

Exploring Digital Financial Research from the Scopus Database (2023-2024): A Bibliometric Analysis

Andi Dorawati Ishak¹, Deddy Rakhmad Hidayat², John Agustinus³,
Idayanti Nursyamsi⁴, and M. Nur Wahyudin S⁵

^{1,2,3,4,5}Hasanuddin University, Makassar, Indonesia

*Corresponding author: idayanti.febuh@gmail.com

ABSTRACT

Digital financial plays a crucial role in enhancing economic growth, welfare, utilization, and the quality of financial services, reshaping the landscape of financial instruments and markets. This study aims to provide a comprehensive bibliometric analysis based on Scopus data on trends and patterns in scientific literature related to digital financial. The research meticulously filters articles and conference papers from 2023 to 2024. Utilizing Biblioshiny, the study systematically identifies leading journals, authors, affiliations, countries of origin, author collaborations, articles, citations, and research themes. The findings show that "Finance Research Letters" and "Journal of the Knowledge Economy" are the most productive journals. Renmin University of China is noted as the leading affiliation, with Zhang X identified as the most prolific author. The work by Ren X titled "Digital Finance and Corporate ESG Performance: Empirical Evidence from Listed Companies in China (2023)" is the most frequently cited. China is the most productive country in publishing research on the topic of digital finance. The keywords "digital financial inclusion" and "finance" are the most commonly published. Emerging topics for future research include "sustainable development, panel data, investment, digital financial services, digital financial literacy, and economic growth". This study serves as a valuable reference for researchers engaged in bibliometric studies on digital finance, offering insights into top authors, journals, affiliations, countries of origin, and key keywords. Additionally, the outcomes of this study support researchers in exploring broader academic collaborations related to digital finance.

Keywords: *Digital financial, Digital finance, Scopus database, Bibliometric analysis.*

1. INTRODUCTION

The rapid advancement of digital technologies, including artificial intelligence, mobile internet, big data, blockchain, and cloud computing, has led to the emergence of a novel financial model termed digital finance. This model encompasses both traditional financial institutions and internet companies that leverage digital technology to enable financing, payments, investments, and other innovative financial business models. Notably, digital finance is characterized by its inclusivity, affordability, low barriers to entry, and extensive geographical reach. These attributes expand the provision of financial services, making them accessible to a broader array of technological innovators and thus fostering the transformation of R&D outcomes into practical applications.

However, digital finance also presents significant risks, particularly those associated with digital technology, which tend to be unpredictable and challenging to manage (Xie and Wu, 2024).

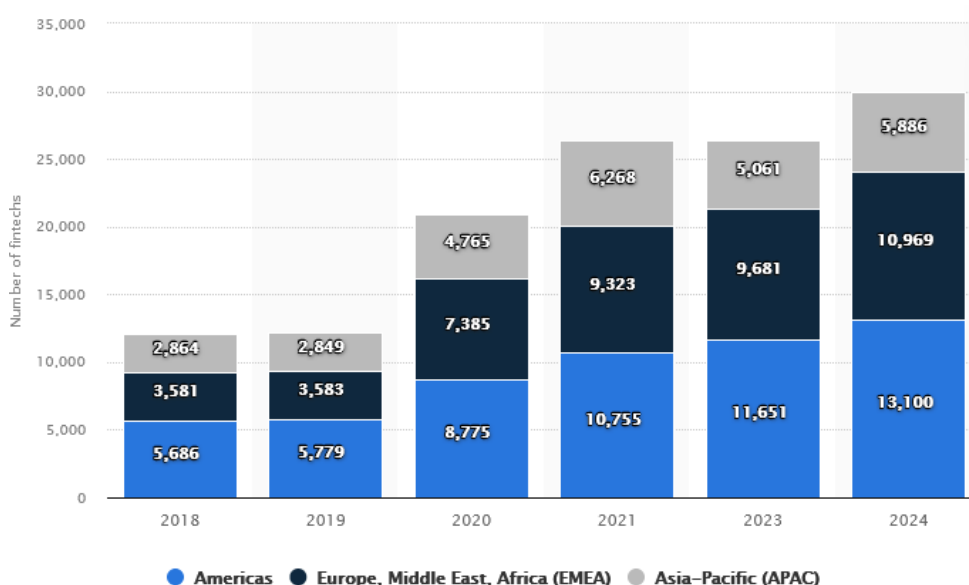
The integration and utilization of digital technologies such as AI, Big Data, and Cloud Computing have profoundly influenced the financial sector, creating new avenues for external financing in entrepreneurial endeavors. To mitigate information asymmetry in the lending process, it is crucial to gather pertinent information about entrepreneurs and their businesses to effectively assess and manage risks. Digital finance comprises services provided by commercial banks and BigTech companies. These services include not only online banking channels but also technology-driven offerings such as digital payment and clearing systems, electronic money, online loans, AI-based customer service, and robo-advisors (Sun and Xie, 2024).

The landscape of financial service development and delivery has undergone a dramatic transformation due to the adoption of new digital technologies. Through mobile applications or electronic wallets linked to secure payment instruments, individuals can perform mobile payments,

engage in online financing and investments, execute digital transfers, and more. These activities are typical of digital finance and are usually facilitated by emerging fintech companies and networks of smart devices like smartphones, personal computers, and tablets. The term fintech, a blend of "financial" and "technology," reflects the evolving nature of the financial industry through the application of information and communication technology (ICT). Digital finance broadly refers to the digitization of financial services, whereas fintech focuses on the use of digital technology to enable, innovate, or disrupt commercial activities within the financial sector (Zou et al., 2023).

The deregulation of financial markets among competing fintech companies has significantly increased the onus on individuals to develop financial literacy. Acquiring financial knowledge empowers individuals to make sound economic and financial choices, avoid errors or misconceptions, and safeguard their financial well-being (Yang, Wu and Huang, 2023).

