fund portfolios (Sirri and Tufano 1998).

Researching mutual funds is an essential step for investors who want to decide how best to deploy their money (Kaur 2018). It entails a thorough examination of different mutual funds to assess their overall suitability for an investor's financial objectives and risk tolerance as well as their performance, risk, management, and fees (Elton and Gruber 2020; Kaur 2018). By looking at market trends, investment methods, fund management experience, and historical data, investors can find funds that match their investment goals (Khorana and Servaes 1999). To maximize returns and efficiently manage risks, our research aids in the selection of appropriate funds as well as the monitoring and modification of portfolios over time (Nedumparambil and Bhandari 2022). Comprehensive mutual fund research is essential for creating a strong and diversified investment portfolio in the always-changing financial landscape (Qureshi et al. 2017).

The digital transformation of financial services has ushered in significant changes within the mutual fund sector (Huij and Post 2011). A notable trend is the growing emphasis on Environmental, Social, and Governance (ESG) criteria in investment decision-making (Reber, Gold, and Gold 2022). Mutual funds that prioritize sustainability are experiencing an influx of capital, as investors increasingly seek to align their financial goals with moral and ethical considerations (Elizabeth F. Goldreyer, Parvez Ahmed, and J. David Diltz 1999). The ascendance of passive investment strategies, primarily through exchange-traded

funds (ETFs) and index funds, has fundamentally altered the competitive landscape of mutual funds (Ehsani and Lien 2015). Investors are increasingly gravitating towards lower-cost, passively managed funds, challenging traditional, actively managed mutual funds to demonstrate consistent alpha generation (Riley 2021).

The inherent volatility of financial markets poses a significant challenge to mutual fund managers striving to deliver risk-adjusted returns (Riley 2021). Mutual funds can capitalize on increasing globalization by offering products that provide exposure to emerging markets, thereby appealing to investors seeking higher growth potential in less saturated territories (Cremers et al. 2016).

It is important to carefully analyze the previous literature, systematically synthesize it and present its findings, identify research gaps, and indicate future research direction for researchers. To achieve this, this study uses bibliometric techniques, which integrate numerous quantitative tools capable of managing enormous data sets related to the literature (Elton and Gruber 2020). Subsequently, the bibliometric assessment of the existing literature assesses the state of the subject at present. It identifies topics and scholarly foundations of fields where the investment of mutual funds is investigated. The study has addressed the following research questions using the bibliometric analysis technique.

RQ1. What are the research advancement patterns till 2025 on Investments in Mutual funds?

RQ2. Which are the most-cited documents and the most contributing authors, countries, and journals?

RQ3. What thematic structure is evident in Mutual fund Investments articles?

RQ4. What are the future research areas in Mutual fund Investments?

Literature Review

Evaluating fund performance is crucial for both investors and companies. Research in this area has increased significantly, becoming more interdisciplinary and internationalized (Kumaraswamy and Al Eze 2018). Key topics include "Mutual Fund Performance", "Fund Return", "Investment Performance", and "Portfolio Selection" (Khorana and Servaes 1999). Some studies suggest that mutual funds that achieve above-average returns may continue to do so, indicating a "hot hand" phenomenon (Amihud and Goyenko 2013). However, other research indicates that this persistence may be due to the use of simple momentum strategies rather than managers' stock-picking skills (Adebambo and Yan 2016). Several factors influence fund performance, including fund size, expenses, and investment strategy (Nedumparambil and Bhandari 2022). Some researchers also use Data Envelopment Analysis (DEA) to evaluate performance (Basso and Funari 2017).

Using characteristic-based benchmarks, such as size, book-to-market ratio, and prior-year return, can help in evaluating a fund's performance by comparing it to portfolios with similar characteristics (Cheema and Nartea 2017). These benchmarks help to assess if a fund is adding value beyond these factors. Fund returns can be broken down into components such as stock-picking skills, returns due to stock characteristics, trading costs, fund expenses, and differences caused by cash or bond holdings (Wermers 2000).

High-turnover funds incur higher transaction costs but also tend to hold stocks with higher average returns and exhibit better stock-picking skills (Chordia 1996). Transaction costs have decreased over time, possibly due to improved trading technology (Chordia 1996). The mutual fund industry is influenced by competing logic, such as trustee and performance logic, which can lead to variations in how funds establish contracts (Grinblatt and Titman 1992). The use of independent professional money management firms is one example of practice diffusion shaped by these competing logic (Fama and French 2010).

Mutual funds are required to disclose their investment strategies in prospectuses (Da, Guo, and Jagannathan 2012). These descriptions can be analyzed using machine learning to identify distinct investment styles or strategy peer groups (SPGs) (Wilhelmina Afua Addy et al. 2024). These are clusters of funds with similar strategy descriptions (Wilhelmina Afua Addy et al. 2024). SPGs can be based on various factors such as market capitalization (e.g., Large Cap, Mid Cap, Small Cap), firm characteristics (e.g., Dividends, New Products & Services), investment philosophies (e.g., Quantitative, Fundamental), and secondary asset classes (e.g., Fixed Income, Derivatives) (Lubos Pastor a and Robert F. Stambaugh b 2001; Wagner, Lee, and Margaritis 2022). Mutual fund styles can be categorized using return-based or holdings-based approaches, but also through textual analysis of prospectus information¹⁵. Funds may also have a dominant strategy or a combination of strategies. (Avramov et al. 2022) Some funds are now incorporating Environmental, Social, and Governance (ESG) factors into their investment strategies (Avramov et al. 2022). ESG scores and news sentiment can be used to measure a firm's ESG performance (Reber et al. 2022).

Mutual fund managers sometimes engage in "herding," trading in the same direction in the same stocks (Wermers 1999). Herding is more prevalent in small stocks and in growth-oriented funds (Pollet and Wilson 2008). Herding can be related to positive-feedback trading strategies and may have an impact on stock returns (Ali 2023). Fund flows are affected by both past performance and fund characteristics. Larger fund complexes may experience faster growth due to lower search costs (Ali et al. 2023; Grinblatt and Titman 1992). There is a relationship between fund flows and divergence from promised strategies, with outflows accelerating mean reversion in divergence. Competition among funds influences their behavior. Some funds may differentiate themselves through their investment strategies (Vo and Le 2017). Funds may face pressure to achieve alpha, which can lead them to deviate from their promised strategies (Kaur 2018; Naughton, Truong, and Veeraraghavan 2008).

Research Methodology

To address this gap in asset pricing research, we use bibliometric analysis to provide a comprehensive understanding of asset pricing theory. To identify current research areas and future scope, this study comprises a comprehensive evaluation of the existing literature. We use the analytical framework established by (Phoong, Khek, and Phoong 2022) to outline the research objectives and the methodology employed to achieve them. The referenced study succinctly presented the methodology for each research objective in a tabular format.

3.1 Bibliometric analysis

The analysis of bibliographic data using bibliometric techniques is one of the most important metrics for determining the caliber of scientific output (Keshari and Gautam 2023). The most significant discoveries of a group of bibliographic records are frequently highlighted using bibliometric analysis (Donthu et al. 2021). The report uses a range of bibliometric analysis methodologies to assess the research relevant to the application of Mutual fund research (Öztürk, Kocaman, and Kanbach 2024). In addition to being able to handle a large corpus, bibliometric analysis may identify publication trends, produce visualizations of the development of a subject, and identify emerging themes (Ali and Bashir 2022). This makes it possible to evaluate the situation as well as imagine prospective future study areas.

3.2. Choosing the techniques for analysis

Both VOS Viewer and the Bibliometrix R-package were used by the study to analyze the data. The Bibliometrix R-package software's metrics for citations and publications identify the most significant

authors, works, sources, and nations based on total citations and the total number of publications (Öztürk et al. 2024). Using the Bibliometrix R-package, co-authorship analysis emphasizes the international research collaborations based on the countries of origin of the papers. As a result of the keywords utilized in the studies, the Bibliometrix R-package is also employed for keyword analysis, producing a thematic map and the hot issues in the industry (Ali and Bashir 2022; Keshari and Gautam 2023b). Thematic mapping provides information on the dominant topics in the area right now and the prospective directions for future research (Keshari and Gautam 2023b). Co-occurrence analysis in VOS Viewer focuses on the textual keywords of the document and shows the link between terms in the literature, giving insight into the knowledge structure of the field. Bibliographic coupling is used in VOS Viewer to clarify the topics in the body of knowledge (Singh 2021). These are the bibliometric analysis methods employed in this paper with the aid of the two programs.

