# Tracking the Research Progress on Financial Literacy and Investment Decisions: A Bibliometric Overview


## Dr. Munmun Mohanty

Professor, Department of Business Administration, Trident Academy of Technology
Bhubaneswar, Odisha, PIN: 751024
Email Id: Munmun.mohanty@tat.ac.in

## Dr. Pallabi Mishra

Assistant Professor, Department of Business Administration, Utkal University
Bhubaneswar, Odisha, PIN: 751004
Email Id: pallabimishra1221@gmail.com

## Dr. Ajodhya Gourab Mishra

Research Assistant, Department of Business Administration, Trident Academy of Technology
Bhubaneswar, Odisha, PIN: 751024
Email Id: ajodhyagourav@gmail.com



***Abstract:*** ***Purpose****: This paper thoroughly examines studies on financial literacy and investment decision-making from the perspectives of business, management, and related fields to figure out growth trends, evolution in the domain, influences of countries and researchers, collaboration patterns, and future research avenues.*

***Design/methodology/approach:*** *Research articles on financial literacy and investment choices were sourced from the* ***Scopus*** *database. To explore the research field, several bibliometric analyses were performed using two specialized tools:* ***Biblioshiny*** *and* ***VOSviewer.***

***Findings:*** *The study highlights a shift in research in the domain from the latent state to the exponential growth stage post-2024, predominantly driven by emerging economies, such as India, Indonesia, and Pakistan. Three phases of evolution are marked by thematic analysis, from conceptual foundation to behavioural finance, and at present, a cognitive process-oriented approach integrating digital financial tools to mitigate cognitive biases for wealth maximization. Consequently, this paves the way for future research directions.*

***Paper Type****: Literature Review*



***Keywords:*** *Financial Literacy, Investment Decision, Bibliometric analysis, Emerging Economies, Research Trends*

## Introduction

Financial literacy has been identified as a critical determinant that affects individuals' ability to make informed investment decisions, thereby affecting individual financial well-being as well as national development (Lusardi & Mitchell, 2014). Financial literacy has been defined as "having the ability to understand and evaluate credible financial information to make financial decisions, considering potential financial consequences and risks" (Baihaqqy et al., 2020). It encompasses financial awareness, knowledge, skills, attitudes, and behaviors that are required to make sound financial decisions. As such, financial literacy enables people to cope with the increasingly complex financial markets and financial products (Hoque et al.,2026).

The relationship between financial literacy and investment behavior has been shown to be positively correlated across various demographic groups. Higher financial literacy enables people to process financial information more efficiently, thereby helping them to utilize resources more efficiently to achieve wealth maximization (Baihaqqy et al., 2020; Parsai & Chandok, 2025). The investment decision is closely linked to an individual's financial literacy level, which determines their ability to assess investment risk, interpret financial information, as well as overcome behavioral biases such as overconfidence or herding behavior (Adil et al., 2022; Gupta et al., 2025). Despite financial literacy being recognized as a critical determinant that affects investment decisions, there exist differences across various groups that need to be addressed through educational programs to enhance financial decision-making efficiency (Indrawati et al., 2025; Prakash et al., 2026).

The study on financial literacy and investment decisions has increased significantly, but it has also been observed that the study in this domain is scattered, and different researchers have applied different methodologies in their study. The main objective of the following bibliometric study is to identify the research trend on financial literacy and investment decisions, as it is expected that the study will provide a comprehensive overview of the different researches conducted in the said domain. The following research questions (RQs) have been framed to analyze the current status and trends in the specified research domains:

RQ1: What are the publication trends and growth patterns in research on financial literacy and investment decisions over time?

RQ2: Which countries and authors have been the most influential in advancing research on financial literacy and investment decisions?

RQ3: What are the key collaboration networks and citation patterns among researchers and countries in this domain?

RQ4: How have the core themes in this domain evolved and what future research directions are suggested by the bibliometric overview to enhance understanding and policy formulation in financial literacy and investment decisions?

## Methodology

### Data Extraction

The current research adopts a bibliometric analysis to answer the mentioned research questions. Data were collected from the *Scopus* database on 21st March, 2026, using the keywords "Financial Literacy" AND "Investment Decision" within the "Article Title" section, as these keywords capture all relevant studies in the field (Praharaj and Chhatoi, 2025). Further, selection criteria involved documents from subject areas "Business, Management and Accounting," "Economics, Econometrics and Finance," "Social Sciences," and "Arts and Humanities. (Patra et.al, 2024)" To ensure quality, peer review, and ease of understanding of documents, the search was limited to "articles" from "journals" published in English (Praharaj et al., 2025a). To uphold transparency and credibility in document

extraction, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework was adopted (Ref: Figure 1) (Praharaj et.al., 2025b). For data tabulation, visualisation and analysis, open-source software such as VOSviewer and R-Studios were used (Samal et al., 2026).

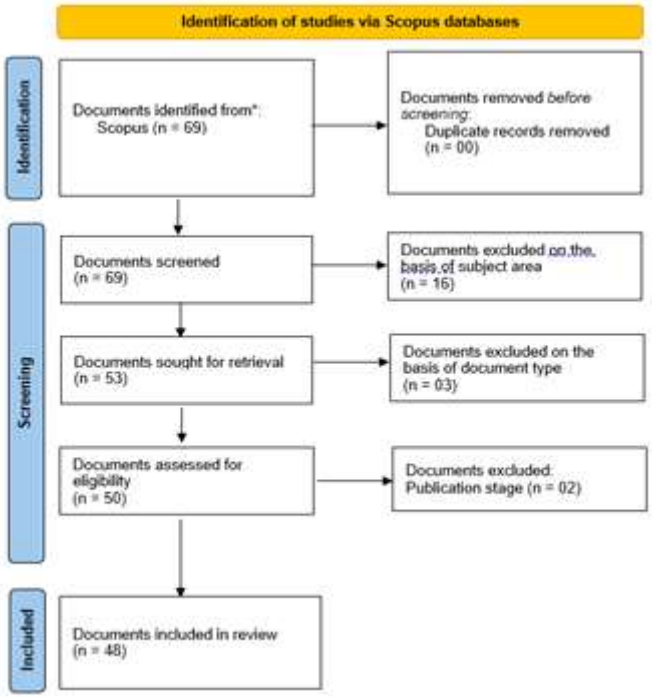



**Figure 1: PRISMA framework**

***Sources:*** *Compiled and computed data; Framework: Moher et al. (2009)*

## Data Analysis and Interpretation

### Publication Growth

Figure 2 presents a detailed synthesis of publications and yearly citation patterns for the intersection of the domains "financial literacy" and "investment choices." Until 2019, a lack of consistency in the number of publications in the research domain was evident: publications appeared sporadically in 2009, 2015, 2016, 2018, and so on, with no publications in intervening years. After 2023, however, a significant increase in documentation was evident, indicating a major shift in the domain.

The trend in publication growth can be segregated into two distinct phases. The preliminary phase, from 2009 to 2023, is latent in nature with fewer publications. The subsequent phase, post-2024, marked an exponential growth in publications, signaling a striking rise in research interest in the domain. The highest number of publications is found in 2025, 2024, and 2020, respectively.

With respect to the citation velocity (Mean Total Citations Per Year, MTCPY) pattern, the years with the highest impact were 2022, 2009, and 2020, in descending order. A significant point to note

here is that 2022, with the highest yearly impact (MTCPY = 16.27), even surpasses the foundational works of 2009 (MTCPY = 12.00). This indicates that though the foundational works of 2009 have a higher cumulative number of citations, the works of 2022 are gaining higher yearly citations and are contributing significantly to the current research environment.

