



Integrating Behavioral Economics into Decision-Making Models: A Bibliometric Review

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ABSTRACT

This study aims to analyze the development of literature on the integration of behavioral economics into decision-making models through bibliometric analysis, with emphasis on collaboration patterns, thematic evolution, and emerging research frontiers. Data were retrieved from the Scopus database using search queries encompassing behavioral economics, behavioral finance, prospect theory, bounded rationality, and cognitive bias combined with decision-making and financial management terms. A total of 394 articles were analyzed using VOSviewer software, covering co-authorship networks, co-occurrence of keywords, and text-data mapping. The analysis reveals well-established academic collaboration networks spanning multiple countries, with behavioral finance, investment decisions, and prospect theory emerging as central research themes. Co-occurrence mapping further identifies bounded rationality and cognitive bias as foundational constructs driving the integration of behavioral economics into financial decision-making models. These findings guide researchers and practitioners toward high-impact collaboration clusters and underexplored thematic gaps, supporting the design of more behaviorally informed financial decision-making frameworks. This study contributes a systematic bibliometric mapping of an expanding interdisciplinary field, providing the first comprehensive network view of how behavioral economics intersects with decision-making research across diverse geographic and institutional contexts.

Keywords: Behavioral Economics, Behavioral Finance, Decision Making, Financial Management, Bibliometric Analysis.

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INTRODUCTION

Classical economic theory posits that individuals make decisions by maximizing utility under full rationality and perfect information. Yet the empirical record consistently tells a different story. A rapidly expanding body of research demonstrates that financial judgments are systematically shaped by cognitive biases, emotional responses, and bounded information-processing capacity, producing outcomes that diverge substantially from those predicted by rational-agent models (Azmi et al., 2026; Mawadah et al., 2026). The recognition that psychological factors are integral to economic behavior has repositioned behavioral economics from a theoretical novelty into a central pillar of financial management research.

Within financial management, the integration of behavioral economics has illuminated phenomena that conventional frameworks struggle to explain, including overconfidence in investment selection, herding behavior in capital markets, and asymmetric loss aversion in portfolio rebalancing (Mawadah et al., 2026; Simangunsong et al., 2026). These patterns reveal that decision-making models anchored solely in rationality assumptions are structurally incomplete. Addressing this gap requires behavioral extensions that explicitly incorporate cognitive and affective mechanisms, a direction that has attracted growing scholarly attention and that underlies the motivation of the present study.

Despite the rapid growth of this literature, systematic analysis of its intellectual structure remains limited. Existing reviews tend to focus on isolated sub-themes such as prospect theory or investor sentiment, rather than mapping the broader field. As a consequence, the collaboration architecture among researchers, the geographic spread of scholarly networks, and the temporal evolution of core concepts remain incompletely understood. Bibliometric analysis offers a powerful methodological remedy. By applying quantitative network techniques to a comprehensive publication corpus, bibliometric approaches reveal collaboration patterns, thematic clusters, and research trajectories that qualitative reviews cannot efficiently capture (Korip et al., 2025; Maulana et al., 2026).

This study addresses that gap by analyzing 394 articles retrieved from the Scopus database using VOSviewer software. The analysis encompasses four complementary dimensions: co-authorship networks at the author and country levels, co-occurrence of keywords, and text-data mapping. Together, these analyses provide a structured account of how behavioral economics and decision-making research have co-evolved. This study contributes to the literature by offering the first comprehensive bibliometric mapping of this interdisciplinary intersection, identifying high-collaboration clusters and thematically underexplored domains that represent productive directions for future inquiry. The remainder of this paper is organized as follows. Section 2 reviews the theoretical and empirical literature underpinning behavioral economics and decision-making. Section 3 describes the data collection and analytical methodology. Section 4 presents and discusses the bibliometric results. Section 5 concludes with contributions, practical implications, and limitations.

LITERATURE REVIEW

Behavioral economics emerged as a systematic challenge to the rational-agent assumptions embedded in neoclassical theory. Traditional models presuppose that economic actors possess stable preferences, unlimited cognitive capacity, and access to complete information, enabling them to consistently identify utility-maximizing choices. Empirical evidence accumulated across decades of

experimental and field research demonstrates that these assumptions routinely fail under real-world decision conditions. Individuals exhibit predictable deviations from rationality driven by cognitive heuristics, emotional states, and perceptual distortions, producing the systematic anomalies that behavioral economics seeks to explain (Azmi et al., 2026; Mawadah et al., 2026).