The financial sector has witnessed profound transformations driven by advances in information technology, with digital technologies deeply embedded in the industry, giving rise to financial technology (fintech). Fintech encompasses various services such as electronic payments, peer-to-peer lending, cryptocurrencies, and crowdfunding platforms. These innovations have democratized access to financial services, making them more accessible and efficient for the public. However, an in-depth understanding of digital finance is crucial, as the sector's technological advancements also pose significant risks. Potential threats include cybercrimes like data breaches, financial losses, and other detrimental impacts, alongside the conveniences and efficiencies offered to users. Fintech's digital payment solutions can streamline transactions between suppliers and consumers, potentially transforming the way goods and services are utilized (Yadav and Banerji, 2023). Presented below is the Number of Fintechs Worldwide from 2018 to 2024, by region.

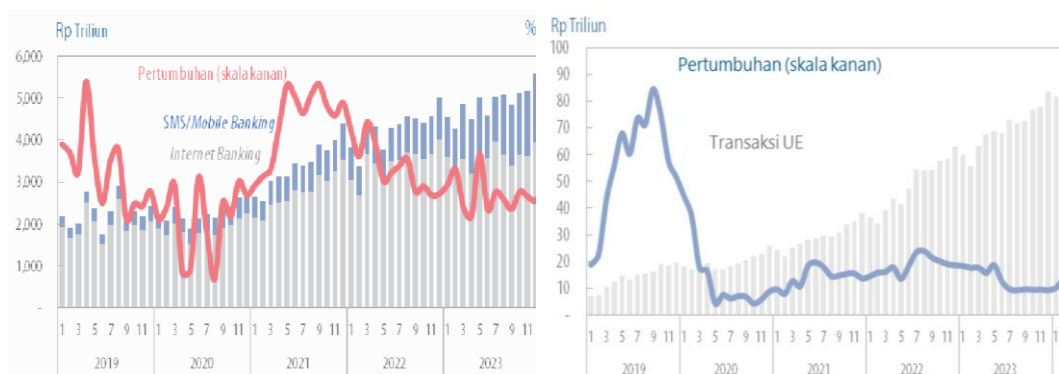


Source: <https://www.statista.com/statistics/893954/number-fintech-startups-by-region/>

Figure 1. Number of Fintechs Worldwide 2018-2024, By Region

As of January 2024, the Americas, encompassing North America, South America, Central America, and the Caribbean, emerged as the global leader in fintech companies, boasting approximately 13,100 fintechs. Figure 1 represents an increase of nearly 1,500 fintechs compared to the previous year. By contrast, the EMEA region, which includes Europe, the Middle East, and Africa, was home to 10,969 fintechs, while the Asia Pacific region had 5,886 fintechs. In 2023, the United States held the top position globally for the highest number of fintech unicorns, possessing roughly five times as many of these high-value companies as the United Kingdom, which occupied the second position. The past decade witnessed a significant surge in global fintech investments, peaking in 2021. However, in 2022, there was a notable deceleration in investment activities, with the Americas experiencing a substantial decline in investment value, likely due to the economic repercussions of the COVID-19 pandemic. In recent years, fintech services have increasingly integrated into daily life, leading to the proliferation of fintech firms. The majority of these

companies originate from the United States and China, with these two nations also being home to eight of the ten largest fintech companies worldwide as of January 2024. Despite the dominance of the U.S. and China, the most valuable fintech unicorn globally in 2022 was Stripe, an Irish payment processing platform. (Statista, 2024).



Source: (Bank Indonesia, 2024)

Figure 2. Growth Digital Banking Transactions and Electronic Money

Figure 2 provides an overview about digital banking transaction and electronic money of Indonesia remained robust, bolstered by a secure, smooth, and reliable payment system. In May 2024, digital banking transactions reached IDR 5,570.49 trillion, reflecting a year-on-year growth of 10.82%. Concurrently, electronic money (EM) transactions saw a significant increase of 35.24% year-on-year, amounting to IDR 92.79 trillion.

2. LITERATURE REVIEW

Digital finance represents a transformative shift in the financial sector, offering notable benefits such as the reduction of information asymmetry and transaction costs while optimizing resource allocation, which heralds substantial future prospects. To address the increasing customer demand for versatile, location-independent financial services, the sector must develop innovative, intelligent solutions. Additionally, the advance of digital technologies facilitates contactless, cost-effective financial services, which diminishes the reliance on cash transactions and traditional financial methods. This technological evolution also enhances information sharing and connectivity, fostering more effective collaboration between financial service providers and their users. Consequently, digital finance can drive inclusive economic growth and promote social equity by alleviating poverty and reducing income inequalities (Zou et al., 2023).

As a novel paradigm, digital finance utilizes electronic information and communication technologies to deliver financial services and solutions. Emerging from the wave of digitalization and technological advancements, digital finance harnesses tools such as the Internet, mobile payment systems, and e-commerce to offer accessible and efficient financial services. This paradigm shift is pivotal for economic development and the improvement of individuals' quality of life (Yang, Ao and Tu, 2024).

Furthermore, digital finance demonstrates significant potential in reaching previously underserved and marginalized populations through the provision of customized financial products and services. The existing body of research highlights that such advancements create affordable investment opportunities, thereby enhancing financial inclusion and system resilience. As new financial innovations like mobile banking, online financial management, peer-to-peer lending, robo-advisors, and sophisticated trading platforms emerge, they reflect the interplay of technology, regulatory frameworks, user behavior, and global market dynamics (Yang, Wu and Huang, 2023).

Digital finance significantly benefits small and medium-sized enterprises (SMEs) by facilitating access to capital for technological innovation, advancing production methodologies, and optimizing natural resource utilization, which collectively contribute to green economic growth. Existing research on the economic impacts of digital finance predominantly explores its effects on consumption and business dynamics, including how it stimulates consumer spending, supports banking stability, mitigates income inequality, reduces financial exclusion, drives business

innovation, boosts total factor productivity, and refines the business financing ecosystem (Song, Gong and Song, 2024).