3.3 Data Collection

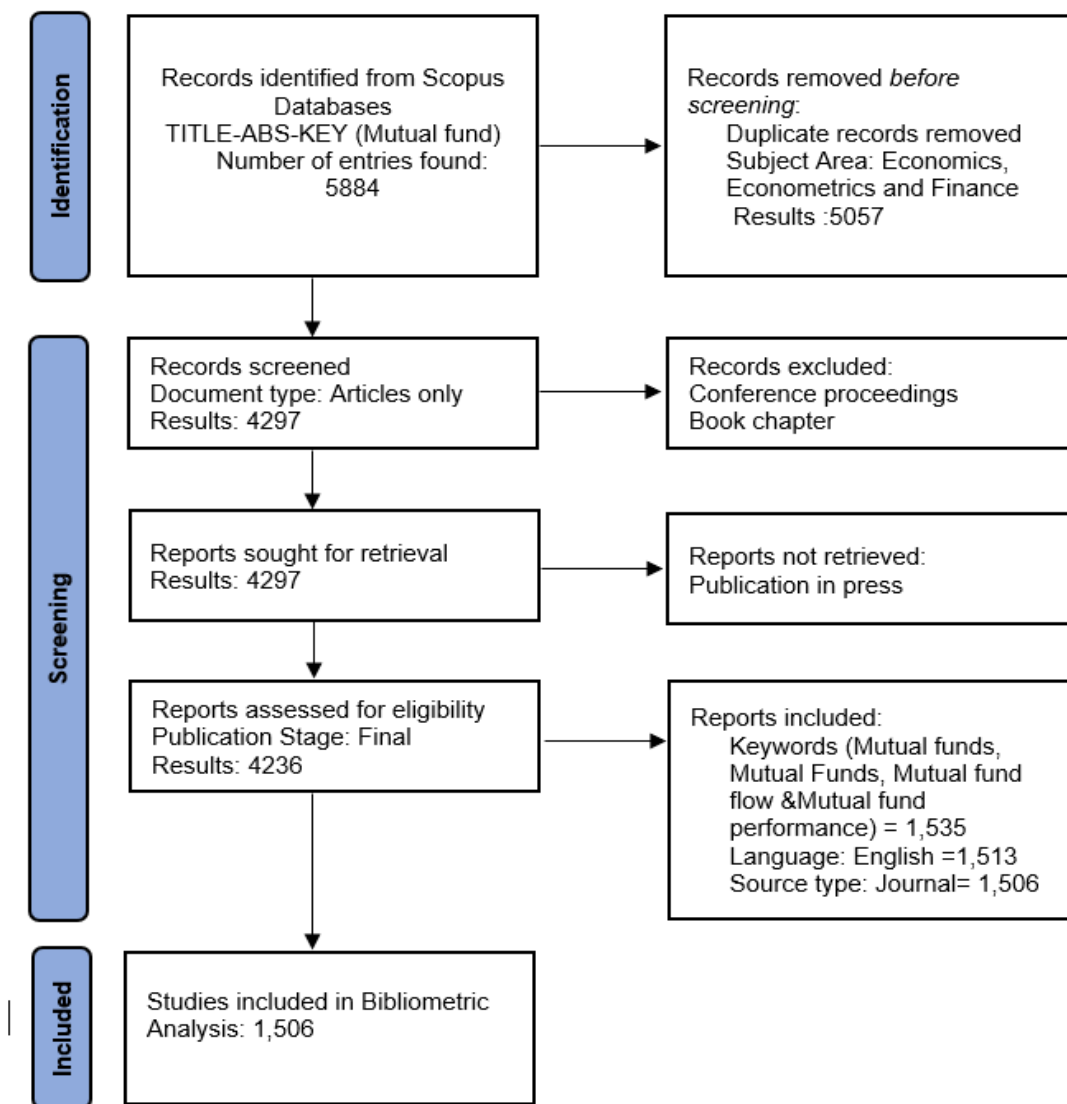


Figure 1. Data extraction for Bibliometric analysis.

3.3.1 Initial search results: We searched the Scopus database using “mutual fund” as the main keyword in “title, abstract, and keywords”. Our initial results yielded 5884 articles. We restricted our results only

to research and review articles that were published in peer-reviewed journals. This restriction results in 5057 documents. To ensure the quality of the articles, we concentrated on articles published in the top journals in Economics, Econometrics, and Finance and to further refine our results, we selected only final selection articles. This further reduced the number of articles to 1506, subsequently used for bibliometric analyses.

MAIN INFORMATION ABOUT DATA	
Timespan	1991:2025
Sources (Journals, Books, etc)	362
Documents	1506
Annual Growth Rate %	5.41
Document Average Age	9.14
Average citations per doc	22.45
References	47716
DOCUMENT CONTENTS	
Keywords Plus (ID)	868
Author's Keywords (DE)	2958
AUTHORS	
Authors	2615
Authors of single-authored docs	219
AUTHORS COLLABORATION	
Single-authored docs	257
Co-Authors per Doc	2.49
International co-authorships %	26.29
DOCUMENT TYPES	
article	1506

Table 1.Descriptive statistics

Table 1 presents the overall information about articles extracted from the Scopus database. As mentioned, 1506 articles are incorporated into the study. These articles are sourced from the 362 top-ranked journals in the finance and economics domain, thereby ensuring the quality of the research articles and providing a comprehensive overview of research conducted to date in the capital asset pricing model. A total of 868 unique keywords are used in these studies; the author's keywords amount to 2958. Keyword plus (ID) refers to extended keywords associated with the manuscript by the Scopus database. The literature review covers the past 25 years (from 1991 to 2025), yielding an average citation of 22.45 per document. There are 257 unique authors involved in the publication of these articles and of the 1506 documents, only 219 are single-authored. The author appearances are the summation of the number of authors from all documents. On average, 2.49 authors have written one document.

4.1. Publication trend: - The total number of papers is plotted against each year of publication in Figure 2, which shows the publishing trend of Mutual funds research. The Figure shows that research started to evolve only after 1991, and there were few papers from 1991 to 2000. The average number of publications per year was finally reached after nine years, or in 2007. Over the past three years, the most papers have been produced, with 2023 being the most productive (124 articles), followed by 2022 (117 articles), and

107 Articles produced in 2021 and 2024. Even though 2023, the year of recovery from COVID-19, was the year that produced (124) the most studies in this field. In 2025, 12 studies have been produced, which indicates the increasing trend of research in this field.