Prospect theory constitutes the theoretical cornerstone of behavioral economics. Introduced as an alternative to expected utility theory, it establishes that individuals evaluate outcomes relative to a reference point rather than in absolute terms, and that losses loom larger than equivalent gains in psychological weight. This asymmetry generates risk-seeking behavior in the domain of losses and risk aversion in the domain of gains, a pattern routinely observed in investment decisions, insurance choices, and financial risk management (Mawadah et al., 2026; Chairani et al., 2026). The explanatory power of prospect theory extends across retail and institutional investor behavior, corporate capital allocation, and individual portfolio management, establishing it as a foundational framework for understanding how psychological forces mediate economic judgment.

Bounded rationality represents an equally fundamental concept. Rather than optimizing over all available alternatives, individuals satisfice by selecting options that meet a minimally acceptable threshold, constrained by cognitive limitations and the cost of information processing. Applied to financial management, this framework helps explain suboptimal diversification, excessive trading, and anchoring to arbitrary reference prices in asset valuation (Azmi et al., 2026; Irianto et al., 2025). Extensive empirical research has linked bounded rationality to persistent market inefficiencies, reinforcing the argument that behavioral extensions are not optional additions but necessary corrections to classical decision-making models.

The organizational dimension of behavioral economics has attracted increasing attention. Cognitive biases, including overconfidence, confirmation bias, and escalation of commitment, have been identified as determinants of managerial investment decisions, merger and acquisition outcomes, and corporate risk tolerance (Mawadah et al., 2026; Wibowo et al., 2026). These findings indicate that behavioral distortions operate not only at the level of individual investors but propagate through institutional processes, affecting collective decision-making in ways that can amplify systemic risk. Despite this growing recognition, the existing literature remains fragmented across disciplinary silos. A bibliometric synthesis is therefore needed to delineate the structural topology of research collaboration and thematic development across this interdisciplinary domain.

METHODS OF RESEARCH

Data Source

This study employs a bibliometric approach to analyze the development of research on the integration of behavioral economics into decision-making models. All data were retrieved from the Scopus database, selected for its comprehensive coverage of peer-reviewed publications in economics, finance, and management. The dataset comprises journal articles directly relevant to behavioral economics, financial decision-making, and related constructs.

Search Strategy

The search query combined controlled vocabulary and free-text terms across two conceptual dimensions. The behavioral economics dimension included the terms behavioral economics, behavioral finance, prospect theory, bounded rationality, and cognitive bias. The decision-making dimension incorporated decision making, decision-making model, financial decision, financial management, corporate finance, investment decision, and portfolio management. Boolean operators were applied to link these term groups, ensuring that retrieved publications substantively addressed the intersection of both conceptual domains (Korip et al., 2025; Maulana et al., 2026).

Data Collection

The search procedure yielded a corpus of 394 articles, which constitute the analytical dataset for this study. These publications were exported in the format required by VOSviewer and subjected to the bibliometric analyses described below.

Data Analysis

Bibliometric analyses were conducted using VOSviewer software, which enables network visualization of publication data across multiple relational dimensions. Four analytical procedures were applied. First, co-authorship analysis at the author level mapped collaborative ties among individual researchers. Second, co-authorship analysis at the country level identified international collaboration structures. Third, co-occurrence analysis of author-supplied keywords revealed the thematic architecture of the field. Fourth, text-data co-occurrence analysis, applied to titles and abstracts, identified latent terminological clusters and their temporal trajectories. Cluster visualization and overlay visualization modes were employed to distinguish synchronic structure from diachronic evolution (Adelia et al., 2025; Saputra et al., 2025; Surya et al., 2025).

RESULT AND DISCUSSION

Co-authorship Analysis of Authors

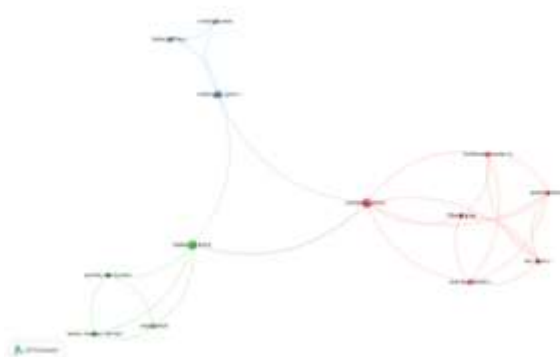


Figure 1. Co-authorship Analysis of Authors

(Source: *Processed using VOSviewer based on Scopus data*)