Digital finance illustrates the transformative potential of new technological advancements within the financial sector. This field encompasses an array of novel financial products, applications, processes, and business strategies that enhance the efficiency and profitability of traditional financial service providers. Financial innovation in this context refers to the development of new financial instruments, services, or processes—such as derivatives, private equity, securitization, hedge funds, and Islamic bonds—that emerge from technological progress in financial tools and institutions (Manasseh et al., 2024).

As a contemporary financial paradigm, digital finance leverages digital technologies to offer a broader range of financial products and services, reduce capital acquisition costs, enhance the operational efficiency of financial institutions, and create competitive dynamics in the financial marketplace. It transcends traditional temporal and spatial limitations between financial resource suppliers and demanders, facilitating easier access to credit through online platforms. By employing advanced information technology for data processing, digital finance improves credit fund accessibility and reduces information asymmetry, which supports the transformation of research and development outcomes. Furthermore, digital finance influences payment habits and consumer expectations by streamlining payment processes, lowering transaction costs, and enhancing overall consumer satisfaction (Xie and Wu, 2024).

Technological advancements, exemplified by digital finance, have significantly facilitated the integration of global payment systems, fundamentally transforming the spectrum of financial products and services available within the financial sector. As a form of financial innovation, digital finance has redefined traditional methods of financial service delivery, simplifying the processes involved and making financial services more accessible. This evolution in the financial landscape garners considerable interest from practitioners, researchers, and policymakers, as addressing various challenges associated with digital finance can enhance its effectiveness for all economic participants. Digital finance encompasses a broad range of services, products, infrastructures, and technologies provided through the internet, personal computers, mobile devices, or digital payment systems, enabling users to perform savings, credit, and payment functions without the need to visit physical bank branches. These services operate through three principal mechanisms: digital transaction platforms, retail agents, and customers, all of which require users to maintain a bank account for engaging with digital financial services. The positive network externalities of digital finance contribute to improved efficiency and productivity in the financial sector, fostering financial inclusion, advancing financial development, and enhancing economic growth, stability, and regulatory effectiveness (Manasseh et al., 2024).

The complexity of digital financial services arises from their reliance on resources and capabilities across banking, technology, telecommunications, agent management, and distribution. Financial service providers deploy these services through mobile networks and agent networks to reach underserved populations more effectively. Digital financial services represent a promising solution for delivering financial services to those with limited access, driven by the pervasive reach of mobile and digital technologies (Iheanachor and Umukoro, 2022).

Lastly, digital wallets represent the latest innovation in digital financial services. Defined as mobile applications that replace traditional wallets, digital wallets facilitate payments without intermediaries and can store diverse forms of personal and financial information, such as credit card details and passport information. Ongoing research into digital wallets also explores their potential applications beyond financial transactions, including blockchain-based solutions for managing health information (Neves et al., 2023).

3. METHODS

3.1 Bibliometric Analysis

This research employs bibliometric analysis via the Bibliometrix library and the Biblioshiny platform available through RStudio. These tools enable thorough analysis, including data breakdown and visualization. As an open-source solution, Bibliometrix is specifically crafted for knowledge mapping and is highly praised for its seamless integration with various other packages, making it ideal for extensive bibliometric deconstruction tasks. This review examines data operations using Biblioshiny, a functional element of the Bibliometrix suite (Medias et al., 2023).

3.2 Data Collection

This study collects data from the Scopus scientific publication database for the period 2023 to 2024 using the keyword "digital financial." Scopus was selected for bibliometric analysis due to its extensive coverage of journals, surpassing that of other scientific databases like Web of Science (WoS). By utilizing keywords and comprehensive details from journal articles—such as authors, titles, abstracts, keywords, citations, and affiliations—this study investigates the pertinence of the topic over recent years. (Hidayat et al., 2024).

4. RESULTS AND DISCUSSION

4.1. Descriptive Analysis

In this study, textual analysis employs R-studio and Biblioshiny software, pioneered by Massimo Aria and Corrado Cuccurullo of the University of Naples, alongside Luigi Vanvitelli of the University of Campania in Italy (Hidayat et al., 2024). The analysis focuses on identifying prevalent terms associated with digital financial. The primary objective is to enrich the literature on digital financial by integrating insights from global studies sourced from the Scopus database.

Figure 3 provides an overview of the documents utilized in the research, focusing on the keyword "digital financial", adding a search filter by limiting the search to 2 years from 2023-2024. The overall findings are presented from the R-studio software analysis, with sources from journals etc, totaling 152 sources, with an annual growth rate of -18.63%. The document content includes 934 Author's Keyword. The publication involves 799 contributors from diverse global origins, achieving an average citation rate of 4.455 citations per document, and 292 document.



Figure 3. Main Information

Source(s): Authors' Elaboration in Bibliometrix R Studio (2024)

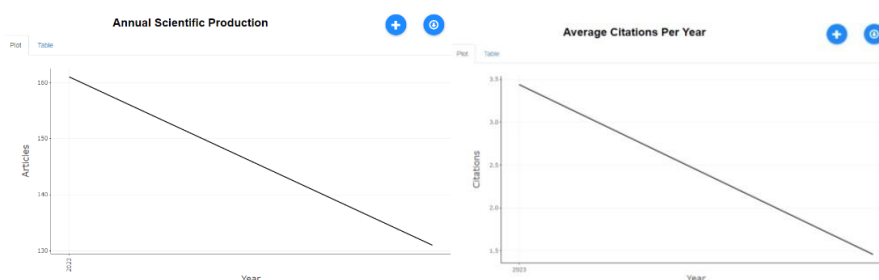


Fig 4. Annual Scientific Production and Average Citation Per Year

Figure 4 illustrates the annual output of scientific publications alongside the average number of citations and annual scientific production received per year. It is observed that the publication output on the theme of digital financial in Scopus-indexed journals has experienced an decreasing trend every year from 2023 to 2024. The average citation per year shows a decreasing trend, indicating that there are still relatively few publications in Scopus-indexed journals citing journals about digital financial sourced from Scopus-indexed journals.