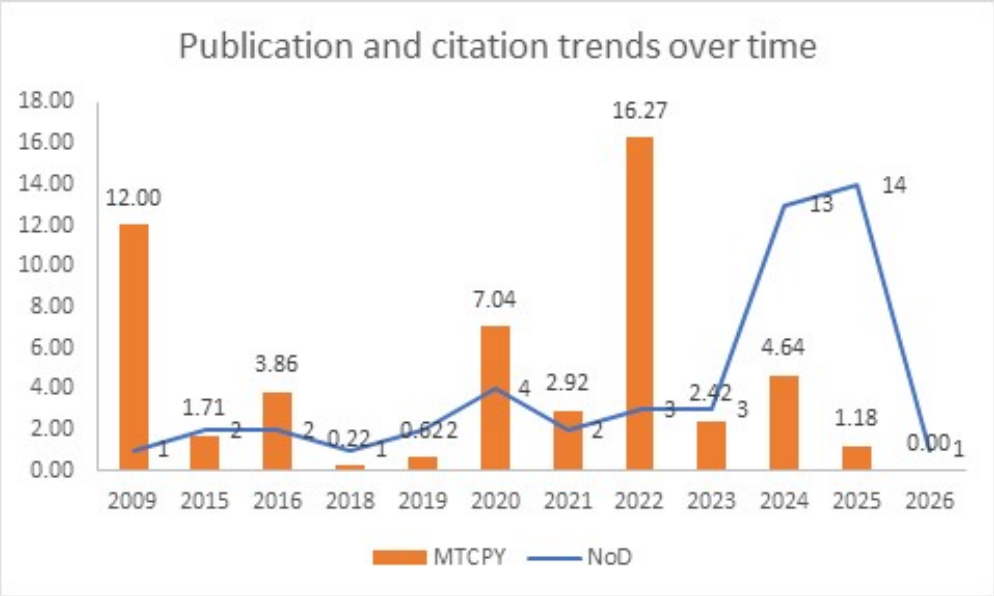



**Figure2: Publication and citation trends over time**
**Note(s):** *MTCPY: Mean total citations per Year; NoD: number of documents
***Source:*** *Compiled and computed data*

**Authors Productivity and Collaboration**

The analysis conducted for authorial productivity shows the formation of a nascent and scattered community of researchers. Therefore, the distribution in Lotka's Law of scientific productivity (Figure3) is highly skewed: 97.7% of authors (128 out of 131) have published just a single document. It is extremely rare to have sustained productivity in this dataset. The most productive authors are *D. Disman, N. Nugraha, and E. Endri*, with two publications each.

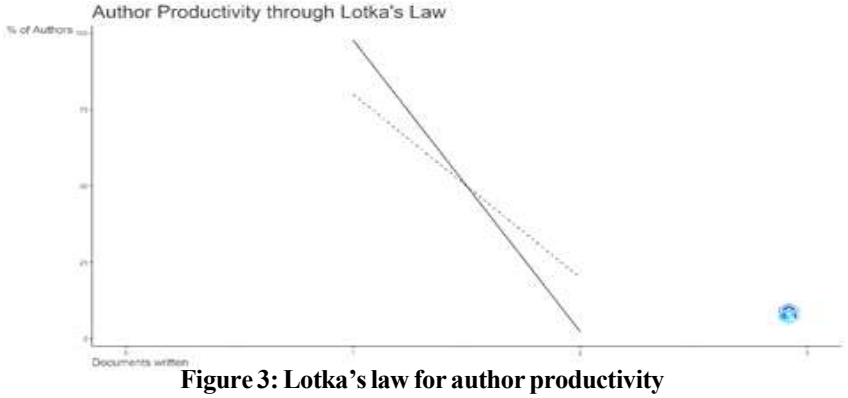



**Figure 3: Lotka's law for author productivity**
***Source:*** *Compiled and computed data, Courtesy: R Studio*

**Table1: Top fifteen authors**

| SN | Author | h_index | g_index | m_index | TC | NP | PY |
|---|---|---|---|---|---|---|---|
| 1 | ENDRI E | 2 | 2 | 0.67 | 11 | 2 | 2024 |
| 2 | DISMAN D | 1 | 2 | 0.14 | 18 | 2 | 2020 |
| 3 | NUGRAHA N | 1 | 2 | 0.14 | 18 | 2 | 2020 |
| 4 | ANOOD BIN KALLI A | 1 | 1 | 0.06 | 216 | 1 | 2009 |
| 5 | HASSAN AL-TAMIMI HA | 1 | 1 | 0.06 | 216 | 1 | 2009 |
| 6 | RAUT RK | 1 | 1 | 0.14 | 162 | 1 | 2020 |
| 7 | ADIL M | 1 | 1 | 0.20 | 123 | 1 | 2022 |
| 8 | ANSARI MS | 1 | 1 | 0.20 | 123 | 1 | 2022 |
| 9 | SINGH Y | 1 | 1 | 0.20 | 123 | 1 | 2022 |
| 10 | AHMAD M | 1 | 1 | 0.20 | 109 | 1 | 2022 |
| 11 | SHAH SZA | 1 | 1 | 0.20 | 109 | 1 | 2022 |
| 12 | AWAIS M | 1 | 1 | 0.09 | 71 | 1 | 2016 |
| 13 | FAHAD LABER M | 1 | 1 | 0.09 | 71 | 1 | 2016 |
| 14 | KHURSHEED A | 1 | 1 | 0.09 | 71 | 1 | 2016 |
| 15 | RASHEED N | 1 | 1 | 0.09 | 71 | 1 | 2016 |

**Notes:** *SN = serial number, NP = number of Publications; TC = total citations; PY = Publication Year

***Sources:*** *Compiled and computed data; Courtesy: R Studios*

There is a significant disconnect between productivity and impact. As shown in Table 1, Disman and Endri may be the most productive, but they are not the most cited. *Hassan Al-Tamimi, H.A. and Anood Bin Kalli, A.*, with a total of the highest 216 citations from one paper (2009), followed by Raut, R.K. with 162 publications have the highest impact. This suggests that the domain at present is mostly best served by a few widely cited papers rather than being dependent on a lot of output from high publication authors.

While local productivity metrics focus on recent contributors, the author co-citation network (Figure 4) outlines the intellectual underpinnings of the field. This network illustrates the scholars most frequently cited together in the reference lists of the 48 sampled documents, thereby pinpointing the foundational theorists influencing current research. As shown in Figure4, *O.S. Mitchell* stands out as the most prominent and influential figure in this area, represented by the largest and most centrally positioned node. This extensive citation record suggests that *Mitchell's* work on financial literacy and retirement planning forms the theoretical basis for the field. Other significant nodes include: I. Ajzen, indicating the widespread use of behavioral frameworks (such as the Theory of Planned Behavior) to comprehend investment decisions; M. Statman, reflecting the strong incorporation of behavioral finance paradigms; and L. Mandell, a pivotal early researcher in financial education.

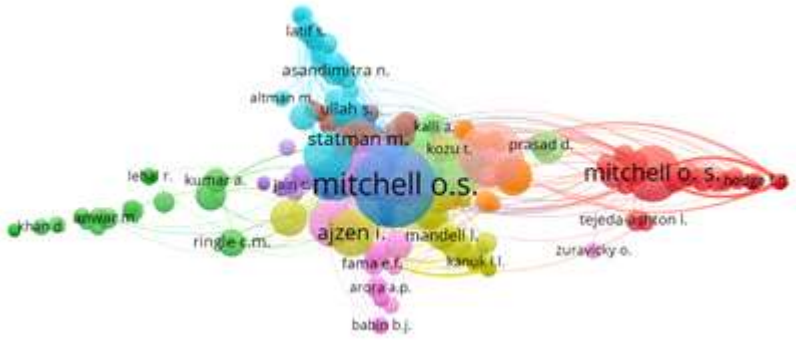



**Figure 4. Author Co-Citation Analysis**
***Source:*** *Compiled and computed data, Courtesy: VoSViewer*

The visualization of bibliographic coupling analysis (Figure 5), assessing authors' interconnectivity and shared intellect, displays a dense and highly centralized core of scholarship. This central accumulation, which contains the interconnected red, blue, and purple clusters, highlights that authors such as Endri E., Adil M. are positioned at the most influential and salient nodes in this cluster. This strong coupling implies that the most impactful researchers in the domain are using a common and strongly stated theory regarding financial literacy and investment decisions. Expanded from the core is a sub-cluster with a decidedly hierarchical structure, as seen in nodes colored green (representing authors such as *Disman*). This implies an academic sub-field whose output is intimately located — and somewhat heterodox to mainstream literature while still being related.

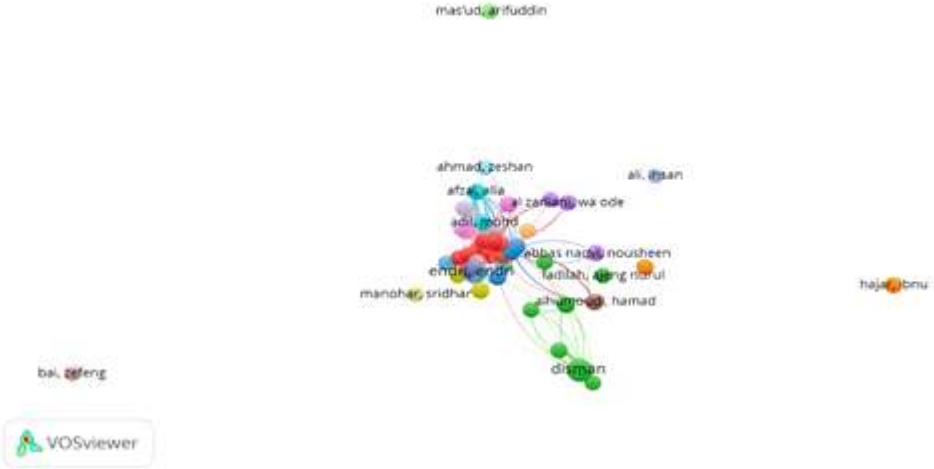



**Figure 5: Authors Bibliographic Coupling**
**Source:** *Compiled and computed data, Courtesy: VoSViewer*

There is a strong separation at the edges demonstrated in the network. Some researchers, including Bai, Z., Mas'ud, A. and Hajar, I. still exist in isolation and do not cite or get cited back from the main network. This split shows that, while one central group is leading the academic discussion, many authors prefer to work individually. These authors might focus on niche issues or use nontraditional methodologies.