Figure 1 presents the co-authorship network among individual researchers in the corpus. The visualization reveals a structured topology in which distinct author clusters are interconnected through shared publication ties, indicating organized collaborative groupings rather than isolated individual outputs. Several high-centrality nodes are apparent, representing scholars who serve as connective bridges between otherwise separate research clusters. This architecture is consistent with the collaborative patterns documented in adjacent bibliometric fields, where a small group of highly active researchers tends to anchor the broader network (Adelia et al., 2025; Ilmahdy et al., 2025). The presence of inter-cluster linkages further suggests that the behavioral economics and decision-making literature has developed sufficient maturity to sustain cross-group knowledge exchange, rather than remaining confined to self-contained research silos.

Co-authorship Network of Countries

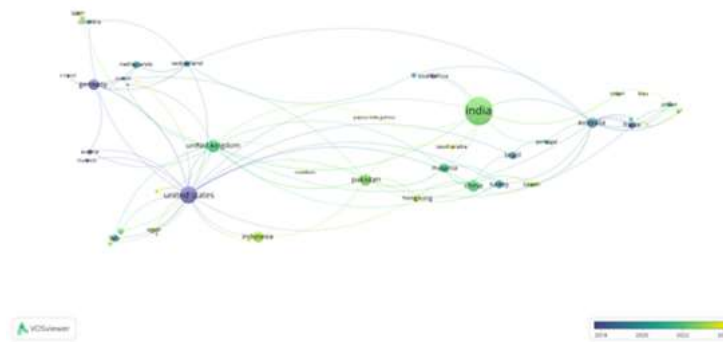
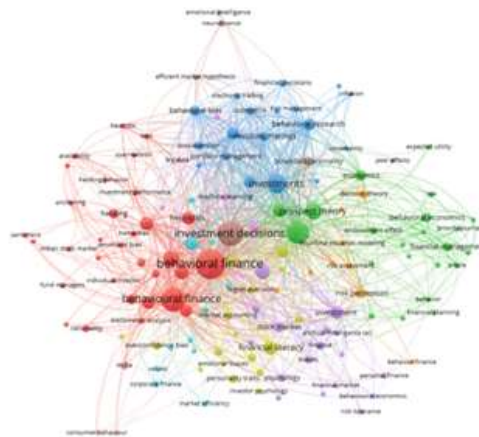


Figure 2. Co-authorship Network of Countries
(Source: *Processed using VOSviewer based on Scopus data*)

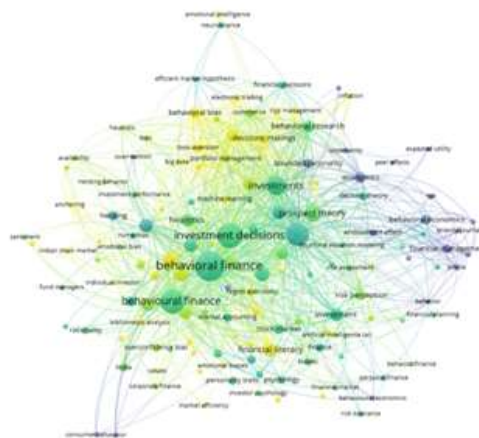
Figure 2 maps the international collaboration structure underlying the corpus. Node size reflects each country's total publication volume, while connecting edges represent joint authorship ties. The network confirms that research on behavioral economics integration is geographically distributed, engaging scholars from both established research economies and emerging academic centers. Several countries occupy structurally central positions as hubs connecting otherwise peripheral national clusters, a pattern that mirrors findings from bibliometric analyses of related management and finance domains (Surya et al., 2025; Usada et al., 2025; Wibowo et al., 2026). The density of international linkages indicates that the field benefits from cross-national knowledge transfer, though the network also reveals a concentration of centrality in a limited subset of highly connected countries, which may imply geographic asymmetries in agenda-setting influence.

Co-occurrence of Keywords



VOSviewer

Figure 3. Co-occurrence Network of Keywords (Cluster Visualization)
(Source: *Processed using VOSviewer based on Scopus data*)



VOSviewer

Figure 4. Co-occurrence Network of Keywords (Overlay Visualization)
(Source: *Processed using VOSviewer based on Scopus data*)

Figure 3 presents the cluster visualization of keyword co-occurrence, revealing the thematic architecture of the field. Multiple distinct clusters are identifiable, each representing a coherent grouping of concepts that frequently appear together in the literature. Behavioral finance, investment decisions, and prospect theory emerge as particularly central nodes, reflecting their role as foundational constructs around which adjacent topics cluster (Chairani et al., 2026; Mawadah et al., 2026). Additional clusters associated with cognitive bias, risk perception, and bounded rationality indicate that the literature engages a broad range of psychological mechanisms rather than concentrating on any single theoretical construct. This thematic breadth is consistent with the multidisciplinary character of behavioral economics, which draws simultaneously on economics, psychology, and finance.