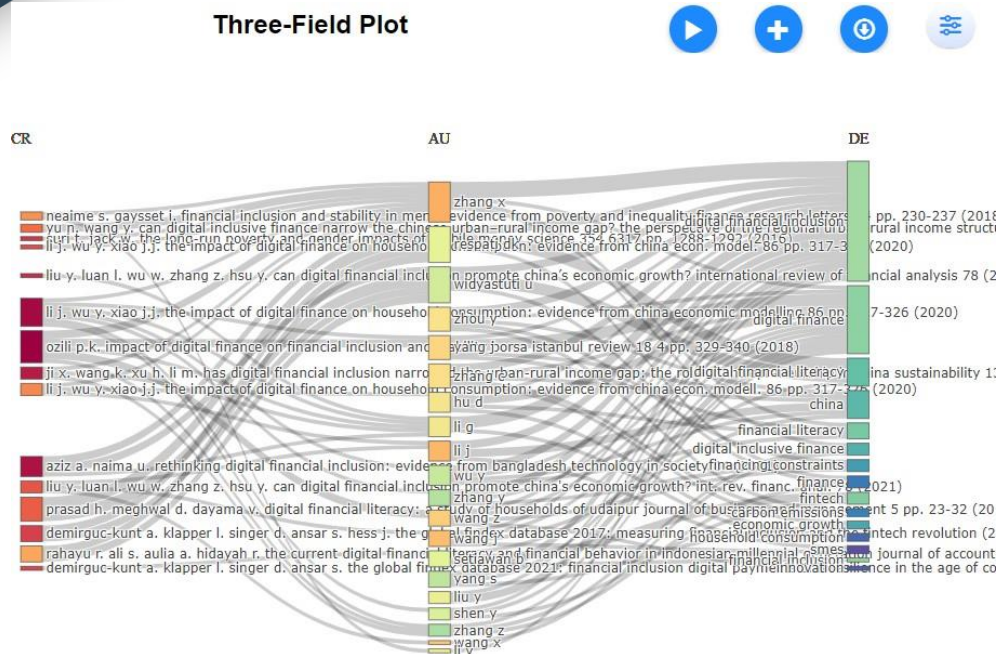


Fig 5. Three-field plot

Understanding the interplay among authors, keywords, and references is pivotal for grasping the intellectual framework of scholarly works. In this study, we employed the Biblioshiny package within RStudio to analyze three distinct plots. This approach provides insights into how these elements converge to shape the intellectual landscape of academic research. Some authors make significant contributions to the research theme of "digital financial", it is important to understand which authors have made major contributions to specific fields. To achieve this, we created three-field plots using Sankey diagrams. The Sankey diagram is a visual representation of flow diagrams where the width of the arrows correlates with the flow quantity or rate between different nodes or categories (Hidayat et al., 2024).

Figure 5 depicts the arrangement where the Author's name appears centrally, with references displayed on the left side of the diagram, and author keywords showcased on the right side. The top five keywords are: Digital financial inclusion, Digital finance, Digital financial literacy, China and Financial literacy. The top five contributing authors are Zhang X, Respati DK, Widyastuti U, Zhou Y, and Yang J.

4.2 Source Analysis

Figure 6 illustrates the distribution of research articles across various journals, focusing on the theme of digital financial. The chart presents a compilation of journal names alongside the frequency of publications using a bar graph format. Darker shades denote higher publication numbers and thematic relevance. Finance Research Letters leads with 12 articles, underscoring its alignment with the discussed theme. Following closely is Journal of The Knowledge Economy with 11 articles published, and in third place is Applied Economics with 7 articles published.