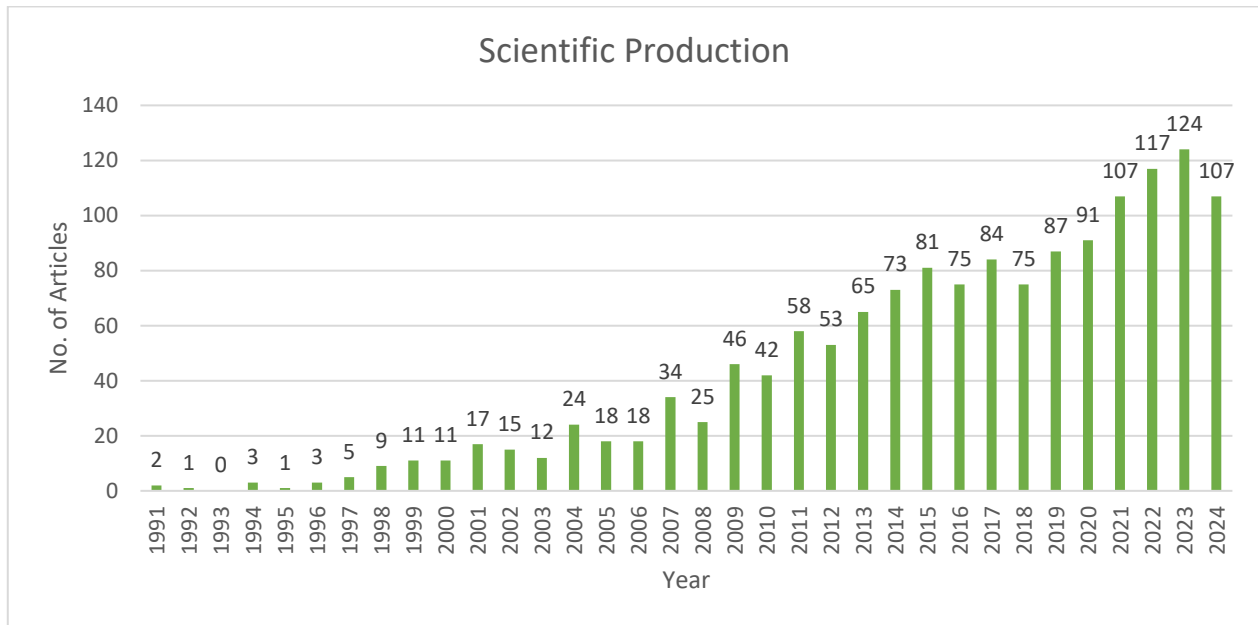


Figure 2. Publication Trend.

4.2. Most Relevant Authors:

The Most Relevant Authors in Figure 3 showing the most prolific authors based on the number of documents they have contributed to the research field. Out of 2615 authors, Matallín-Sáez, J.C. is the most prolific author, with 23 documents attributed to their name. Followed by the Authors such as De Mingo-López, D.V., Massa, M., and Soler-Domínguez, have each contributed 10 documents. Several other authors, including Karoui, A., O'Sullivan, N., Otten, R., and Parida, S., have each contributed 9 documents. The contributions range from 8 documents (Andreu, L.) to 23 documents (Matallín-Sáez, J.C.), showing a significant variation in productivity among the listed authors. These authors are likely key contributors to the research field, playing an influential role in advancing the topic through their consistent work.

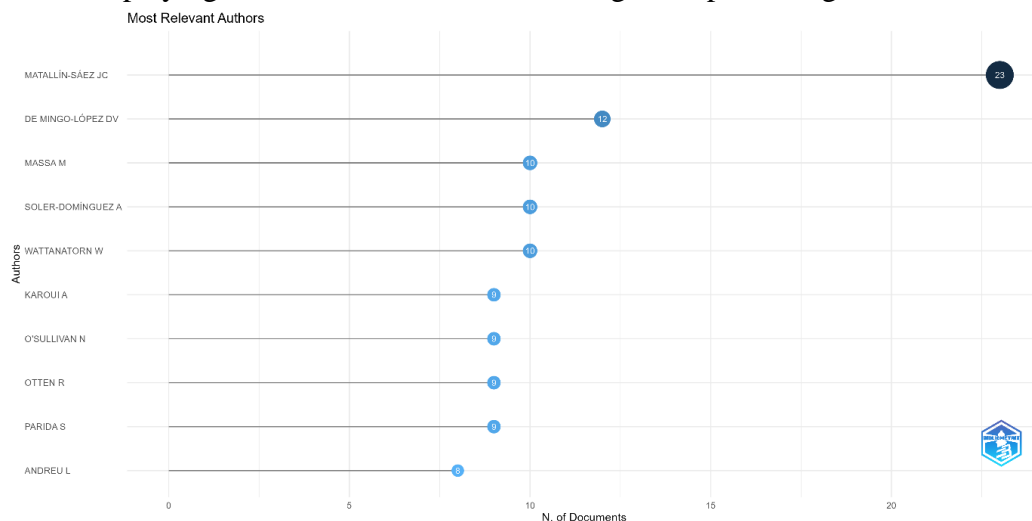


Figure 3. Most Relevant Authors.

4.3. Top Authors and Corresponding Countries:

The most influential authors of Mutual fund research as well as the top countries with the highest cited documents are presented in Table 2 obtained through citation metrics. Out of 2615 authors who have published at least 2 documents, Renneboog L.; Ter Horst J.; and Zhang C. stand out as the most influential authors in this topic, receiving 1269 citations. He is followed by the Berk J.B.; Van Binsbergen J.H. receiving 492 citations. Out of 88 countries that have a minimum of two documents published in this area, the United States is the country with top intellectual contribution in Mutual fund research have 564 publications and the highest number of citations is 19116.

Figure 4, displays the distribution of documents based on the countries of corresponding authors. It is categorized into Single-Country Publications (SCP) and Multiple-Country Publications (MCP) to highlight collaboration patterns. The USA dominates as the leading contributor, with the highest number of documents, followed by China, particularly in SCP, indicating a large number of studies authored solely within the country. Spain and the United Kingdom are also prominent in both SCP and MCP.

Author	Documents	Citations	Country	Documents	Citations
Renneboog L.; Ter Horst J.; Zhang C.	2	1269	United States	564	19116
Berk J.B.; Van Binsbergen J.H.	2	492	United Kingdom	138	4667
Pástor L.; Stambaugh R.F.	2	321	Netherlands	44	4166
Otten R.; Bams D.	3	261	China	166	1908
Cuthbertson K.; Nitzsche D.; O'sullivan N.	3	231	Germany	70	1632
Bauer R.; Otten R.; Rad A.T.	2	223	Australia	80	1565
Ferris S.P.; Yan X.(S.)	2	92	Spain	99	1527
Taylor J.	2	92	Canada	69	1314
Christoffersen S.E.K.; Sarkissian S.	2	79	France	60	1256
Prather L.J.; Middleton K.L.	2	62	Sweden	25	1099

Table 2 . Top Authors and Countries

Notes : TP = Total Publications, TC = total Citations.

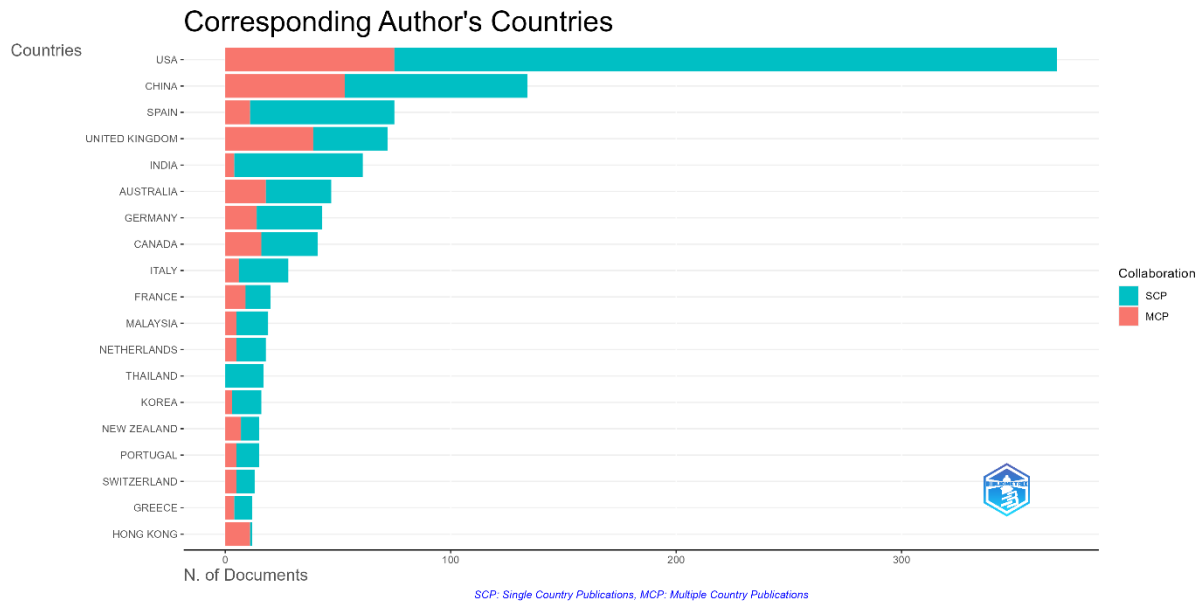


Figure 4. Corresponding Author's Countries.