**Country Influence and Collaborative Networks**

The evidences from bibliometric analysis highlights a clear geographic clustering of academic output and impact on citation in the domain of financial literacy and investment decisions. The country with the most articles is Indonesia (25), followed by India (21) and Pakistan (13) as the leading research hubs in this topic. The countries India, Indonesia and Pakistan witnessed a sharp rise (Figure 6) in producing published articles in the domain, emerging as the top three contributors from 2022 onwards. It indicates the global interest to conduct research into financial literacy and investment decision within rapidly growing Asian markets.

However, in terms of citation impact (Figure7), India is the most influential country with 439 numbers of total citations (TC) followed by Pakistan and United Arab Emirates with a total of 270 and 216 citations respectively.

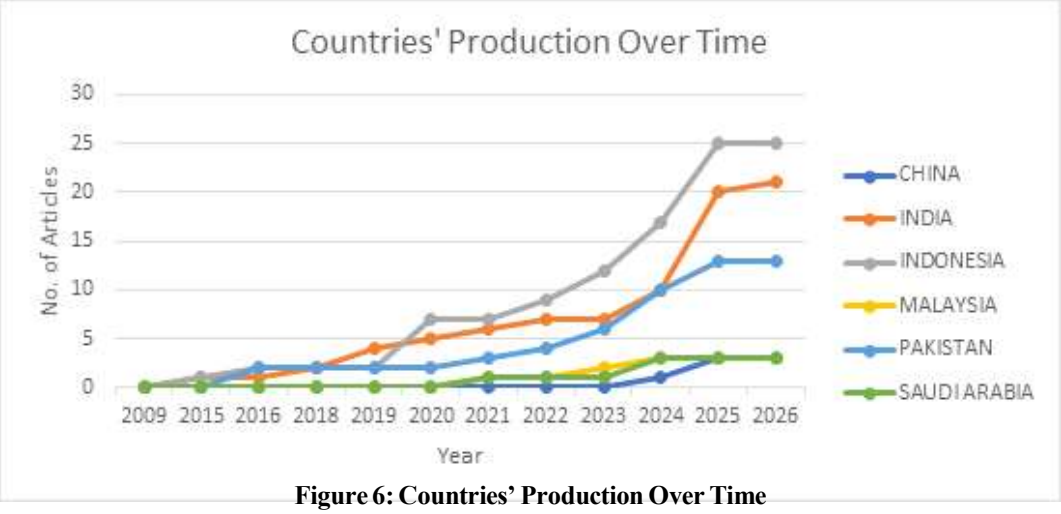



**Figure 6: Countries' Production Over Time**

***Source:*** *Compiled and computed data, Courtesy: R Studio*

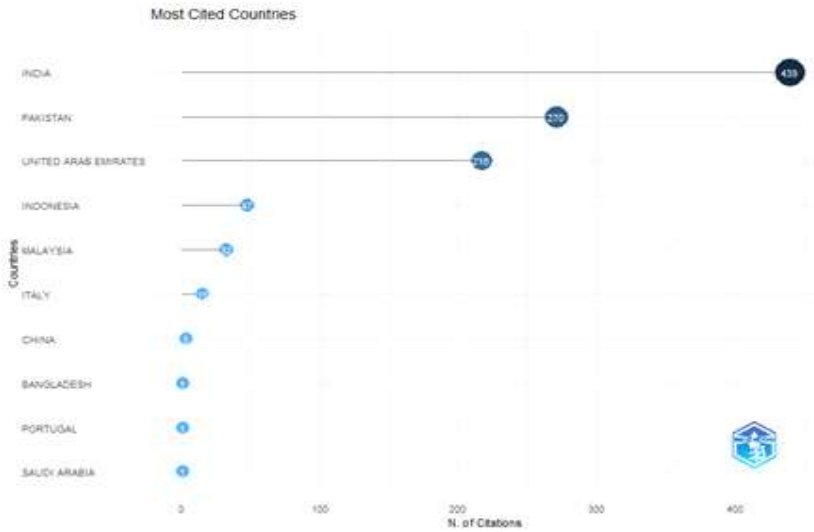



**Figure 7: Most Cited Countries**

***Source:*** *Compiled and computed data, Courtesy: R Studio*

The overlay visualization of countries' bibliographic coupling (Figure8), which is color-coded by publication year from 2022 (dark blue) to 2025 (yellow-green), further shows that India, Indonesia, and Pakistan have the largest nodes (highest link strength), with the densest inter-country citation and collaboration links concentrated among these three, while newer participants like China, the United Kingdom, and the United States appear on the network's periphery, indicating an emerging but still developing internationalization of the field.

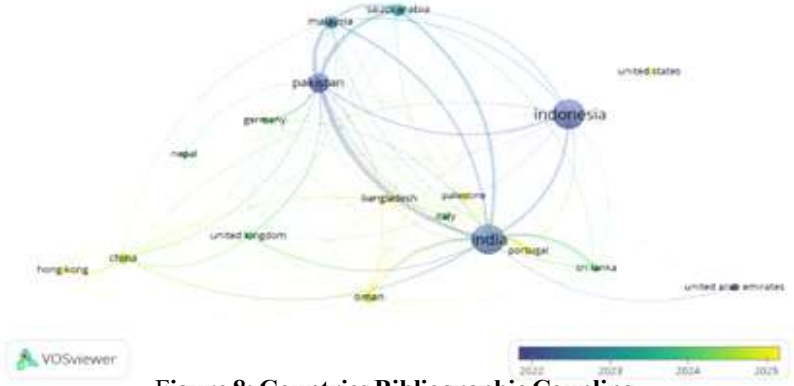



**Figure 8: Countries Bibliographic Coupling**
***Source:*** *Compiled and computed data, Courtesy: VoSViewer*

Interestingly, emerging South and Southeast Asian economies, particularly India, Indonesia, and Pakistan are major producers and research hubs in this domain, clearly indicating the concentration of the research landscape in a specific region.

**Evolution of keywords**

Analyzing the evolution of keywords (Figure 9), reveals a clear shift in the. From 2009 to 2014, most research used broad terms like "literacy" and "investments." After 2015, "financial literacy" and "investment decision" became the main topics. From 2020 to 2026, the literature expanded to include more complex psychological ideas. In this period, terms such as "behavioral finance" and "financial behavior" became common, and "financial literacy" appeared much more often, reaching 36 mentions by 2026.

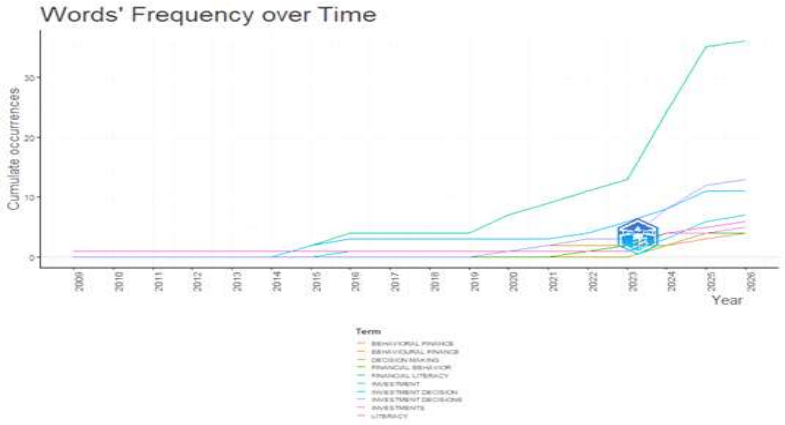



**Figure 9: Evolution of keywords**
***Source:*** *Compiled and computed data, Courtesy: R Studio*

The keyword co-occurrence network (Figure 10) analysis revealed a wide range of themes, showing how keywords were clubbed into sixteen separate clusters. The network contains 173 keywords linked by 1,382 co-occurrences, giving a detailed view of the field. This clustering highlights steady progress in research at the intersection of financial literacy and investment decisions, moving from basic models to more advanced topics like behavioral finance, technology, and ethics in the share market investment.