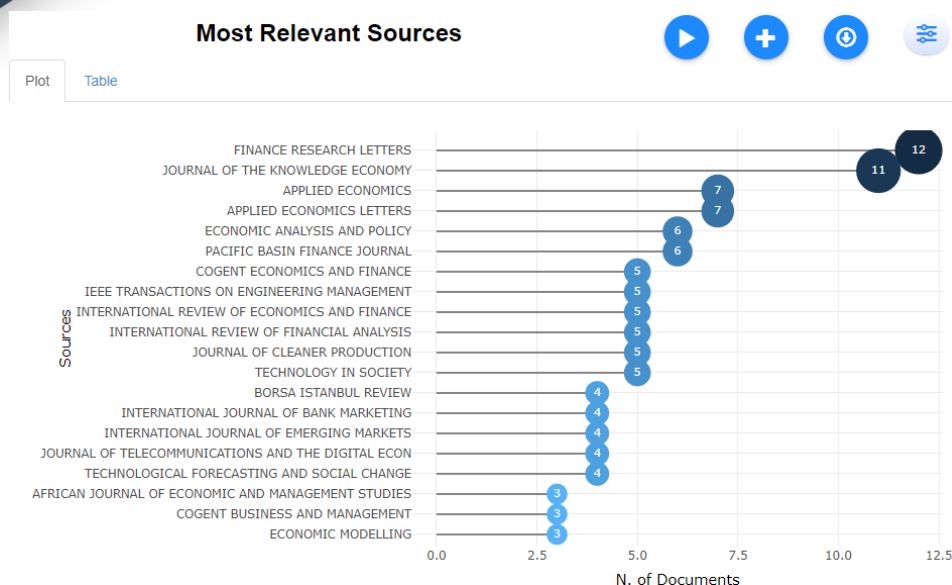


Fig 6. Most Relevant Sources

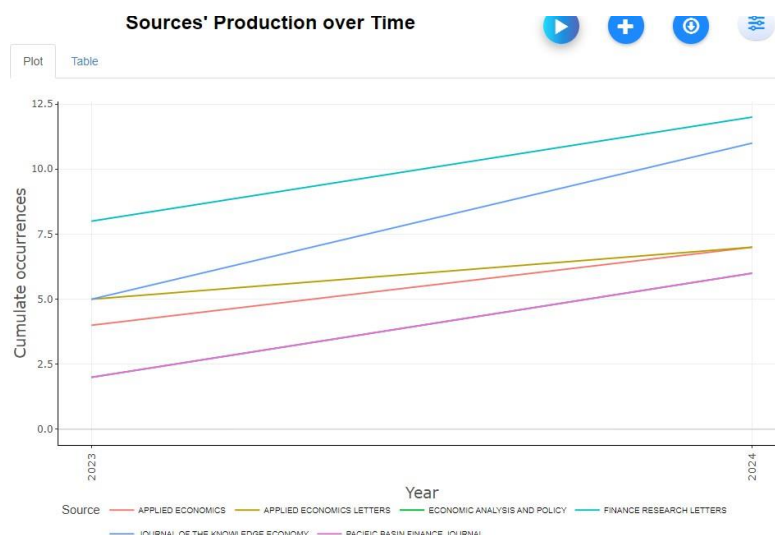


Fig 7. Source Production Over Time

This study also explores the evolution of academic journals that act as repositories for research focused on the topic of digital financial. The curves in Figure 7 show the annual appearance the evolution and advancement of each journal from 2023 to 2024, providing an understanding of whether publications on digital financial have encountered fluctuations in their publication rates over time. The curves depict that research on the theme of digital financial tends to experience an increasing publication trend.

4.3 Author Analysis

Figure 8 illustrates the quantity of research articles authored by each relevant researcher to the theme of digital financial. The data displays a list of the most published authors and the interval of the number of documents published with a bar chart. The darker the color indicates the higher quantity and relevance of the research theme, and the number of documents published by all journals ranges from 3 to 6 documents.

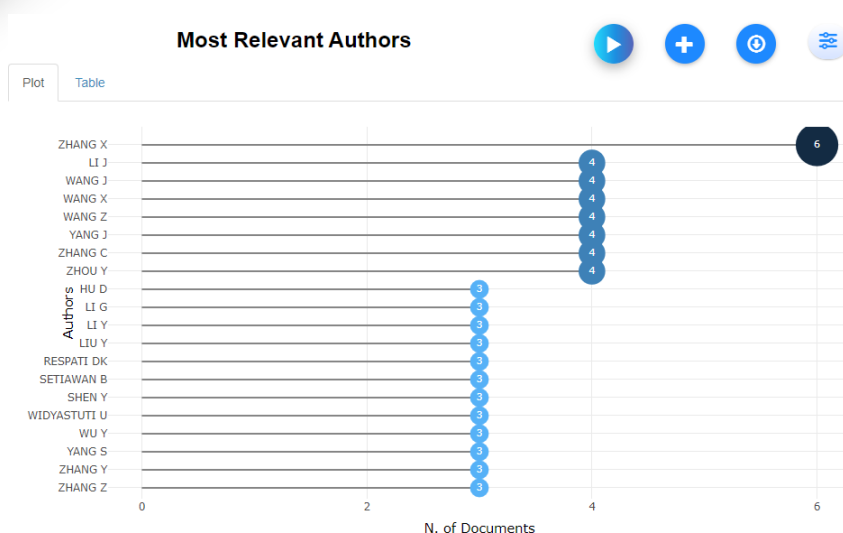


Fig 8. Most Relevant Authors

Zhang X ranks highest with six publications depicted in the prominent dark bar on the graph, surpassing other journals in relevance to the discussed theme. Several authors are depicted in light blue bar graphs after that, namely: Li J, Wang J, Wang X, Wang Z, Yang J, Zhang C, Zhou Y, each with 4 documents. This indicates that the quantity and relevance to the theme of digital financial are still limited.



Fig 9. Author's Production Over Time

Figure 9 shows the productivity of the most prolific authors during the research period from 2014 to 2024. The red line indicates this productivity, as authors publish their research in the last year. Additionally, the red line graphically represents the annual publication count with circles marking each year. It provides a visual summary of researchers who have contributed to the topic of digital financial in recent times. Authors have long been publishing and have a consistent track record every year throughout 2023-2024 in research related to digital financial, namely Zhang X, Li J., and Wang J.

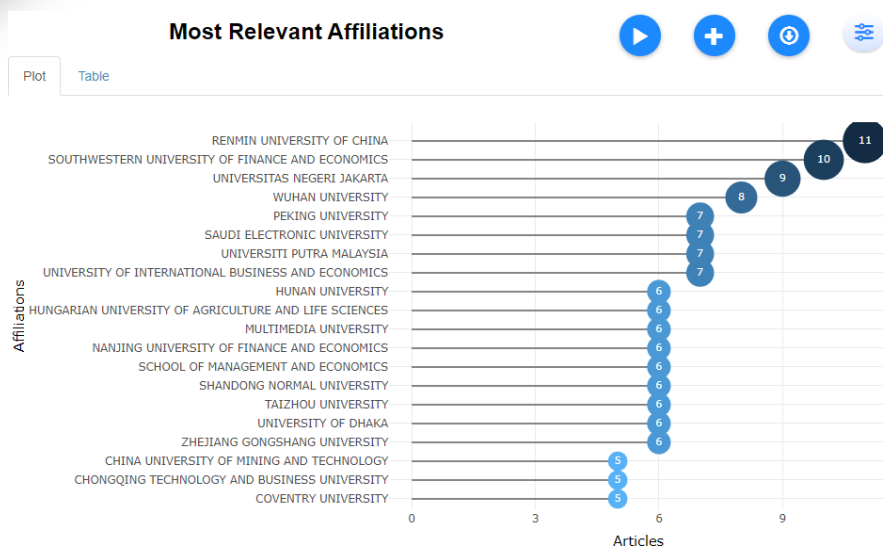


Fig 10. Most Relevant affiliations

Figure 10 shows the number of research documents on the theme of digital financial based on author affiliations. This visual representation illustrates the leading 20 affiliations alongside the distribution of published documents using a blue bar chart. The intensity of the blue hue correlates with the extent of researchers' affiliations, where darker shades indicate stronger associations. The documented output spans between 5 until 11 publications. Renmin University of China is the top-ranked author affiliation with 11 document publications. Southwestern University of Finance and Economics ranks second with 10 publications and in third place is the Universitas Negeri Jakarta with 9 documents.