4.5. Most relevant Sources: The most relevant journals in Figure 6 are present in a specific research domain, likely related to finance, investment, or mutual funds, based on the number of published documents. The most prolific sources, however, in terms of publications, the Journal of Banking and Finance, with 106, followed by the Journal of Financial Economics with 101 respectively.

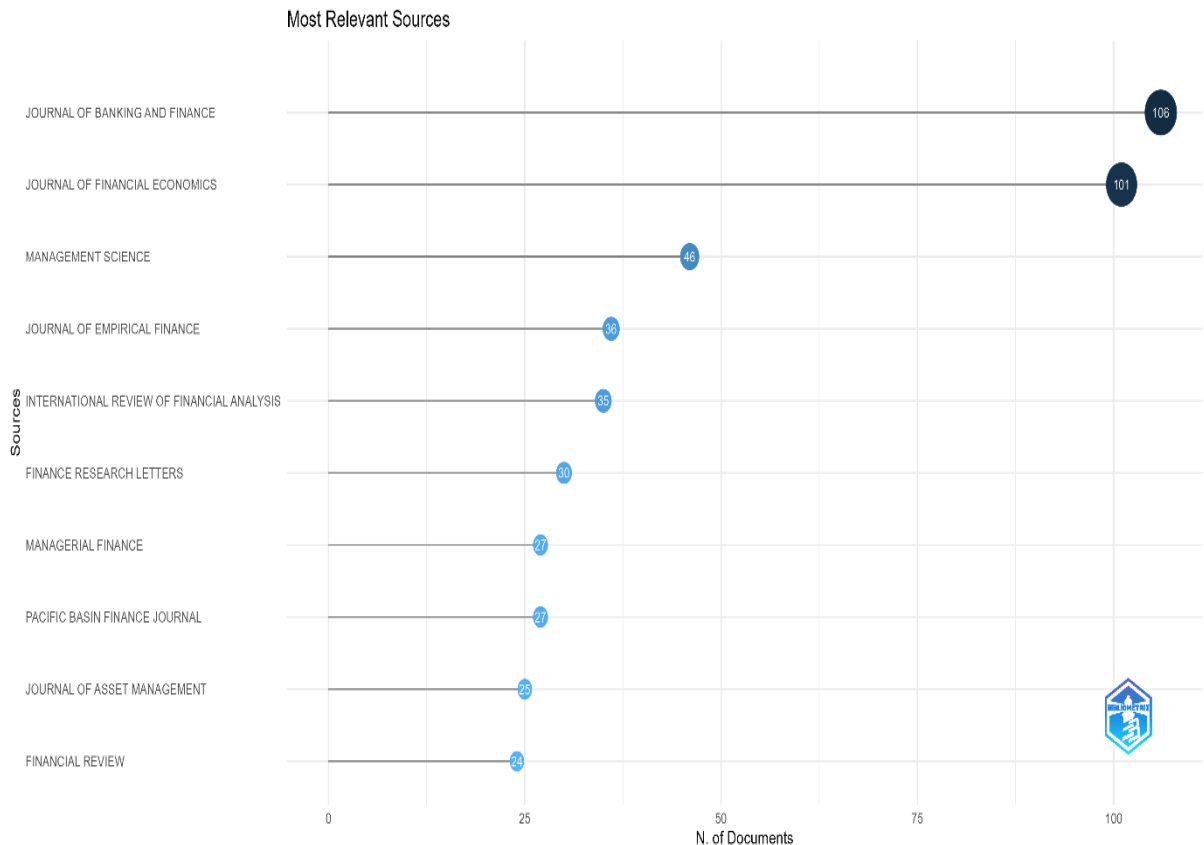


Figure 5. Most Relevant Sources.

4.6. Bradford's Law:

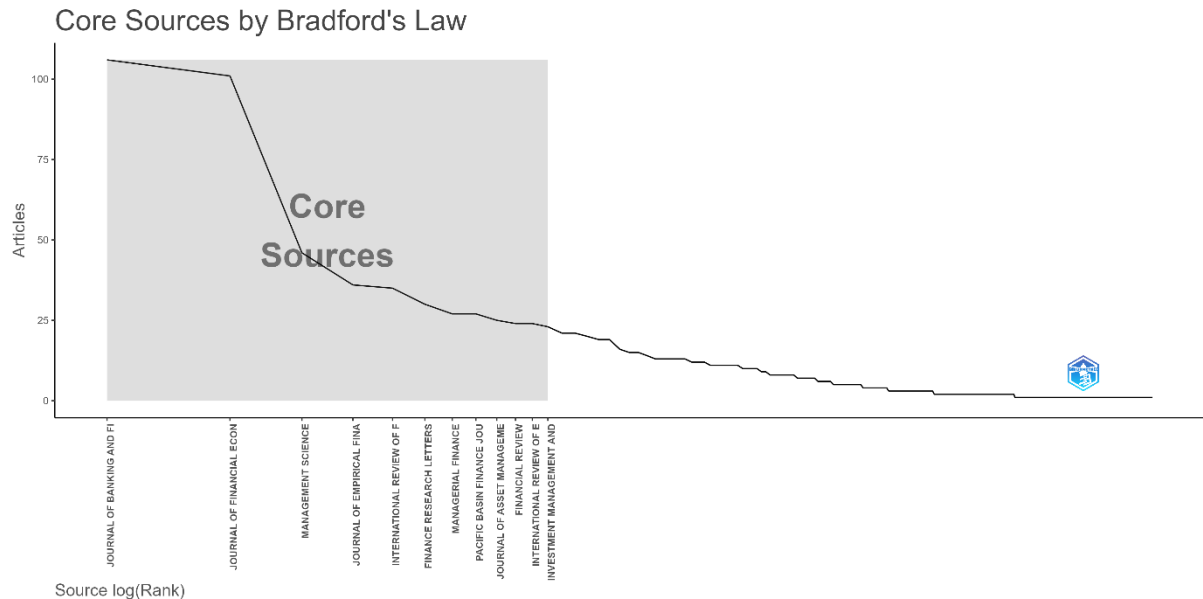


Figure 6. Bradford's Law.

Figure 6 explains Bradford's Law applied to research articles, identifying "core sources" in a specific domain. The shaded region represents the most productive journals, contributing the most articles, and forming the core sources. These sources, including prominent journals like the *Journal of Banking and Finance*, and the *Journal of Financial Economics and Management Science*, dominate the field with high article counts, indicating their centrality and influence. As the sources' rank increases (moving to the right on the x-axis), the contribution diminishes significantly, consistent with Bradford's Law. This highlights the concentration of impactful research within a limited set of key journals, while the remaining sources collectively produce fewer articles, showcasing the uneven distribution of scholarly output.

4.7. Co-occurrence Analysis.

Figure 8 describes a co-occurrence network analysis generated using VOSviewer, which maps the relationships between key terms in academic literature or research related to mutual funds. The largest and most central node is "mutual funds", indicating that it is the core topic in this analysis. Other highly connected terms include "fund performance," "mutual fund flows," "institutional investors," "liquidity," and "market timing." The size of the nodes represents the frequency of occurrences of each term, meaning larger terms appear more often in the analyzed dataset.

Research on mutual funds can be categorized into four key clusters. The Green Cluster focuses on investment strategies and risk, highlighting aspects such as risk management, market timing, performance measurement, and fund selectivity. The Blue Cluster explores behavioral and institutional aspects, including investor behavior, fund flows, and decision-making patterns among institutional and individual investors.



Key trends and relationships emerge across these clusters. Performance-related metrics, such as persistence, liquidity, and capital flow, remain central to fund evaluation. ESG and ethical investing are gaining prominence, particularly concerning institutional investors and governance. Additionally, market timing and behavioral finance are closely linked, indicating strong research interest in how investors react to market conditions and psychological biases influencing investment decisions.