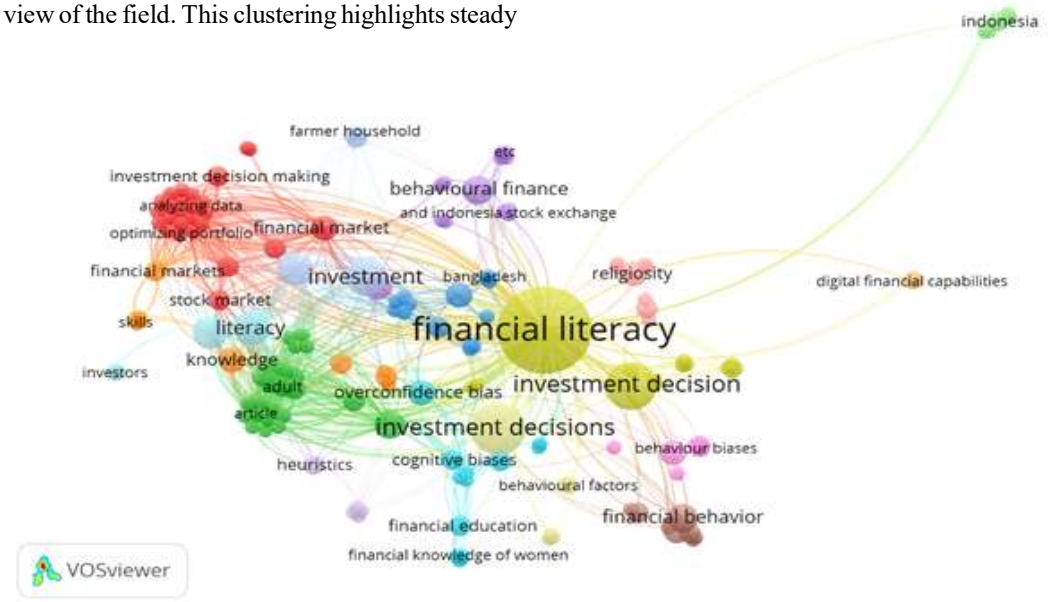



**Figure 10: Keywords Co-occurrence Network**
***Source:*** *Compiled and computed data, Courtesy: VosViewer*

The first cluster includes 26 keywords, with the total link strength (TLS) of 783. The major three keywords from the first cluster are "stock market (56TLS)", "Pakistan (48TLS)" and "financial market (47TLS)". Scholars in this cluster focused on mapping regional market dynamics and contextual factors driving investments in technologically augmented emerging economies. Important need factors were identified by Abbas (2025) including such as "productive financial decision-making" and intent to invest. Ullah et al. (2024) found similar results linking investor behavior, AI-driven tools such as ChatGPT, and portfolio optimization. The authors further found that financial literacy also plays a mediating role in cancelling out psychological anomalies and herd behaviour in regional share markets (Subedi, 2024).

The second cluster is comprised of 23 keywords and 759TLS. The top three keywords in this cluster are, "behavioural finance (59TLS)", "adult (46TLS)" and "female (46TLS)" respectively. The intent of those authors in this cluster was mostly to test the interaction between demographic variables, cognitive psychology, and behavioral finance theories. According to Koti (2019), factors such as "financial ability and proficiency" top the list of challenges in the types of challenges unique to working women. Adil (2022) and Mahmood et al. (2024) conveyed that the effect of different kind of behavioural biases like risk-aversion and disposition affect investment decisions based on gender. They also noted that targeted financial literacy markedly enhances the ability of adult female investors to establish independent financial stability while mitigating bias-related mistakes.

The third cluster has 14 keywords containing 140TLS. The leading three keywords for this cluster are "capital market (21TLS)," "attitude (19TLS)" and "empowerment (14TLS)." The scholars in this group sought to understand how attitudes toward finance drive persistent investor empowerment and long-term returns within extended capital markets. Ghosh (2025) found that "attitude toward making any investment decision" and "wealth maximization" were key motivations behind retail investors. Baihaqqy (2020) lent support to the findings, stating that an investor's educational qualification formed the basis for understanding financial systems. The authors further emphasized that market empowerment is the optimal data-driven practice of overcoming information asymmetry, as well as an expectation for capital market participants to adopt a pro-investment attitude and achieve sustainable development.

The fourth cluster included 14 keywords with 315TLS. Top three important keywords in this cluster are "financial literacy (221TLS)", "investment decision (44TLS)" and "asset growth (5TLS)". The goal here is to study the fundamental correlation between literacy levels and sustained asset growth over time. Usriyono (2023) pointed out that the factors such as "millennial generation's individual investment decisions" and "financial behavior" are important determinants of asset accumulation. This was also supported by studies conducted by Jariwala (2015) and Divakara (2026), where it was concluded that financial literacy serves as a major moderating variable. The authors also stressed the importance of investor experience in financial planning to ensure sustainable wealth creation in different population segments, including lower-middle-income and women entrepreneurs.

The fifth cluster has 13 keywords with 95TLS. The top 3 much appeared keywords from this cluster are "investment decision-making (26TLS)", "behavioural finance (18TLS)" and "Indonesia stock exchange (5TLS)". The authors in this cluster shared their goal of examining local structural environments, being the Indonesian stock market given a behavioral perspective using the theory of planned behavior and fintech adoption. Bahari (2025) discovered that factors like "the influence of emotional and cognitive biases" played a role in localized investment decisions. The findings have been supported by the work of Raut (2020), Ahmed et al. (2021) and Usriyono (2023), who examined the role of fundamental financial risk tolerance as a driver of financial decisions.They also found that financial information and proficiencies played a mediating role in lowering emotional biases on the exchange.

The sixth cluster consists of 13 keywords with 116TLS. The most salient three keywords of this cluster are "overconfidence bias (27TLS)", "financial education (13TLS)" and "mediation analysis (13TLS)". Scholars in this cluster aimed to see how structured financial education mitigates serious cognitive deficits through mediation analysis. Agarwal (2025) described 'susceptibility to behavioural biases' and 'framing effects' as impediments to rational trading. Divakara (2026) also supported the findings, establishing the moderating role of continuous education in regulating retail investors' overconfidence.The authors also acknowledged that financial literacy serves as an essential intervention mechanism to be able to channel inappropriate overconfidence into rational risk-taking.

There are 10 keywords with 129TLS in the seventh cluster. The top three keywords in this cluster are "knowledge (36TLS)", "financial markets (34TLS)" and "individual investors (23TLS)". One of the shared goals among authors of studies within this cluster was to chart out how individual investors learn from and use knowledge to successfully navigate complex, and often volatile, financial markets. As Abbas (2025) set forth factors like "sound financial knowledge" as the bedrock for productive market participation. Divakara (2026) agreed with the results in that individual investors do heavily depend on their own stock market knowledge to get the desired outcome of future returns. The authors have further noted that well drafted

financial knowledge frameworks are necessary to shield individual investors against systemic market fluctuations.

Cluster eight includes 9 keywords with 60TLS. The most relevant three keywords in this cluster are "financial behavior (16TLS)", "financial knowledge (11TLS)" and "financial attitude (7TLS)". Authors in this cluster were united in their aim to delineate the interaction between knowledge, attitude, and final behaviour. Financial behavior and attitude are the positive significant predictors of successful investment decisions (Ghosh, 2025). Usriyono (2023) complemented these findings by revealing that such intrinsic behavioral traits are the foundation elements of millennials' actual investment decisions.They went on to find that investment opportunities moderated the effect of investors financial attitude and subsequent financial behavior.

There are 8 keyworsds with 52TLS in the ninth cluster. The highlighted keywords from this cluster are "overconfidence (14TLS)", "behaviour biases (6TLS)" and "behaviour finance (6TLS)". The general goal is to control and study parasitic irrational tendencies (overconfidence particularly) in trading contexts. Among biases that hindered objective analysis were factors of "overconfidence" and "disposition" (Adil, 2022). Darwish (2025) and Usriyono (2023) affirmed that individual investment decisions are negatively affected by overconfidence and trait anger. The authors also stressed that an investor's unreasonable certainty in their predicative skills needs to be taken into account directly by behavior finance frameworks.

The tenth cluster is constituted of 8 Keywords with a total of 36TLS. The most significant keywords in this cluster are "religiosity (10TLS)", "behavior finance (7TLS)" and "sociodemography (4 TLS)". Researchers in this cluster sought to delve into the underlying sociodemographic traits and religious beliefs that influence financial behavior in millennials. For some segments of investors, Abbas (2025) found that factors such as "religiosity" and the desirability for "Islamic Banks" were decisive criteria. Ali (2025) and Suherman et al. confirm the findings (2025), that an integration of Islamic financial practices with preference for Sharia-compliant investment is a cohesion. The authors also noted that sociodemographic factors are a primary driver of whether or not an investor considers an asset class acceptable, either on ethical or religious grounds.