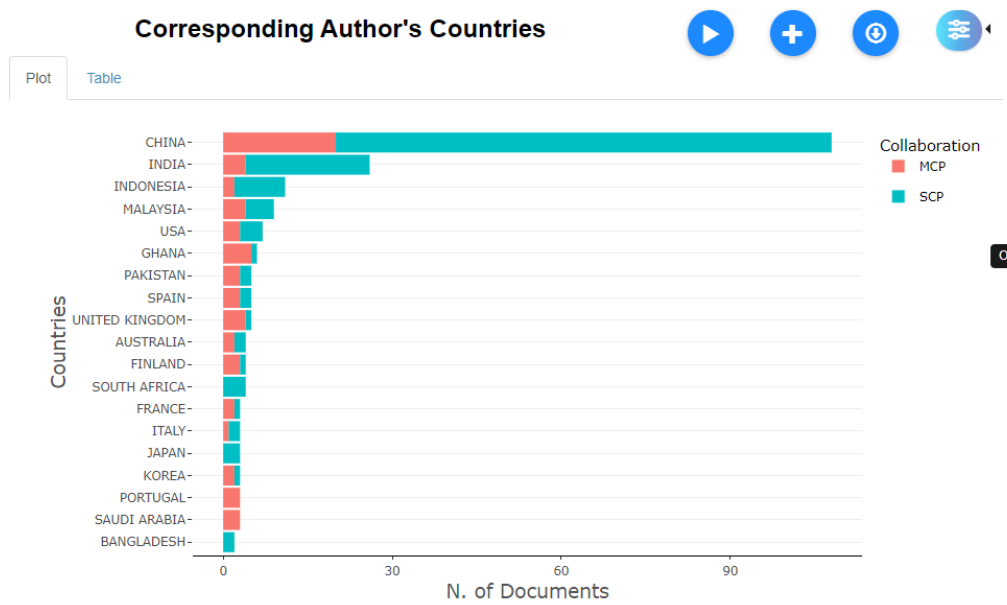


Fig 11. Corresponding Author's Countries

Figure 11 provides an overview of author-country correspondence in each article, assessing collaboration levels, whether within a single country or across multiple countries. The data encompass the top 19 countries involved, reflecting document counts spanning from zero to over 100 publications focused on the topic of digital financial. As a result, China ranks first as the country with the highest number of corresponding authors. Following India in the second position, followed by the Indonesia, Malaysia, and USA.

Figure 12 categorizes studies concerning digital financial by the countries that reference most frequently. A bar graph displays the citation counts, with darker hues denoting higher citations for

research on this topic. The graph highlights words cited between 18 and 728 times. The top five countries are listed alongside their respective citation numbers, emphasizing their significance in the realm of digital financial research. First, China with 728 citations, followed by Finland with 82 citations, India with 59 citations, United Arab Emirates with 50 citations, and Spain with 30 citations.

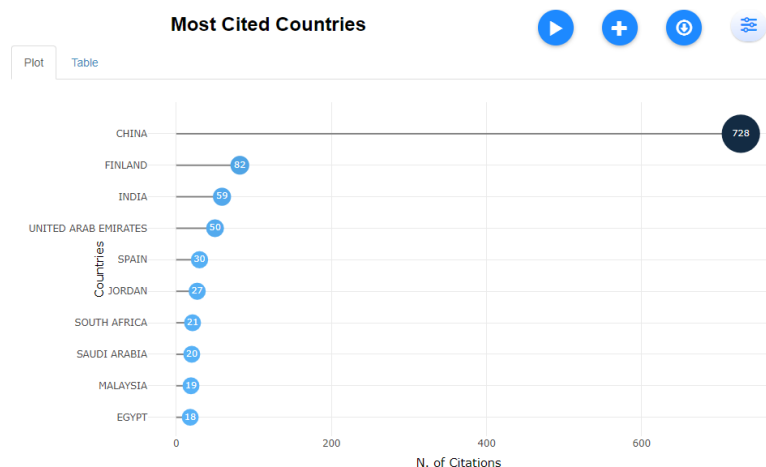


Fig 12. Most Cited Countries

4.4 Document Analysis

Figure 13 shows the most cited documents and displays the sequence of citation data of articles on the theme of digital financial. It showcases a blue bar chart detailing the citation history, encompassing the author names, publication years, and journal sources. The intensity of the bar's color correlates with the citation count, ranging notably from 19 to 94 citations. Of particular note is the article authored by Ren X (2023) Pac Basin Financ J, "Digital Finance and Corporate ESG Performance: Empirical Evidence from Listed Companies in China (2023)" which stands out with the highest citation count of 94 citations.