Figure 4 adds a temporal dimension through the overlay visualization. Keywords are color-coded according to the mean publication year of articles in which they appear, enabling identification of earlier foundational concepts and more recently emerging themes. The visualization indicates that foundational terms such as prospect theory and cognitive bias appear in relatively earlier publications, while terms associated with digital financial decision-making and emerging market contexts reflect more recent scholarly attention. This temporal gradient suggests a productive evolution in the field's research frontier, moving from theoretical consolidation toward applied and contextually grounded inquiry, a trajectory that supports the continued relevance of bibliometric monitoring (Azmi et al., 2026).

Co-occurrence Map Based on Text Data

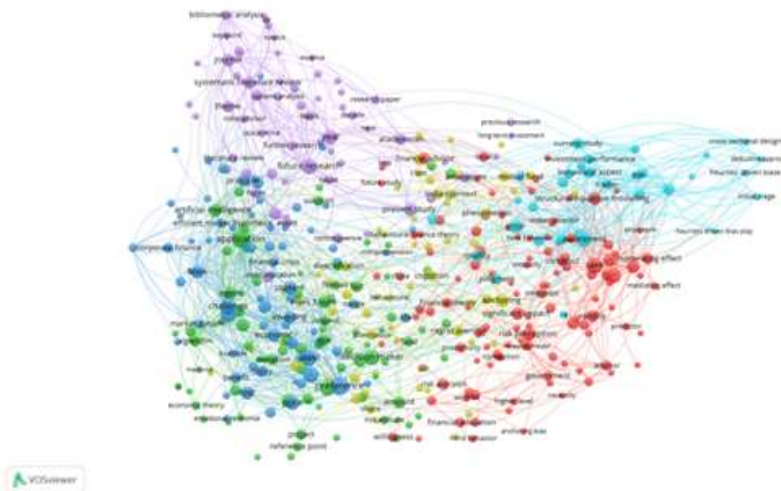


Figure 5. Co-occurrence Map Based on Text Data (Cluster Visualization)
 (Source: *Processed using VOSviewer based on Scopus data*)

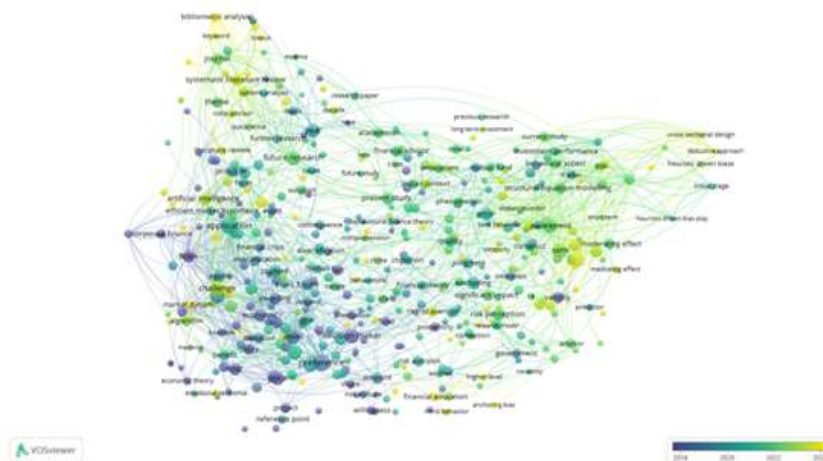


Figure 6. Co-occurrence Map Based on Text Data (Overlay Visualization)
 (Source: *Processed using VOSviewer based on Scopus data*)

Figure 5 presents the cluster visualization derived from text-data co-occurrence analysis applied to titles and abstracts. This approach complements keyword analysis by capturing terminological patterns in the full discursive context of publications rather than relying solely on author-assigned index terms. The resulting network reveals that investment, behavioral finance, preference, and risk perception function as structurally prominent terms, occupying central positions around which related concepts cluster (Mawadah et al., 2026; Simangunsong et al., 2026). These centralities confirm that investment decision-making and the psychological drivers of financial risk assessment constitute the primary substantive domain of the corpus, while also signaling connections to organizational and managerial decision contexts.