There are 7 keywords in the eleventh cluster with a total of 28TLS. The representative keywords in this cluster are "Indonesia (7TLS)", "crowdfunding backers (4TLS)" and "crowdfunding investment decision (4TLS)". The overall aim is to analyze non-traditional and digital investment pathways, including alternative corporate finance and crowdfunding. For example, there are factors such as "shaping investment decisions" via critical evaluation of non-donation crowdfunding platforms (Arifah & Dalimunthe, 2020). These findings were consistent with the study conducted by Hendrawaty et al. (2020), who found that digital financial literacy and CEO financial literacy are major factors for the best project evaluation. The authors further stressed the importance of technological tailoring in ensuring that crowdfunding backers can evaluate risk accurately within peer-to-peer funding configurations.

The cluster twelve has 7 keywords with 235TLS. The most notable keywords in this cluster are "investment (104TLS)", "decision making (96TLS)" and "farmer household (7TLS)" All authors in this cluster shared an interest for mapping generalized behavioral decision-making processes across different non-traditional economic sectors including agriculture. Murini et al. (2025) pointed out factors including "the role of financial literacy in investment decisions" especially in rural development contexts. These findings were affirmed by systematic reviews which show that financial literacy greatly increases the effectiveness with which agrarian organisations make decisions. The authors further recognized the need for extending the

scholarship on financial literacy into rural spaces as an important avenue of future inquiry.

The thirteenth cluster comprises of 7 keywords with 116TLS. The three most salient keywords from this cluster are "investment decisions (92TLS)", "behavioural factors (4TLS)" and "psychological factors (4TLS)". Scholars in this cluster aimed to untie the multi-factorial socioeconomic and gendered determinants of investment decisions during periods of market volatility. Prasad et al. (2021) identified factors like "market efficiency" and the extent to which emotion causes disruption logical allocations of funds during investment. The results were in line with broader literature documenting the combined influence of behavioral, socioeconomic, gender factors on equity investment decisions. They also acknowledged that financial literacy can be an important moderating variable in equalizing investment strategies between men and women.

The fourteenth cluster includes 5 keywords and corresponds to 47TLS. Keywords dominating in this cluster are "heuristics (7TLS)", "framing effects (6TLS)" and "cognitive illusions (6TLS)". The literature emphasizes on breaking down the particular thought processes and traps that circumvent rational modeling of investments. According to Agarwal (2025), the main mental mechanisms that result in sub-optimal retail investment are "heuristics", "framing effects" and "cognitive illusions". Heuristic behavior factors play a major role in restricting full-scale decision-making, as identified by Iram (2023).The authors further stated that awareness of these cognitive illusions is the first necessary step in implementing de-biasing strategies at the level of financial planning architectures.

Cluster fifteen consists of 5 keywords with 57TLS. The top high-frequency keywords from this cluster are "literacy (97TLS)", "investments (82TLS)" and "financial information (4TLS)". Scholars in this cluster are set out to show how knowledge about accessing financial information serves as a bridge to transforming basic literacy into active investing. Bahari (2025) holistically identifies, "the role of financial information as a mediator" in understanding heterogeneous investment decisions. This was reinforced by Abbas (2025) whose work discovered that with adequate baseline literacy, investors can efficiently handle complicated market information. The authors additionally recognized that continued 24/7 access to clear financial information remains necessary for maintaining healthy levels of investment activity.

The sixteenth cluster is made up of 4 keywords with 16TLS. The most frequently occuring keywords in this cluster are "digital financial capabilities (4TLS)", "ethical financial intermediaries (4TLS)" and "micro-enterprises (4TLS)". The common goal of this cluster is to test the integration of new digital capabilities and ethical financing for micro-level business units and sustainable investing. In addition, Ali (2025) highlighted factors such as "digital financial literacy" that are necessary to navigate emerging financial technologies. The results are similar to those from Iram (2023) and Aristei et al. (2024). The authors highlighted that building up digital financial capabilities allows micro-enterprises to tap sustainable ethical financial intermediaries as sources of profitability and green growth.

**Evolution of topics and themes**

The trend topics analysis (Figure11) demonstrates the evolutionary lineage between research papers developed in the domain of financial literacy and investment decisions. This evolutionary research trajectory can be divided into three distinct phases as mentioned below.

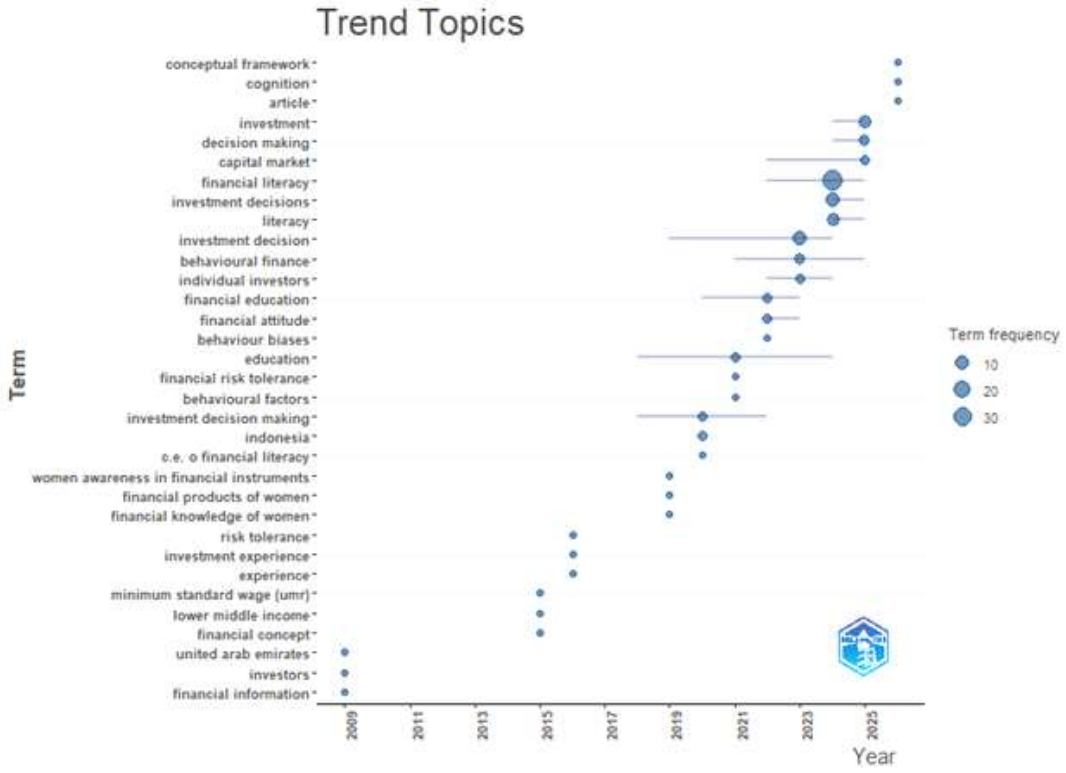



**Figure 11: Evolution of topics**

***Source:*** *Compiled and computed data, Courtesy: R Studio*

**(1) Early Phase (Pre 2022): Conceptual Foundations**

Scholarly interest in the field first took root during this period. Researchers in this phase focused on baseline concepts, such as "financial information" (2009), "risk tolerance" (2016), and demographic-specific subjects, like the "financial knowledge of women" (2019). This phase further paved the way for research on financial literacy by integrating with other aspects such as personal experiences, early market engagement, and different demographic segments.

**(2) Growth Phase (2022 - 2024): Thematic Consolidation**

The volume of literature expanded significantly in this phase, with notable topics being "financial literacy" (peaking in 2024) and "investment decisions". From 2022 to 2023 studies addressing psychological dimensions with keywords such as "behavioral finance," "financial attitude," and "behavioral biases." Instead of studying isolated concepts, scholars began observing the connections between general financial knowledge and individual mindsets and their combined effect on investment management and market behaviour.

**(3) Maturity Phase (Post 2024): Cognitive Process-oriented Approach**

The most recent publications indicate a distinctive thematic drift with terms like "decision making," "capital market" (2025), "cognition" (2026), and "conceptual framework" (2026). Various internal mechanism, functions, and processes, such as the role of financial literacy in

reducing behavioral biases and changing the internal heuristics for making decisions under the conditions of uncertainty are eventually getting more focus in research.

Thematic evolution (Figure12) further substantiates this progression. The trajectory of growth traces a clear path of evolution in the domain. In the early stage of research (2009–2022), financial literacy and investment decisions were often studied in deep isolation. From 2023–2024 these streams began to merge, showing that financial literacy was being understood as a wider psychological and behavioural frameworks. Recently (2025–2026), the studies branched into separate cognitive processes and applications. During this period, research identified financial literacy reduces irrational investment decision-making.