China, the United Kingdom, and Australia are key contributors to global research, forming prominent nodes with strong international collaborations. Regional clusters are evident, such as Europe (France, Spain, and the Netherlands) and the Asia-Pacific region (China, India, and Australia), highlighting active

research networks. In contrast, countries like Iran, Turkey, and Finland are on the periphery, with lower contributions and fewer global connections.

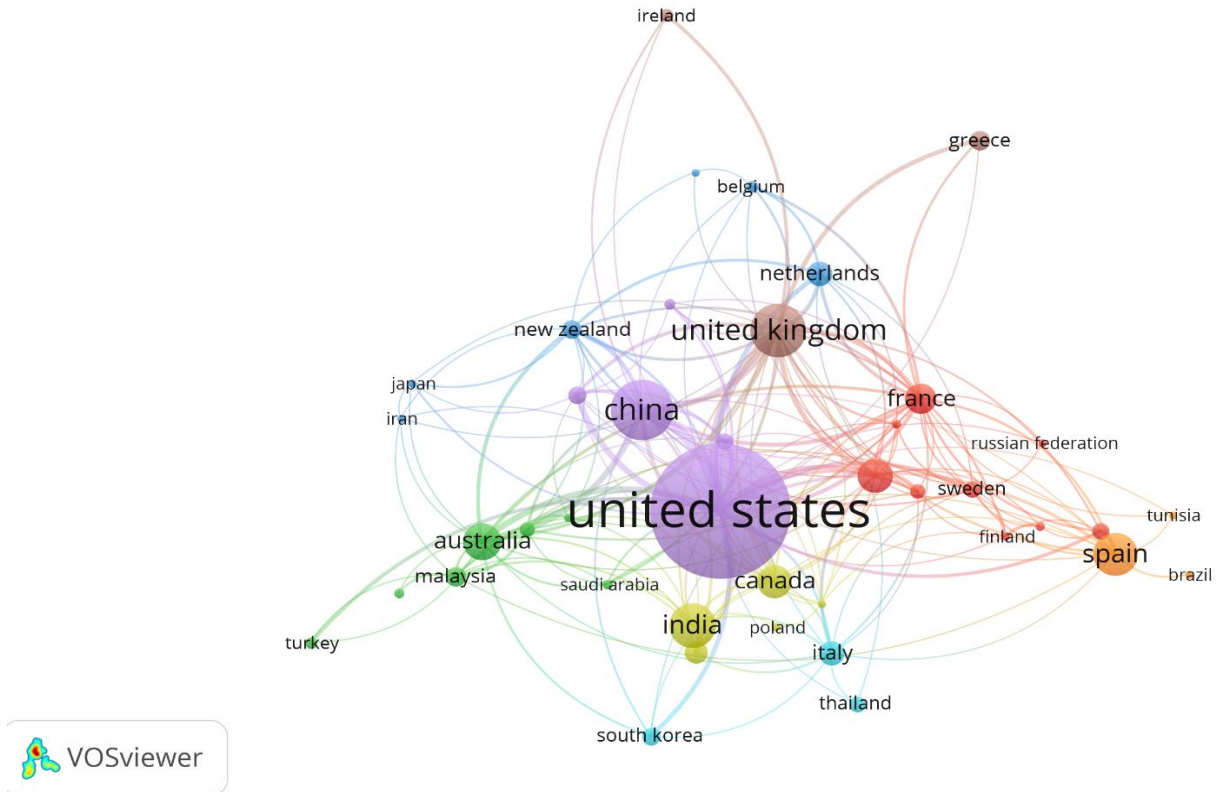


Figure 9. Co-authorship Analysis.

4.8. Bibliometric Coupling

The bibliometric coupling technique helps identify emerging research themes, scholarly networks, and intellectual structures within a field (Donthu et al. 2021). The uploaded image is a bibliographic coupling network map generated using VOSviewer. It visualizes the relationships between documents based on shared references, where nodes represent documents and links show the degree of coupling.

Citations from publications are used in bibliographic coupling to illustrate the current level of knowledge on the topic. Basic, specialized, and current information are all included in bibliographic coupling (Goodell et al., 2021). Coupling occurs when two works relate to a third work that is shared. It implies that there's a possibility the two pieces deal with related topics. A total of 229 documents 173 of which were connected were considered for coupling if they had at least 35 citations. As seen in Figure 10, this led to the identification of seven theme groupings. Each item in these clusters has been examined to group them under a single theme in content analysis.

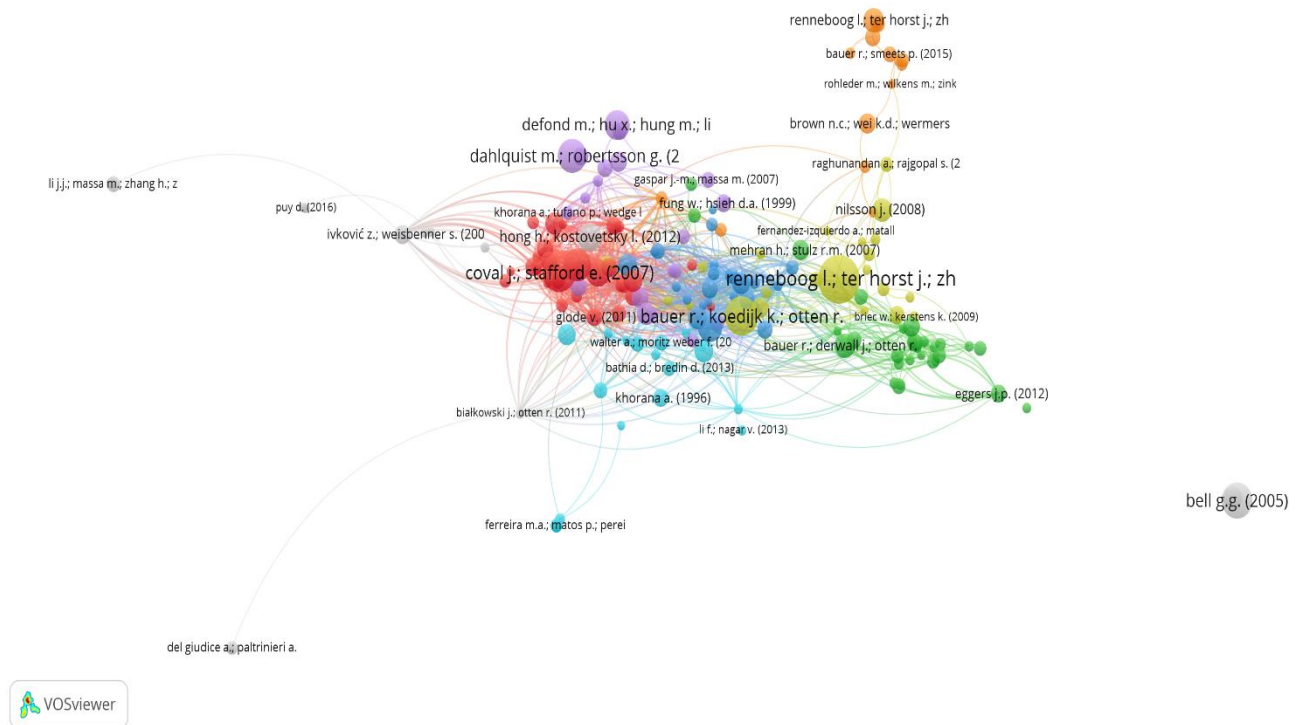


Figure 10. Bibliometric Coupling.