Figure 6 extends the text-data analysis through the overlay visualization, tracing the temporal evolution of terminological prominence. Earlier publications appear to have concentrated on foundational mechanisms of cognitive bias and investor behavior, while more recent work increasingly addresses institutional decision-making, digital environments, and cross-national contextual variation. This finding is consistent with the broader trajectory documented in related bibliometric reviews, where the field progressively incorporates richer contextual and methodological diversity over time (Rafasya et al., 2026; Yahya et al., 2026). Collectively, the text-data analyses corroborate the keyword findings and reinforce the conclusion that behavioral economics research is expanding both in scope and in the sophistication of its engagement with financial decision-making.

CONCLUSION

This study examines the intellectual structure and collaborative architecture of research on the integration of behavioral economics into decision-making models using bibliometric analysis of 394 Scopus-indexed articles visualized through VOSviewer. Co-authorship network analysis reveals established collaborative clusters at both the individual researcher and country levels, with cross-cluster linkages indicating a field that has achieved sufficient maturity for interdisciplinary knowledge exchange. Keyword co-occurrence analysis identifies behavioral finance, investment decisions, and prospect theory as the dominant thematic anchors, while bounded rationality and cognitive bias serve as foundational constructs undergirding the broader literature. Temporal overlay analyses confirm that the field is evolving from theoretical consolidation toward applied, contextually embedded inquiry, with emerging market contexts and digital financial environments representing the most recent research frontiers.

For researchers and practitioners, this study highlights several actionable insights. The identification of high-centrality collaboration hubs suggests productive entry points for scholars seeking to build international research partnerships in this domain. The thematic gaps apparent in the keyword and text-data maps, particularly the relative underdevelopment of organizational-level behavioral decision-making and cross-country institutional heterogeneity, point toward areas where new contributions would be most impactful. This study contributes to the literature by providing the first systematic bibliometric mapping of the behavioral economics and decision-making intersection, offering a structured evidence base for research prioritization. Limitations include the restriction to Scopus-indexed publications and the exclusion of conference proceedings, which may underrepresent emerging scholarly contributions. Future research should extend this analysis to additional databases and apply longitudinal bibliometric techniques to track the acceleration of specific thematic clusters over time.