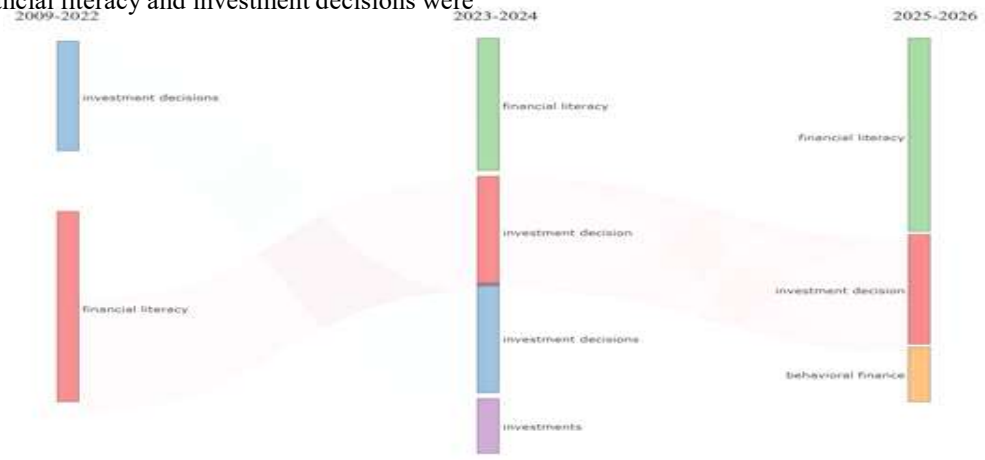



**Figure 12: Evolution of topics**

***Source:*** *Compiled and computed data, Courtesy: R Studio*

**Thematic mapping for research roadmap**

The thematic Map (Figure13) provides a comprehensive mapping of research themes related to financial literacy and investment decisions, categorised into four quadrants—motor, basic, niche, and emerging/declining—based on their centrality (relevance) and density (development).

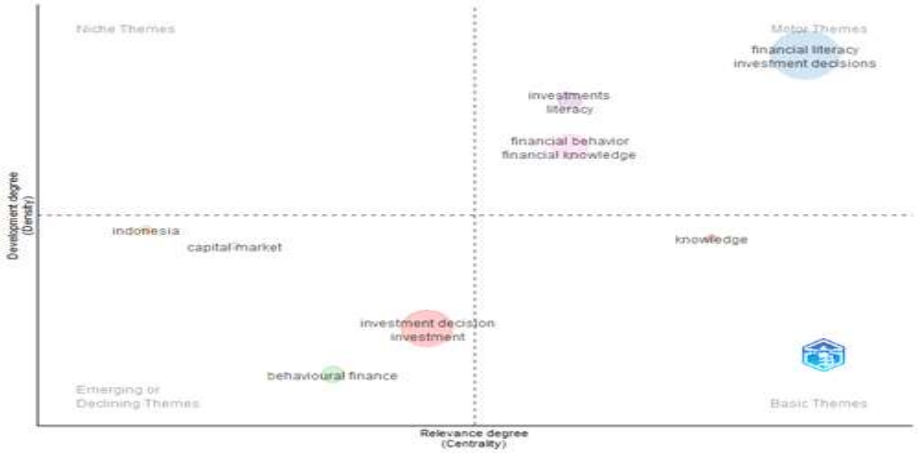



**Figure 13: Thematic map**

***Source:*** *Compiled and computed data, Courtesy: R Studio*

The **motor themes** (high centrality and high density) - comprised of "financial literacy," "financial behavior," and "investments" – reflects the established foundational studies in this domain. Researches in this quadrant focuses on well-developed, essential solutions, illustrating how core concepts like financial literacy directly influence market participation and logical portfolio investment decisions (Usriyono & Wahyudi, 2023). These themes highlight the basic components for understanding the behaviour of individual investors.

The **basic themes** (high centrality, lower density), mainly denoted as "knowledge," serve as crucial link in bridging distinct research areas in the domain. On the other hand, emerging themes (low density, low centrality) such as "behavioural finance," "capital market," and "investment decision" indicate areas that are newly emerging or undergoing transitions. Recent studies reveal an increasing shift towards understanding emerging behavioural aspects, such as emotional biases and cognitive influences, within specific share markets (Mahmood et al., 2024).

Future research within this trajectory may explore how digital financial literacy and advanced technological platforms moderate cognitive biases. Furthermore, subsequent scholarly efforts could investigate the development of robust conceptual frameworks that map the intersection of neuro-finance and individual risk tolerance, facilitating a more nuanced understanding of post-modern investment decision-making (Ghosh, 2025; Venkatesan, 2025).

## Horizon of Future Investigation

Future research on financial literacy and investment decision may offer a more in-depth investigation of financial awareness and investment behaviour considering complex gender-centric scenarios, different demographic concepts, distinct risk tolerance, cognitive influences, technological advancement and creation of regulatory framework focusing on sustainable wealth creation. All these future research agendas may address limitations in available studies. Based on these follow-up studies may assess how targeted financial education and cognitive de-biasing could potentially impact wealth maximisation, taking into consideration emotion regulation impairment, portfolio optimisation, and rational market participant behavior with a more extensive array of data sources and neuro-financial methodologies designed to counter self-reporting bias and develop greater depth to the understanding of success drivers. Future studies could potentially investigate how modern retail investing is shaped by emerging platforms or technologies—like AI, digital financial capabilities and alternative crowdfunding processes. Additionally, research may analyse and compare investment behaviours and efficiency across regulatory frameworks, identifying best practices and the policy trade-offs required for sustainable asset growth. Table 2 provides a summary of potential research themes, questions, and keywords for future research.

**Table 2: Potential avenues for future research**

| Future research themes | Potential research questions | Potential Keywords |
|---|---|---|
| Gender dynamics, financial literacy and Investment behaviour | (1) How financial literacy act as a moderating factor to balance investment approaches and inherent risk tolerance among retail investors in diffrent gender perspective?<br>(2) How do behavioral biases that are specific to gender, like extreme risk aversion and the disposition effect, | "Financial Literacy" "Risk Tolerance" "Gender Perspective" "Women Investors" "Portfolio Optimization" |

| | | |
|---|---|---|
| | influence the strategies for portfolio optimization & wealth maximization?<br>(3) How could financial institutions make their literacy programs more inclusiv e, in order to enable women investors to equip themselves for building financial stability independently in growing economies?<br>(4) What are the specific structural and cognitive barriers that prevent women investors from moving from conventionally safety a ssets (e.g., gold, bank deposit) to the more volatile capital markets?<br>(5) What are the challenges for working women to acquire financial literacy and investing in long -term assets? | "Wealth Maximization"<br>"Capital Market"<br>"Growing Economy"<br>"Working Women" |
| Cognitive process in investment decision-making | (1) What types of cognitive illusions and heuristics (e.g., framing effects, overconfidence) persist among investors who are highly financially literate?<br>(2) How neuro-financial mechanisms affects the relationship between financial risk tolerance and individual investment decisions under extreme market conditions?<br>(3) What kinds of targeted financial pla nning architectures and decision -support systems can be designed to intercept and correct irrational framing effects in real-time retail trading?<br>(4) What are the impacts of continuous education and experience in mitigating instinctive cognitive biases?<br>(5) Which conceptual frameworks best combine financial literacy, cognition, and risk tolerance into one model to predict trading behavior? | "Cognitive Illusions"<br>"Heuristics"<br>"Neuro-finance"<br>"Financial Risk Tolerance"<br>"Individual Investment Decisions"<br>"Framing Effects"<br>"Cognitive Biases"<br>"Conceptual Framework"<br>"Trading Behaviour" |
| Digital financial literacy and fintech | (1) How does digital financial literacy contribute to the precision of risk evaluation of crowdfunding backers for non-traditional economic groups (e.g. agricultural firms)?<br>(2) What is the impact of technological exposure with advanced technological platforms and the adoption of AI-driven tools in retail investors' decision making?<br>(3) How does the combin ation of digital financial instrumentation with ethical financial intermediaries impact microenterprises sustainable growth and capital allocation? | "Digital Financial Literacy"<br>"Artificial Intelligence"<br>"Ethical Financial Intermediaries"<br>"Microenterprises"<br>"Fintech Adoption"<br>"Emerging Economies" |

***Source:*** *Authors' creation; Courtesy: Praharaj and Chhatoi (2025)*

## Major Findings and Discussion

A bibliometric analysis focusing on the intersection of the keywords "financial literacy" and "investment decisions" was conducted with articles exported from the Scopus database (upto March 2026). The PRISMA framework was implemented to maintain clarity and relevance, resulting in 48 peer-reviewed articles being included in the final sample.

The analysis of publications growth identified two distinct phases. The initial phase (2009 -2023) was characterized by irregular and minimal publications. From 2024 onwards, in the second phase, research interest in the domain ramped up, with the highest number of articles published in 2024 and 2025. The substantial contributions in the domain are coming from emerging economies in South and Southeast Asian countries such as India, Indonesia, and Pakistan.