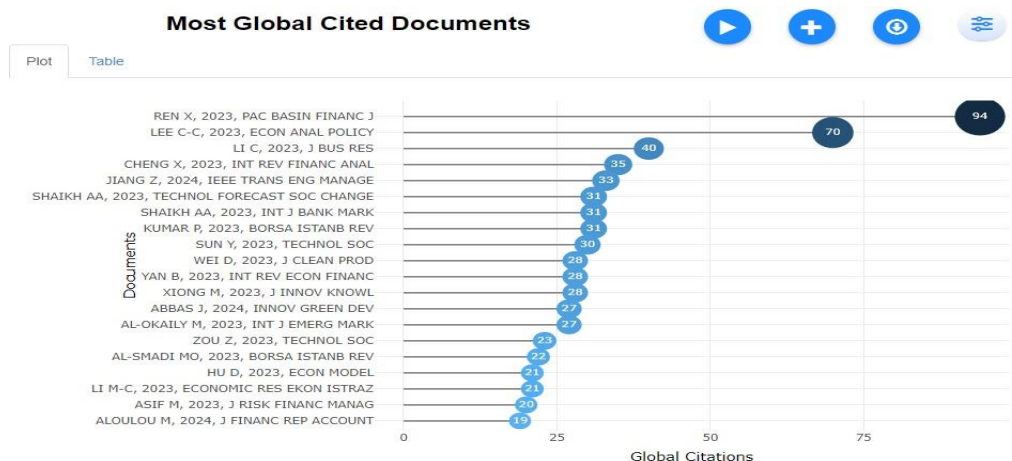


Fig 13. Most Global Cited Documents

Figure 14 visually represents the key terms prominent in studies focusing on digital financial. The data highlights that the term "finance" is the most frequently occurring, appearing 29 times, underscoring its significance in research on this topic. Following closely is "china", appearing 20 times. Next, the third most relevant word is "financial service".

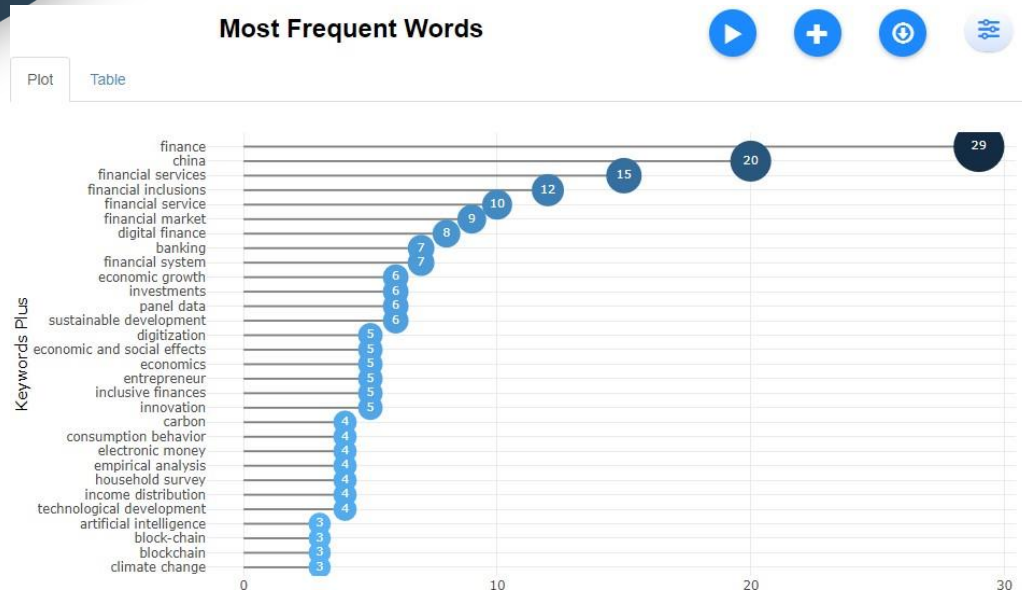


Fig. 14. Most Relevant Words

Figure 15 presents a visual representation of key terms prevalent in studies focusing on digital financial, depicted as a word cloud. This graphical depiction highlights words that commonly appear in the titles and abstracts of articles related to this thematic area. Word clouds utilize varying font sizes to indicate the frequency of each word within the dataset, with larger fonts representing more frequent terms. While the arrangement of words in a word cloud is typically random, central placement emphasizes the most dominant terms for clearer visibility. This study specifically constructed a word cloud using authors' keywords.



Fig. 15. Word Cloud

Additionally, a word cloud serves as an additional bibliometric tool for visualizing dominant themes in a field of study. It also indicates research focal points and emerging investigative paths. The five dominant cloud words in Figure 15 related to the keyword digital financial: Fintech, digital financial services, financial literacy, and digital financial literacy. Furthermore, smaller-sized words or terms signify fewer publications related to those terms, thus becoming relevant novelties in digital financial-themed research.