Cluster 1 consists of 30 articles showing red nodes, which mainly concentrated on the study and analysis of Mutual Fund performance in various aspects in different countries (Aluri, 2017; Chiu et al., 2021; Kourouthanassis et al., 2015) and their impact on Mutual fund returns. Cluster 2 focuses on the performance of the different categories of Mutual Funds like ESG Funds, SRI funds, ethical funds, green Mutual funds, and hedge funds, and it consists of 29 articles, shown in green nodes. Cluster 3 also includes 25 articles, shown in blue nodes, and focuses on the investigation of economic factors, social significance, and skill of the Mutual fund managers. Cluster 4 consists of 22 articles that mainly analyzed the performance based on SRI & ESG mutual funds and focused on portfolio selection instruments. Cluster 5 consists of 21 articles showing violet nodes, mainly concentrated on the global convergence of IFRS into Mutual funds and the impact of stock market timing on the market return. Cluster 6 consists of 17 articles shown in blue nodes, and focuses on the studies on mutual funds managers' timing capabilities, fund allocation, investor sentiments & herding impact on industries. Cluster 7 includes 15 articles shown on orange nodes, mainly concentrating on mutual fund herding and behavioral studies, evaluation of performance with active peer benchmark, and comparison of Islamic, SRI & conventional bonds. Four research streams are identified after a detailed review of the contents of each cluster and the themes that are derived from these clusters. The streams are.

1. Mutual fund performance.
Cluster 1 & cluster 2 concentrate on the analysis of mutual fund performance of Mutual fund in various aspects of different countries & on different categories of mutual funds.
2. Behavioral Biases and Manager's Skill.
Cluster 6 & cluster 7 investigate herding behavior, other behavioral studies, and managers' capabilities in the selection of portfolios.
3. Impact of social, economic, and governmental factors on performance.

Cluster 3 and Cluster 4 concentrate on the analysis of social, and economic factors and the performance of ESG & SRI mutual funds.

4. Convergence of International Financial Reporting Standards into Mutual Funds.

Cluster 5 focuses on the convergence of IFRS into mutual fund and stock market timing.

4.11. Trend topics and Thematic mapping.

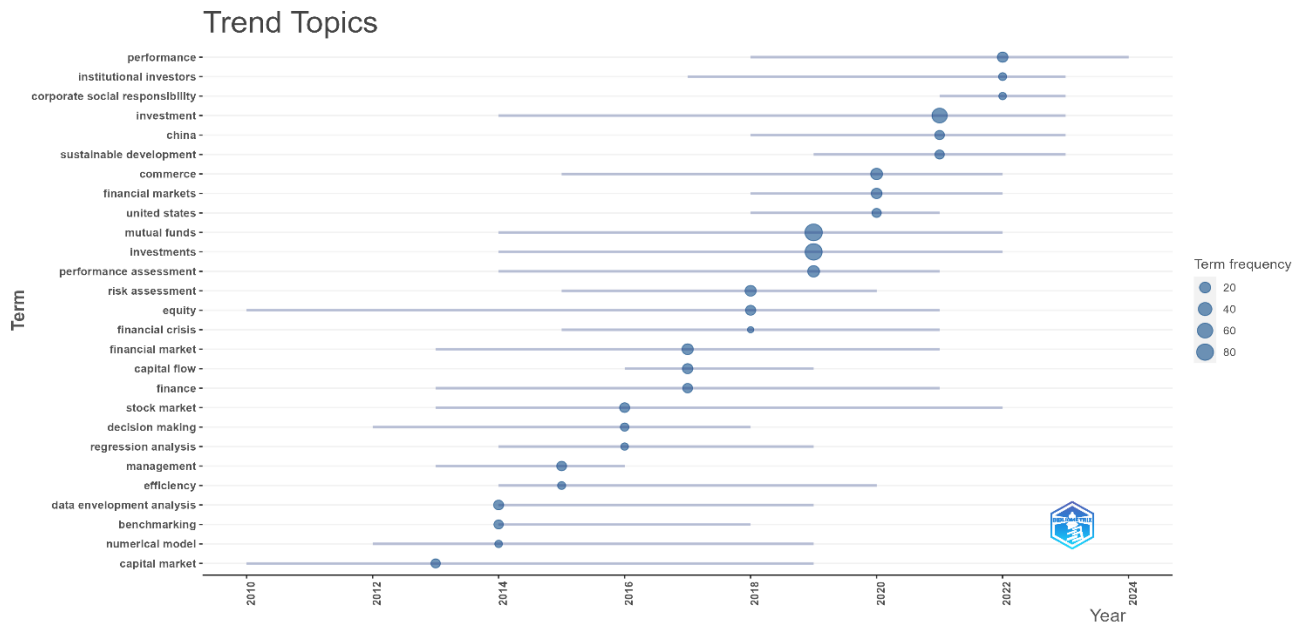


Figure 11. Trend Topics.

Figure 11 represents trending topics over time, showing how the frequency of certain financial and investment-related terms has evolved from around 2010 to 2024. From 2010 to 2015, financial and investment topics were less prominent, but from 2016 onward, the number of trending terms increased significantly. Key topics like risk assessment, financial markets, institutional investors, and corporate social responsibility have gained prominence, with newer terms such as sustainable development and China appearing more frequently since 2020.

While earlier discussions focused on equity and financial crises, these topics have declined over time, whereas performance, institutional investors, and investment remain dominant. Emerging trends highlight a growing interest in sustainable development and corporate social responsibility, reflecting a shift toward ethical investing and environmental concerns. Additionally, increased discussions about China indicate its rising influence in global financial markets.

Sl.N o	Keyword	T O	Sl. No	Keyword	TO		
1	Mutual Funds	87	11	Equity	15		
2	Investments	82	12	Data Envelopment Analysis	14		
3	Investment	59	13	Stock Market	14		

4	Commerce	25	14	Finance	1 3		
5	Performance Assessment	25	15	Financial System	1 3		
6	Financial Market	21	16	Management	1 3		
7	Risk Assessment	20	17	China	1 2		
8	Financial Markets	18	18	Managers	1 2		
9	Performance	17	19	Benchmarking	1 1		
10	Capital Flow	16	20	Capital Market	1 1		
	Notes: TO= Total Occurrence					Table 3. Top Keywords	

Thematic Mapping

This thematic map categorizes research topics based on their development (density) and relevance (centrality) in the field. The quadrants provide insights:

- Motor Themes (Top-Right):** Topics such as "financial market," "equity," "capital flow," and "stock market" are highly central and developed, driving research in the field. These are well-established themes with significant influence.
- Basic Themes (Bottom-Right):** Themes like "risk assessment," "sustainability," and "China" have high centrality but lower development. They serve as foundational topics, with the potential for further exploration and integration.
- Niche Themes (Top-Left):** Topics such as "mutual funds," "performance management," and "benchmarking" have high development but lower centrality. These are specialized areas, important within specific contexts but not widely connected across the field.
- Emerging or Declining Themes (Bottom-Left):** Topics like "finance" and "decision making" have low development and centrality, suggesting they may be nascent or losing relevance in current research.