REFERENCE

- Adelia, A., Rahman, M. H., Muthahari, M. W., Pramisy, F. L., Ariswati, L. D., & Kesuma, M. R. (2025). Navigating digital business performance: A bibliometric exploration and integrated evaluation framework. *Ekopedia: Jurnal Ilmiah Ekonomi*, 1(4), 3222–3236. <https://doi.org/10.63822/yxfn4k21>
- Althaf, S. A., Sustyaningsih, S., Kusuma, A. M. N., Anwar, A. G., Irianto, E. O., & Kesuma, M. R. (2025). Digital transformation and sustainability: Unraveling interconnections and challenges through bibliometric insights. *Digital Bisnis: Jurnal Publikasi Ilmu Manajemen dan E-Commerce*, 4(4), 206–223. <https://doi.org/10.30640/digital.v4i4.5506>
- Ariswati, L. D., Kesuma, M. R., Aini, R. N., Irianto, E. D. O., Widaryo, C. M., & Henrika, M. (2025). Does financial literacy drive SME success in resource-rich regions? *Priviet Social Sciences Journal*, 5(11), 308–321. <https://doi.org/10.55942/pssj.v5i11.714>
- Azmi, R., Pranesty, T. K., Puteri, R., Febrianty, Z., Hasanah, R., Irianto, E. D. O., & Kesuma, M. R. (2026). Dinamika rasionalitas terbatas dan pengambilan keputusan: Perspektif bibliometrik. *Ekopedia: Jurnal Ilmiah Ekonomi*, 2(2), 3525–3541. <https://doi.org/10.63822/fxjy8830>
- Chairani, N. S., Najwa, N. A., Kartika, S. A., & Kesuma, M. R. (2026). How has digital transformation reshaped personal financial management behavior research? *Moneter: Jurnal Ekonomi dan Keuangan*, 4(1), 85–106. <https://doi.org/10.61132/moneter.v4i1.2050>
- Ilmahdy, A. N., Thio, O., Shalehah, N. N., Pratama, S. R. H., Henrika, M., & Kesuma, M. R. (2025). The nexus of digitalization and innovation in business processes: A bibliometric analysis and identification of research gaps. *Anggaran: Jurnal Publikasi Ekonomi dan Akuntansi*, 3(4), 145–161. <https://doi.org/10.61132/anggaran.v3i4.1960>
- Irianto, E. D. O., Kesuma, M. R., Henrika, M., Widaryo, C. M., Aini, R. N., & Ariswati, L. D. (2025). Liquidity and financial resilience: Lessons from Indonesia amid COVID-19 resurgence. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(2), 2749–2757. <https://doi.org/10.31004/riggs.v4i2.931>
- Korip, Z. M., Assyifa, A. R., Mantika, S. U., Kesuma, M. R., & Ariswati, L. D. (2025). A bibliometric analysis of financial literacy and financial planning research. *Ekopedia: Jurnal Ilmiah Ekonomi*, 1(4), 3354–3374. <https://doi.org/10.63822/31gje388>
- Maulana, M. D., Mandese, R. R., Adyutasara, D., Kesuma, M. R., & Irianto, E. D. O. (2026). Public financial management: A bibliometric analysis of research trends and influential publications. *Ekopedia: Jurnal Ilmiah Ekonomi*, 2(1), 22–36. <https://doi.org/10.63822/gt0sws91>
- Mawadah, N., Auliyawati, A., Hendi, H., Mangkona, A. A., Aprilia, V., Widaryo, C. M., & Kesuma, M. R. (2026). Bibliometric analysis of decision-making in crisis management: Mapping intellectual structures and contextual gaps in financial management with emphasis on emerging markets. *Ekopedia: Jurnal Ilmiah Ekonomi*, 2(2), 3448–3463. <https://doi.org/10.63822/33y71743>
- Rafasya, D. K., Limbong, J. A., Farich, S. N., Nakhat, S. S. R., Widaryo, C. M., & Kesuma, M. R. (2026). Technology adoption in SMEs: Unraveling bibliometric patterns and public policy influences. *Jejak Digital: Jurnal Ilmiah Multidisiplin*, 2(1), 86–99. <https://doi.org/10.63822/gzytfc30>
- Saputra, S. A. J., Tofani, M. R. U., Risma, N., Aisyah, N., & Kesuma, M. R. (2025). Navigating digital horizons: A bibliometric exploration of digitalization in family businesses and emerging research agendas. *Ekopedia: Jurnal Ilmiah Ekonomi*, 1(4), 2926–2942. <https://doi.org/10.63822/qbwx6k02>
- Simangunsong, A. P. B., Feryanto, F., Halomoan Sinaga, T., Henrika, M., & Kesuma, M. R. (2026). Who decides the household budget? Bibliometric insights into intrahousehold dynamics. *Ekopedia: Jurnal Ilmiah Ekonomi*, 2(1), 122–135. <https://doi.org/10.63822/3b4dvz96>

- Surya, A. P., Kolompoy, B. E. Y., Khairunnisa, S. A., Liszt, C. I. K., Aini, R. N., & Kesuma, M. R. (2025). Digital leadership in organizational transformation: Bibliometric insights and strategic implications. *Ekopedia: Jurnal Ilmiah Ekonomi*, 1(4), 3245–3259. <https://doi.org/10.63822/wy5jyh66>
- Usada, S., Erlangga, R., Yahya, R. A., Kayla, N., & Kesuma, M. R. (2025). Digital business models in the Industry 4.0 era: A bibliometric lens on evolutionary trends and scholarly trajectories. *Jejak Digital: Jurnal Ilmiah Multidisiplin*, 2(1), 141–154. <https://doi.org/10.63822/mmebf884>
- Wibowo, B., Edyanto, C., Satrio, R., Aini, R., & Kesuma, M. R. (2026). Financial management in the context of globalization: A bibliometric study. *Ekopedia: Jurnal Ilmiah Ekonomi*, 2(1), 37–51. <https://doi.org/10.63822/atc9bc19>
- Widaryo, C. M., Henrika, M., Ariswati, L. D., Kesuma, M. R., & Irianto, E. D. O. (2025). Sustainable financial management practices and firm value: Evidence from environmentally responsible companies in Indonesia. *Jurnal Kolaboratif Sains*, 8(12), 7774–7793. <https://doi.org/10.56338/jks.v8i12.9520>
- Yahya, L., Gracyella, I., Salsabila, R., Widaryo, C. M., & Kesuma, M. R. (2026). How does finance drive international business evolution? A bibliometric network view. *Trending: Jurnal Manajemen dan Ekonomi*, 4(1), 195–214. <https://doi.org/10.30640/trending.v4i1.5692>