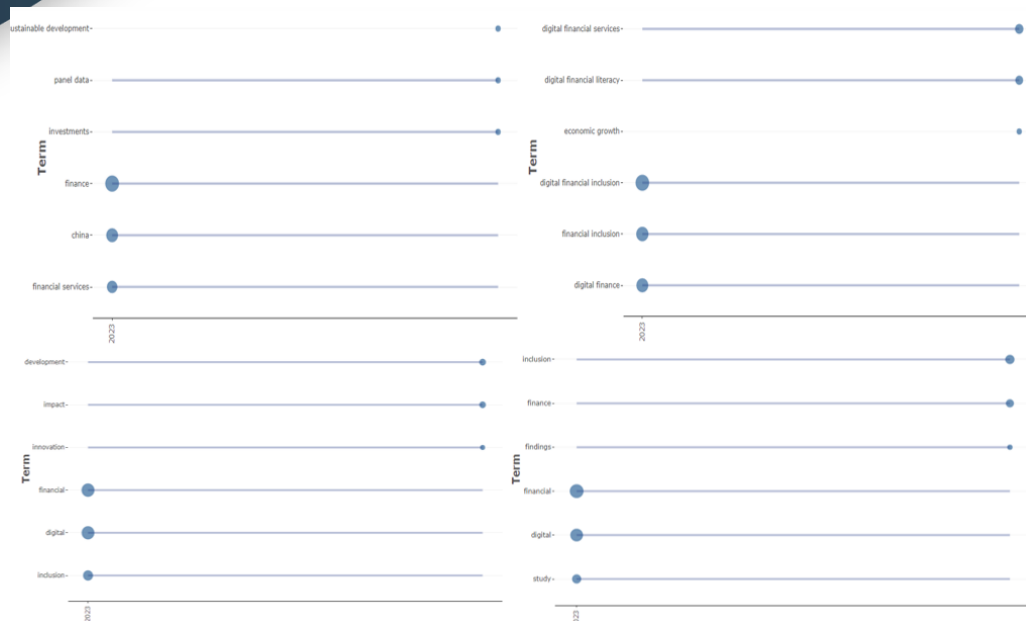


Fig. 16. Trending Topics

Investigating topic trends constitutes a significant aspect of this study. The research delves into the evolving themes explored in studies related to digital financial. Figure 16 presents an overview of the development of topics related to digital financial over time with an annual breakdown, thus revealing which topics have been long-standing and which ones are newly used. These topic trends also consider the frequency value of each word shown on the logarithmic axis. In addition to analyzing yearly trends, the prevalence of topics is calibrated based on the frequency of keywords found within research themes pertaining to digital financial. The frequency and recency of word usage are depicted in the diagram: the higher position indicates higher frequency, and further right indicates recent usage. Trend topics relevant to the year 2024 are presented: Sustainable development, Panel data, Investment, Development, Impact, Innovation, Digital Financial Services, Digital financial literacy, Economic Growth, Inclusion, Finance, and Findings. Showing potential for further development in future research on digital financial based on keyword plus, authors' keyword, titles, and abstracts.

5. CONCLUSION

This study seeks to establish a conceptual framework aiding scholars and professionals in comprehending the evolution of research concerning digital financial spanning the period from 2023 to 2024. Furthermore, it intends to utilize bibliometric analysis to investigate the trends in scholarly publications related to academic writing, citations, sources, countries, high-impact paper authors, international collaboration among paper authors, novelty, future relevant research theme developments. This article contributes to this research by compiling existing literature in the Scopus database, with special emphasis on sources, authors, and significant documents. The R Bibliometrix package, known for its flexibility and ease of use, proves to be an invaluable asset for bibliometric analyses. In this study, the Biblioshiny platform, integrated with R Studio, facilitated the evaluation of a dataset encompassing 152 published works. This collection includes 292 articles, authored by 799 researchers from diverse international backgrounds. On average, each document received 4.455 citations.

Descriptive study findings indicate that China is the most prolific country in publishing research related to digital financial, while Finance Research Letters, Applied Economics and Journal of The Knowledge Economy the most productive journals in publishing digital financial research, Renmin University of China is the top-ranked author affiliation has the highest affiliation with paper authors. Zhang X is the most prolific author of digital financial-themed articles. The work by Ren X titled "Digital Finance and Corporate ESG Performance: Empirical Evidence from Listed Companies in China (2023)" is the most frequently cited.

The keywords "digital financial inclusion" and "finance" are the most commonly published. Emerging topics for future research include "sustainable development, panel data, investment, digital financial services, digital financial literacy, and economic growth". This study serves as a valuable reference for researchers engaged in bibliometric studies on digital finance, offering insights into top authors, journals, affiliations, countries of origin, and key keywords. Additionally, the outcomes of this study support researchers in exploring broader academic collaborations related to digital financial.

REFERENCES

- Bank Indonesia (2024) Tinjauan Kebijakan Moneter Juni 2024 Bank Indonesia.
- Hidayat, D.R. et al. (2024) 'Customer Loyalty : Bibliometric Analysis Based on Scopus Data', in Proceedings of the 8th International Conference on Accounting, Management, and Economics (ICAME 2023), Advances in Economics, Business and Management Research 279. Atlantis Press International BV. Available at: <https://doi.org/10.2991/978-94-6463-400-6>.
- Iheanachor, N. and Umukoro, I. (2022) 'Partnerships in digital financial services : An exploratory study of providers in an emerging market', *Journal of Business Research*, 152(August), pp. 425–435. Available at: <https://doi.org/10.1016/j.jbusres.2022.08.010>.
- Manasseh, C.O. et al. (2024) 'Impact of digital financial innovation on financial system development in Common Market for Eastern and Southern Africa (COMESA) countries', *Asian Journal of Economics and Banking*, 8(1), pp. 121–142. Available at: <https://doi.org/10.1108/AJEB-04-2022-0041>.
- Medias, F. et al. (2023) 'A bibliometric analysis on innovation in philanthropy research : a study based on Scopus database', *International Journal of Innovation Science* [Preprint]. Available at: <https://doi.org/10.1108/IJIS-08-2022-0139>.
- Song, Yunxing, Gong, Y. and Song, Yan (2024) 'The impact of digital financial development on the green economy : An analysis based on a volatility perspective', *Journal of Cleaner Production*, 434(June 2023), p. 140051. Available at: <https://doi.org/10.1016/j.jclepro.2023.140051>.
- Sun, X. and Xie, X. (2024) 'How does digital finance promote entrepreneurship ? The roles of traditional financial institutions and BigTech firms', *Pacific-Basin Finance Journal*, 85(February), p. 102316. Available at: <https://doi.org/10.1016/j.pacfin.2024.102316>.
- Xie, Z. and Wu, Y. (2024) 'Heliyon Digital finance , financial regulation and transformation of R & D achievements', *Heliyon*, 10(9), p. e30224. Available at: <https://doi.org/10.1016/j.heliyon.2024.e30224>.
- Yadav, M. and Banerji, P. (2023) 'A bibliometric analysis of digital financial literacy'. Available at: <https://doi.org/10.1108/AJB-11-2022-0186>.
- Yang, J., Wu, Y. and Huang, B. (2023) 'Digital finance and financial literacy : Evidence from Chinese households ☆', *Journal of Banking and Finance*, 156(September). Available at: <https://doi.org/10.1016/j.jbankfin.2023.107005>.
- Yang, N., Ao, X. and Tu, Y. (2024) 'The impact of digital financial development on rural household income mobility', *Finance Research Letters*, 63(January), p. 105368. Available at: <https://doi.org/10.1016/j.frl.2024.105368>.
- Zou, Z. et al. (2023) 'Insight into digital finance and fintech : A bibliometric and content analysis', *Technology in Society*, 73. Available at: <https://doi.org/10.1016/j.techsoc.2023.102221>.