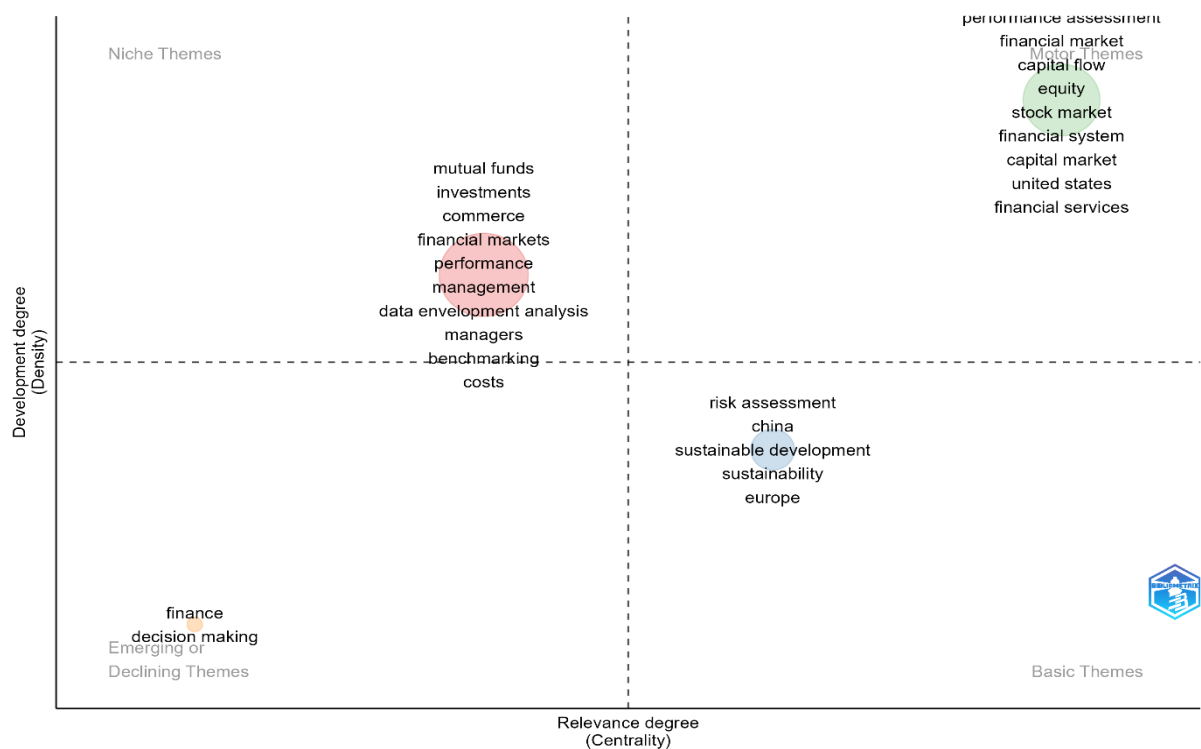


Figure 12. Thematic Mapping.

Discussions and Conclusions

Mutual fund is an important stream of financial research that finds use in a variety of financial and investment-related fields. It is a well-researched field with an increasing number of publications, and the recent surge of publications (2023) demonstrates its depth and potential. Thus, the purpose of this study is to examine how Mutual fund research has evolved and to suggest potential avenues for further research in the field. Based on the systematic literature review and the bibliometric analysis of 1506 documents published over 35 years (1991-2025), accessed from the Scopus database, the study identifies and highlights the most prominent authors, keywords, articles, and research clusters to explore a visible landscape and research frontiers of asset pricing theory.

The analysis reveals that the USA has published the highest number of articles (564), with 19116 citations, and is considered the leading country. In terms of the most relevant authors, Renneboog L.; Ter Horst J.; and Zhang C emerge as the most prolific authors with 1269 citations in the USA. In Bradford's law, prominent journals like the *Journal of Banking and Finance*, and the *Journal of Financial Economics and Management Science*, dominate the field with high article counts, indicating their centrality and influence. In thematic mapping, motor themes, topics such as "financial market," "equity," "capital flow," and "stock market" are highly central and developed, driving research in the field.

Practical implication

Research on mutual funds has several practical implications for investors, fund managers, policymakers, and regulators. Investors can benefit from insights on performance persistence, risk assessment, and fund selection, enabling them to make more informed decisions about their capital allocation. For mutual fund managers, research findings on market timing, liquidity management, and performance measurement provide valuable strategies for optimizing fund performance. Policymakers and regulators can use mutual

fund research to enhance disclosure requirements, governance standards, and fee structures, ensuring better transparency and investor protection. Findings related to expense ratios, fund performance, and ethical investing help shape policies that promote fairness and efficiency in financial markets. Well-informed regulations can create a more stable and investor-friendly financial environment. Finally, research on mutual funds across different regions, such as China, the UK, and Australia, provides valuable insights into global investment trends, cross-border fund flows, and the role of institutional investors in shaping financial markets.

Further Research Scope

Future research on mutual funds can explore several key areas to enhance industry understanding and investment strategies. With the rising emphasis on ESG and sustainable investing, future research can assess the long-term effects of ESG integration on fund returns and investor behavior. The role of behavioral finance, particularly in understanding investor sentiment, biases, and decision-making during economic uncertainty, also warrants further exploration. Additionally, research on mutual fund performance in emerging markets can provide valuable insights into evolving investment opportunities and regulatory challenges. The growing influence of Fintech and AI in fund management, including robo-advisors and machine learning-driven portfolio optimization, is another promising area. Addressing these areas will contribute to a more efficient, sustainable, and investor-friendly mutual fund industry.

References:

1. Adebambo, Biljana N., and Xuemin Sterling Yan. 2016. "Momentum, Reversals, and Fund Manager Overconfidence." *Financial Management* 45(3):609–39. doi: 10.1111/fima.12128.
2. Ali, Asgar, and Hajam Abid Bashir. 2022. "Bibliometric Study on Asset Pricing." *Qualitative Research in Financial Markets* 14(3):433–60.
3. Ali, Muhammad Asad, Muhammad Aqil, Syed Hasnain Alam Kazmi, and Syed Imran Zaman. 2023. "Evaluation of Risk Adjusted Performance of Mutual Funds in an Emerging Market." *International Journal of Finance and Economics* 28(2):1436–49. doi: 10.1002/ijfe.2486.
4. Ali, Sara ;, Badshah, Ihsan ;, Demirer, Riza. 2023. "Anti-Herding by Hedge Funds and Its Implications for Expected Returns." *Journal of Economic Behavior and Organization* 211:31–48.
5. Amihud, Yakov, and Ruslan Goyenko. 2013. "Mutual Fund's R2 as Predictor of Performance." *Review of Financial Studies* 26(3):667–94. doi: 10.1093/rfs/hhs182.
6. Annaert, Jan, Marc De Ceuster, and Kurt Versteegen. 2013. "Are Extreme Returns Priced in the Stock Market? European Evidence." *Journal of Banking and Finance* 37(9):3401–11. doi: 10.1016/j.jbankfin.2013.05.015.
7. Avramov, Doron, Si Cheng, Abraham Lioui, and Andrea Tarelli. 2022. "Sustainable Investing with ESG Rating Uncertainty." *Journal of Financial Economics* 145(2):642–64. doi: 10.1016/j.jfineco.2021.09.009.
8. Ball, Ray, S. P. Kothari, Jay Shanken, and William E. Simon. 1995. *Problems in Measuring Portfolio Performance An Application to Contrarian Investment Strategies*.
9. Basso, Antonella, and Stefania Funari. 2017. "The Role of Fund Size in the Performance of Mutual Funds Assessed with DEA Models." *European Journal of Finance* 23(6):457–73. doi: 10.1080/1351847X.2016.1164209.