In the research field, sixteen major themes were identified, with evidence pointing to a shift from interest in elementary conceptual systems toward more advanced mental factors. Main themes included "stock market dynamics," "behavioural finance," "cognitive psychology", "digital financial capabilities." In the initial stage of research on financial knowledge, before 2022, the emphasis was on basic ideas in finance such as "information", "risk tolerance", or knowledges targeting one group of people and not others. When it came to the thematic consolidation stage (2022-24), attention also turned towards psychological aspects such as "behavioural finance," "behavioural biases," and "financial attitude." By the recent cognitive process-oriented phase (post 2024), a large number of studies conducted highlighting internal processes, including "heuristics," "framing effect," and how financial literacy constrains irrational decisions. Concerns for ethical financial practices and the use of AI-enabled tools are emerging as highlighted theme.

The major themes in the domain are importance of customized knowledge for the effective navigation of volatile share markets, and sustainable wealth creation with safe adoption of fintech innovations across various demographic groups in the best possible manner. Overall, the research trends highlight a noteworthy move of financial literacy from an isolated educational measure to an interconnected cognitive instrument that empowers individual investors, financial decision-making capabilities by reducing behavioural biases.

Addressing the research questions, the following observations were made from bibliometric analysis;

- Trend and growth wise publications in the field have undergone a significant transformation, starting from a sporadic phase (2009 – 2023) to a phase of significant increase in publication (post-2024). Initially, there were a smaller number of irregular publications of research in the area were made. In recent years, especially in 2024-2025, the trend shifted marking highest number of published research articles.
- The advancement of research is primarily driven by South and Southeast Asian countries, mostly emerging economies, such as India, Indonesia, and Pakistan. While Indonesia is found to be the most productive country (25 published articles), India is emerging as the most impactful country based on citations. Analyzing collaboration and citation patterns it has been figured out that these emerging economies are not only the key producers of literature but also act as core collaborative hubs. According to the citation pattern analysis, though recent years marked highest publication number, the citation velocity (Mean citation per year) peaked in years like 2022, 2009 and 2020 respectively. A significant gap in

comparative cross-cultural research is identified as the participation of western economies in collaborative network is limited.

- Examining the authors level, it is very much evident that there is a disconnect between productivity and impact. Authors like *D. Disman, N. Nugraha,* and *E. Endri* are then most productive, and authors like *H.A. HassanAl-Tamimi, A. Anood Bin Kalli*, *and R.K. Raut* are found to have highest impact based on citation. Significantly, 97.7% of authors (128 out of 131) have contributed only a single publication to this domain, highlighting the nascent and loosely collaborated research community. From the author co-citation analysis, it has been identified that foundational contributors such as *O.S. Mitchell, I. Ajzen,* and *M. Statman* are the most prominent scholars anchoring the theoretical basis of the research in the domain.

- Three distinct research phases have been identified considering the thematic evolution. Researchers were focused on foundational concepts and specific demographic variables in the initial phase (pre-022). Similarly, thematic consolidation combining psychological aspects with core financial literacy constructs was researched in the growth phase (2022-2024). The interest has shifted towards a cognitive process-oriented approach in the recent phase (post-2024). Hence, in the future, the studies may investigate gender-specific dynamics in investment behaviour, the influence of neuro-financial constructs in critical market conditions, the impact of emerging technologies such as fintech and AI on investors, and the creation and implementation of regulatory frameworks to establish discipline in the investment and sustainable wealth creation.

## Concluding remarks

This bibliometric research investigated the growth and trends over time of studies integrating financial literacy and investment decisions. The domain evolved from a sparse and irregular phase of article production (2009-2023) to a rapidly growing publication phase in recent years, with most of the contributions from emerging economies like India, Indonesia, and Pakistan. Similarly, the research in the field has emerged from exploring foundational concepts to investigating complex phenomena such as cognitive processes, behavioural biases, and later to digital financial capabilities. In today's world, financial literacy is the most important skill for investors to make sound decisions, avoid common biases, adopt suitable emerging technologies, and navigate critical market conditions. The study offers a clear picture of the evolution and associations at various levels in the domain and provides future pathways for researchers and professionals to consider.

**Practical Implementations:** Policymakers and financial institutions are expected to draw practical idea from this study for creating focused, behaviour-based financial literacy programs. By conducting in-depth research on cognitive biases and emerging market trends and technologies, digital training and decision-making tools can also be developed for retail investors. Regulatory frameworks can be put in place to encourage ethical market activity and sustainable wealth management.

**Limitations:** The clear limitation of this study is that it uses data from the Scopus database only. There is a chance that relevant literature available in other databases, such as Web of Science or Google might be excluded. Additionally, restricting articles to English might overlook impactful localized research works. Hence, future research work could be conducted by exporting data from multiple databases and adopting

qualitative meta-analyses to validate bibliometric trends.

## References


Abbas Naqvi, N., Siddiqui, D. A., & Mir, M. M. (2025). Financial Literacy and Investment decisions of Investors of Islamic Banks in Pakistan: The Role of Intention to invest and Religiosity. *Interdisciplinary Journal of Management Studies, 18*(2), 225–239. https://doi.org/10.22059/IJMS.2025.366223.676233

Adil, M., Singh, Y., & Ansari, M. S. (2022). How financial literacy moderate the association between behaviour biases and investment decision? *Asian Journal of Accounting Research, 7*(1), 17–30. https://doi.org/10.1108/AJAR-09-2020-0086

Agarwal, A., Rao, N. V. M., & Nogueira, M. C. (2025). Financially Savvy or Swayed by Biases? The Impact of Financial Literacy on Investment Decisions: A Study on Indian Retail Investors. *Journal of Risk and Financial Management, 18*(6), 322. https://doi.org/10.3390/jrfm18060322

Aggarwal, M. (2019). Financial literacy and investment decisions. *Finance India, 33*(4), 981–1000.

Ahmed, Z., Noreen, U., Ramakrishnan, S. A. L., & Binti Abdullah, D. F. (2021). What explains the investment decision-making behaviour? The role of financial literacy and financial risk tolerance. *Afro-Asian Journal of Finance and Accounting, 11*(1), 1–19. https://doi.org/10.1504/AAJFA.2021.111814

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology, 32*(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.xAli, I., Liu, J., Shah, S. K., & Khattak, M. S. (2025). Islamic Practices and Investment Decision: The Role of Money Management Skills and Digital Financial Literacy. *SAGE Open, 15*(4). https://doi.org/10.1177/21582440251379142

Arifah, J. N., & Dalimunthe, Z. (2020). The impact of financial literacy on the investment decision of non-donation-based crowdfunding in Indonesia. *International Journal of Business and Society, 21*(3), 1045–1057.

Aristei, D., Gallo, M., & Vannoni, V. (2024). Preferences for ethical intermediaries and sustainable investment decisions in micro-firms: The role of financial literacy and digital financial capability. *Research in International Business and Finance, 71*, 102483. https://doi.org/10.1016/j.ribaf.2024.102483

Atkinson, A., & Messy, F.-A. (2012). "Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study." *OECD Working Papers on Finance, Insurance and Private Pensions*.

Awais, M., Fahad Laber, M., Rasheed, N., & Khursheed, A. (2016). Impact of financial literacy and investment experience on risk tolerance and investment decisions: Empirical evidence from pakistan. *International Journal of Economics and Financial Issues, 6*(1), 73–79.

Bahari, S., Al Zarliani, W. O., Suriadi, & Hasddin. (2025). Examining the Role of Financial Literacy, Cognitive Bias, and Emotional Bias in Shaping Investment Decisions: A Study on the Indonesian Stock Exchange. *Indian Journal of Finance, 19*(11), 65–81. https://doi.org/10.17010/ijf/2025/v19i11/175842

Baihaqqy, M. R. I., Disman, Nugraha, & Sari, M. (2020). The correlation between education level and understanding of financial literacy and its effect on investment decisions in capital markets. *Journal of Education and e-Learning Research, 7*(3), 306–313. https://doi.org/10.20448/JOURNAL.509.2020.73.306.313

Baihaqqy, Mochammad Rizaldy Insan, Disman Disman, Nugraha Nugraha, Maya Sari, and Sugiyanto Ikhsan. 2020. "The Effect of Financial

Literacy on the Investment Decision." *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences* 3 (4): 3073. https://doi.org/10.33258/birci.v3i4.1333.