10. Bollen, Nicolas P. B., and Jeffrey A. Busse. 2005. "Short-Term Persistence in Mutual Fund Performance." *Review of Financial Studies* 18(2):569–97. doi: 10.1093/rfs/hhi007.
11. Brown, Stephen J., and William N. Goetzmann. 1997. *JOURNAL OF NANCIAL ECONOMICS Mutual Fund Styles*. Vol. 43.
12. Capocci, Daniel, and Georges Hübner. 2004. "Analysis of Hedge Fund Performance." *Journal of Empirical Finance* 11(1):55–89. doi: 10.1016/j.jempfin.2002.12.002.
13. Cheema, Muhammad A., and Gilbert V. Nartea. 2017. "Momentum, Idiosyncratic Volatility and Market Dynamics: Evidence from China." *Pacific Basin Finance Journal* 46:109–23. doi: 10.1016/j.pacfin.2017.09.001.
14. Chordia, Tarun. 1996. *The Structure of Mutual Fund Charges*. Vol. 41.
15. Cremers, Martijn, Miguel A. Ferreira, Pedro Matos, and Laura Starks. 2016. "Indexing and Active Fund Management: International Evidence." *Journal of Financial Economics* 120(3):539–60. doi: 10.1016/j.jfineco.2016.02.008.
16. Da, Zhi, Re Jin Guo, and Ravi Jagannathan. 2012. "CAPM for Estimating the Cost of Equity Capital: Interpreting the Empirical Evidence." *Journal of Financial Economics* 103(1):204–20. doi: 10.1016/j.jfineco.2011.08.011.
17. Donthu, Naveen, Satish Kumar, Debmalya Mukherjee, Nitesh Pandey, and Weng Marc Lim. 2021. "How to Conduct a Bibliometric Analysis: An Overview and Guidelines." *Journal of Business Research* 133:285–96. doi: 10.1016/j.jbusres.2021.04.070.
18. Ehsani, Sina, and Donald Lien. 2015. "Effects of Passive Intensity on Aggregate Price Dynamics." *Financial Review* 50(3):363–91. doi: 10.1111/fire.12071.
19. Elizabeth F. Goldreyer, Parvez Ahmed, and J. David Diltz. 1999. *The Performance of Socially Responsible Mutual Funds: Incorporating Sociopolitical Information in Portfolio Selection*.
20. Elton, Edwin J., and Martin J. Gruber. 2020. "A Review of the Performance Measurement of Long-Term Mutual Funds." *Financial Analysts Journal* 76(3):22–37.
21. Fama, Eugene F., and Kenneth R. French. 2010. "Luck versus Skill in the Cross-Section of Mutual Fund Returns." *Journal of Finance* 65(5):1915–47. doi: 10.1111/j.1540-6261.2010.01598.x.
22. Frazzini, Andrea, and Owen A. Lamont. 2008. "Dumb Money: Mutual Fund Flows and the Cross-Section of Stock Returns." *Journal of Financial Economics* 88(2):299–322. doi: 10.1016/j.jfineco.2007.07.001.
23. Grinblatt, Mark, and Sheridan Titman. 1992. "The Persistence of Mutual Fund Performance." *The Journal of Finance* 47(5):1977–84. doi: 10.1111/j.1540-6261.1992.tb 04692. x.
24. Grinblatt, Mark, Sheridan Titman, and Russ Wermers. 1995. "American Economic Association Momentum Investment Strategies, Portfolio Performance, and Herding: A Study of Mutual." *Source: The American Economic Review* 85(5):1088–1105.
25. Huij, Joop, and Thierry Post. 2011. "On the Performance of Emerging Market Equity Mutual Funds." *Emerging Markets Review* 12(3):238–49. doi: 10.1016/j.ememar.2011.03.001.
26. Kaur, Inderjit. 2018. "Effect of Mutual Funds Characteristics on Their Performance and Trading Strategy: A Dynamic Panel Approach." *Cogent Economics and Finance* 6(1):1–17. doi: 10.1080/23322039.2018.1493019.
27. Keshari, Aditya, and Amit Gautam. 2023a. "Asset Pricing in Global Scenario: A Bibliometric Analysis." *IIM Ranchi Journal of Management Studies* 2(1):48–69. doi: 10.1108/irjms-02-2022-0025.

28. Keshari, Aditya, and Amit Gautam. 2023b. "Asset Pricing in Global Scenario: A Bibliometric Analysis." *IIM Ranchi Journal of Management Studies* 2(1):48–69. doi: 10.1108/irjms-02-2022-0025.
29. Khorana, Ajay, and Henri Servaes. 1999. *The Determinants of Mutual Fund Starts*.
30. Kumar, Ms Meetu. 2021. *s*
31. Kumaraswamy, Sumathi, and Ibrahim Al Ezee. 2018. "Performance Evaluation of Saudi Equity Mutual Funds: Fama Decomposition Model." *Investment Management and Financial Innovations* 15(4):158–68. doi: 10.21511/imfi.15(4).2018.13.
32. Lounsbury, Michael, and Hayagreeva Rao. 2004. *Sources of Durability and Change in Market Classifications: A Study of the Reconstitution of Product Categories in the American Mutual Fund Industry, 1944-1985**.
33. Lubos P!astor a, , and c Robert F. Stambaugh b. 2001. "Mutual Fund Performance and Seeminglyunrelated Assets."
34. Miao, Jianjun, Neng Wang, We Thank, Andy Abel, Dave Backus, Jonathan Berk, Patrick Bolton, Ricardo Caballero, Darrell Duffie, Jan Eberly, Lorenzo Garlappi, Robert Geske, Simon Gilchrist, Steve Grenadier, John Heaton, Vicky Henderson, Bob Hodrick, Hong Liu, Debbie Lucas, Michael Manove, Chris Mayer, Robert Mcdonald, Mitchell Petersen, Tim Riddiough, Tom Sargent, Eduardo Schwartz, Bill Schwert, Suresh Sundaresan, Sheridan Titman, and Fernando Zapatero. 2006. *Investment, Consumption, and Hedging under Incomplete Markets*.
35. Naughton, Tony, Cameron Truong, and Madhu Veeraraghavan. 2008. "Momentum Strategies and Stock Returns: Chinese Evidence." *Pacific Basin Finance Journal* 16(4):476–92. doi: 10.1016/j.pacfin.2007.10.001.
36. Nedumparambil, Elizabeth, and Kumar Bhandari. 2022. "Risk Factors, Uncertainty, and Investment Decision: Evidence from Mutual Fund Flows from India." *Indian Economic Review* 57(2):349–72. doi: 10.1007/s41775-022-00155-8.
37. Öztürk, Oğuzhan, Rıdvan Kocaman, and Dominik K. Kanbach. 2024. "How to Design Bibliometric Research: An Overview and a Framework Proposal." *Review of Managerial Science*. doi: 10.1007/s11846-024-00738-0.
38. Phoong, Seuk Yen, Shi Ling Khek, and Seuk Wai Phoong. 2022. "The Bibliometric Analysis on Finite Mixture Model." *SAGE Open* 12(2). doi: 10.1177/21582440221101039.
39. Pollet, Joshua M., and Mungo Wilson. 2008. "How Does Size Affect Mutual Fund Behavior?" *Journal of Finance* 63(6):2941–69. doi: 10.1111/j.1540-6261.2008.01417.x.
40. Qureshi, Fiza, Ali M. Kutun, Izlin Ismail, and Chan Sok Gee. 2017. "Mutual Funds and Stock Market Volatility: An Empirical Analysis of Asian Emerging Markets." *Emerging Markets Review* 31:176–92. doi: 10.1016/j.ememar.2017.05.005.
41. Reber, Beat, Agnes Gold, and Stefan Gold. 2022. "ESG Disclosure and Idiosyncratic Risk in Initial Public Offerings." *Journal of Business Ethics* 179(3):867–86. doi: 10.1007/s10551-021-04847-8.
42. Riley, Timothy B. 2021. "Portfolios of Actively Managed Mutual Funds." *Financial Review* 56(2):205–30.
43. Singh, Bharati. 2021. "A Bibliometric Analysis of Behavioral Finance and Behavioral Accounting." *American Business Review* 24(2):198–230. doi: 10.37625/ABR.24.2.198-230.
44. Sirri, Erik R., and Peter Tufano. 1998. "Costly Search and Mutual Fund Flows." *Journal of Finance* 53(5):1589–1622. doi: 10.1111/0022-1082.00066.

45. Vo, Lai Van, and Huong Thi Thu Le. 2017. "Strategic Growth Option, Uncertainty, and R&D Investment." *International Review of Financial Analysis* 51:16–24. doi: 10.1016/j.irfa.2017.03.002.
46. Wagner, Moritz, John Byong Tek Lee, and Dimitris Margaritis. 2022. "Mutual Fund Flows and Seasonalities in Stock Returns." *Journal of Banking and Finance* 144. doi: 10.1016/j.jbankfin.2022.106623.
47. Wermers, Russ. 1999. "Mutual Fund Herding and the Impact on Stock Prices." *Journal of Finance* 54(2):581–622. doi: 10.1111/0022-1082.00118.
48. Wermers, Russ. 2000. "Mutual Fund Performance: An Empirical Decomposition into Stock-Picking Talent, Style, Transactions Costs, and Expenses." *Journal of Finance* 55(4):1655–1703. doi: 10.1111/0022-1082.00263.
49. Wilhelmina Afua Addy, Adeola Olusola Ajayi-Nifise, Binaebi Gloria Bello, Sunday Tubokirifuruar Tula, Olubusola Odeyemi, and Titilola Falaiye. 2024. "Algorithmic Trading and AI: A Review of Strategies and Market Impact." *World Journal of Advanced Engineering Technology and Sciences* 11(1):258–67. doi: 10.30574/wjaets.2024.11.1.0054.