Darwish, F. S. M. (2025). Financial literacy and investment decision: an empirical study from the Palestine Stock Exchange. *Frontiers in Behavioral Economics, 4*, 1444022. https://doi.org/10.3389/frbhe.2025.1444022

Divakara Reddy, N., Santosh, B. R., Ananda, S., & Desai, G. (2026). Behavioral Biases and Investment Decision-Making in the Indian Stock Market: The Moderating Role of Financial Literacy and Investor Experience. *F1000Research, 14*, 1283. https://doi.org/10.12688/f1000research.171289.2

Hassan Al-Tamimi, H. A., & Anood Bin Kalli, A. (2009). Financial literacy and investment decisions of UAE investors. *Journal of Risk Finance, 10*(5), 500–516. https://doi.org/10.1108/15265940911001402

Hoque, M. E., Low, S.-W., & Haque, M. M. (2026). "The moderating role of financial literacy on the nexus of financial information sources and risky investment behavior: Is it contingent on financial interest and risk tolerance level?" *Financial Innovation*, 12(50). https://doi.org/10.1186/s40854-025-00839-z

Iram, T., Bilal, A. R., & Ahmad, Z. (2023). Investigating The Mediating Role of Financial Literacy on The Relationship Between Women Entrepreneurs' Behavioral Biases and Investment Decision Making. *Gadjah Mada International Journal of Business, 25*(1), 93–118. https://doi.org/10.22146/gamaijb.65457

Indrawati, N. K., Jazuli, A. M., Muljaningsih, S., Nurmasari, N. D., Jiwa Juwita, H. A., & Fahlevi, M. (2025). "The mediator role of risk tolerance and risk perception in the relationship between financial literacy and financing decision." *Cogent Business & Management*, 12(1), 2468877. https://doi.org/10.1080/23311975.2025.2468877

Jariwala, H. V. (2015). Analysis of Financial Literacy Level of Retail Individual Investors of Gujarat State and Its Effect on Investment Decision. *Journal of Business and Finance Librarianship, 20*, 133–158. https://doi.org/10.1080/08963568.2015.977727

Koti, K. (2019). Financial literacy and its impact on the investment decisions of working women. *Humanities and Social Sciences Reviews, 7*(6), 554–561. https://doi.org/10.18510/hssr.2019.7686

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Mahmood, F., Arshad, R., Khan, S., Afzal, A., & Bashir, M. (2024). Impact of behavioral biases on investment decisions and the moderation effect of financial literacy; an evidence of Pakistan. *Acta Psychologica, 247*, 104303. https://doi.org/10.1016/j.actpsy.2024.104303

Makkulau, A. R., Hajar, I., Sabrin, & Husin. (2024). Influence of Financial Literacy, Investment Promotion, and Socioeconomic Status on Stock Investment Decisions Through Risk Perception. *Revista de Gestao Social e Ambiental, 18*(6), e06269. https://doi.org/10.24857/rgsa.v18n6-138

Moher, D., Liberati, A., Tetzlaff, J. and Altman, D.G. (2009), "Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement", BMJ, Vol. 339, p. b2535, doi: 10.1136/bmj. b2535.

Murini, Mas'ud, A., Sujono, & Sukotjo, E. (2025). The Role of Financial Literacy on Investment Decisions in Supporting Agricultural Development: What is the Future Agenda? *Journal of Global Innovations in Agricultural Sciences, 13*(1), 309–318. https://doi.org/10.22194/JGIAS/25.1537

Parsai, Pooja, and Arpita Kelkar Chandok. (2025). "The Role of Financial Literacy in Investment Decision-Making: A Review." *International Journal of Innovations in Science Engineering*

*and Management.*, March, 296. https://doi.org/10.69968/ijisem.2025v4i1296-301.

Patra, A. K., Praharaj, A., Sudarshan, D., & Chhatoi, B. P. (2024). AI and business management: Tracking future research agenda through bibliometric network analysis. Heliyon, 10(1), e23902. https://doi.org/10.1016/j.heliyon.2023.e23902

Praharaj, A., & Chhatoi, B. P. (2025). Enterprise resource planning (ERP) in business: a contextual snapshot. Global Knowledge, Memory and Communication. https://doi.org/10.1108/GKMC-07-2024-0453

Praharaj, A., Patra, A. K., & Chhatoi, B. P. (2025a). Chasing sustainable energy goals: A close look with bibliometric and content analysis of SDG-7. *International Journal of Technology Management & Sustainable Development, 24*(2), 151–181. https://doi.org/10.1386/tmsd_00105_1

Praharaj, A., Patra, A. K., & Chhatoi, B. P. (2025b). Driving the transition to SDG-7: a comprehensive review. Journal of Science and Technology Policy Management. https://doi.org/10.1108/JSTPM-08-2024-0321

Prakash, A. R., Adhikari, B., & Poudyal, A. (2026). Financial literacy and investment decision-making among state government employees in Sikkim: An empirical assessment. *Discover Education*. https://doi.org/10.1007/s44217-026-01196-4

Prasad, S., Kiran, R., & Sharma, R. K. (2021). Behavioural, Socio-economic Factors, Financial Literacy and Investment Decisions: Are Men More Rational and Women More Emotional? *Indian Economic Journal, 69*(1), 66–87. https://doi.org/10.1177/0019466220987023

Ratnawati, Sudarmiatin, Soetjipto, B. E., & Restuningdiah, N. (2022). The role of financial behavior as a mediator of the influence of financial literacy and financial attitudes on msmes investment decisions in indonesia. *Journal of Social Economics Research, 9*(4), 193–203. https://doi.org/10.18488/35.v9i4.3231

Raut, R. K. (2020). Past behaviour, financial literacy and investment decision-making process of individual investors. *International Journal of Emerging Markets, 15*(6), 1243–1263. https://doi.org/10.1108/IJOEM-07-2018-0379

Samal, J., Praharaj, A., Patra, A. K., & Chhatoi, B. P. (2026). Artificial intelligence as a catalyst for the circular economy: trends and future direction. In Handbook on Artificial Intelligence and the Circular Economy (pp. 12–27). Edward Elgar Publishing. https://doi.org/10.4337/9781035343386.00009

Subedi, D. P., & Bhandari, D. R. (2024). Impact of Psychological Factors on Investment Decisions in Nepalese Share Market: A Mediating Role of Financial Literacy. *Investment Management and Financial Innovations, 21*(3), 317–329. https://doi.org/10.21511/imfi.21(3).2024.26

Suherman, U., Nugraha, Disman, & Mayasari. (2025). Moderation of Gender, Age, Education, and Income on the Influence of Religiosity of Student Investors in West Java Indonesia with Stock Investment Decisions Mediated by Financial Literacy. *Quality - Access to Success, 26*(205), 290–301. https://doi.org/10.47750/QAS/26.205.29.

Susanto, K. P., Mandagie, W. C., Endri, E., & Wiwaha, A. (2025). Financial literacy, technological progress, financial attitudes and investment decisions of Gen Z Indonesian investors. *Investment Management and Financial Innovations, 22*(1), 25–34. https://doi.org/10.21511/imfi.22(1).2025.03.

Ullah, R., Ismail, H. B., Islam Khan, M. T., & Zeb, A. (2024). Nexus between Chat GPT usage dimensions and investment decisions making in Pakistan: *Moderating role of financial literacy. Technology in Society, 76*, 102454. https://doi.org/10.1016/j.techsoc.2024.102454

Usriyono, E., & Wahyudi, S. (2023). The Investment Decision of Millennial Generation: An Analysis Using Financial Literacy and Financial Behavior. *Corporate Governance and*

*Organizational Behavior Review, 7*(2), 8–14. https://doi.org/10.22495/cgobrv7i2p1

Wang, D., & Zou, T. (2024). Financial literacy, Cognitive bias, And personal investment decisions: A new perspective in behavioral finance. *Environment and Social Psychology, 9*(11), 3050. https://doi.org/10.59429/esp.v9i11.3050

Wang, P., & Bai, Z. (2025). Decoding the crypto investor profile: how financial literacy, investment experience and age shape cryptocurrency investment decisions. *Humanities and Social Sciences Communications, 12*(1), 1785. https://doi.org/10.1057/s41599-025-06068-0

Wendy, W. (2024). The nexus between financial literacy, risk perception and investment decisions: Evidence from Indonesian investors. *Investment Management and Financial Innovations, 21*(3), 135–147. https://doi.org/10.21511/imfi.21(3).2024.12

Yamaguchi, M., Ogura, K., Himeno, Y., Shiiku, A., Nagahama, H., Nabeshima, H., Kuramoto, Y., Khan, M., & Kadoya, Y. (2025). The Association of Financial Knowledge, Attitude, and Behavior with Investment Loss Tolerance: Evidence from Japan. *Risks*. https://doi.org/10.3390/risks13100204.

Yanti, F., & Endri, E. (2024). Financial Behavior, Overconfidence, Risk Perception and Investment Decisions: The Mediating Role of Financial Literacy. *International Journal of Economics and Financial Issues, 14*(5), 289–298. https://doi.org/10.32479/ijefi.16811