




# Bank Profitability on Emerging Markets for Business Sustainability: A Systematic Literature Review

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**Abstract.** This study aims to provide a systematic literature review and bibliometric analysis of bank profitability with a particular focus on emerging markets, which remain underexplored in global academic discussions. Using a systematic literature review approach through keyword searches for “bank profitability” in the Scopus database, this study analyzed 6,097 publications from 1989 to 2025 using VOSviewer software to identify research trends, major determinants, and thematic gaps. The results reveal a significant increase in the number of publications over time, but most studies remain concentrated on developed markets such as the United States and Europe, while research on developing countries is still limited. The findings highlight the growing role of technology, especially digital banking, as a key driver of bank profitability, along with the importance of macroeconomic factors and regulatory frameworks. The analysis presented is restricted to Scopus data, and we recommend future work should consider other databases such as Web of Science and a more comprehensive set of policy and macroeconomic variables to allow greater generalizability. These result implications can be useful for bank managers to help them devise effective strategies that enable the use of technological advancements and diversification of services to improve profit. On the social side, a financially sound banking industry can support key areas like education and infrastructure, and encourage more inclusive and sustainable banking systems. The originality of this research lies in the use of the most recent data and bibliometric analysis to provide a comprehensive perspective on the determinants of bank profitability in emerging markets.

**Keywords:** bank profitability, literature review, business sustainability, emerging markets.

## 1 Introduction

Bank profitability is a main indicator in evaluating the financial performance of banking institutions. The bank's ability to generate profit from its operational activities is very decisive for the institution's continuity of life while at the same time reflecting the stability of the financial system as a whole. In the context of an increasingly dynamic global economy, profitability also becomes an important measurement gauge for the effectiveness of resource management as well as bank resilience in facing external challenges [1].

Sector conditions in banking keep changing along with the development of technology, regulation, and market dynamics. The COVID-19 pandemic, for example, has put great pressure on bank profitability through increasing credit risk and changes in consumer behavior [2], [3]. On the other hand, the progress of digital technology and the transformation of financial services based on technology (fintech) provide new opportunities for banks to increase efficiency and reach larger market segments [4].

However, some major empirical studies on bank profitability are still dominated by studies in developed countries such as the United States and Europe [5]. Studies of developing countries, which have different economic and financial system characteristics, are still relatively limited. This creates a literature gap in understanding the factors that influence bank profitability in regions with banking systems that are currently developing.

Through a systematic literature review and bibliometric analysis of 6,097 publications in the Scopus database, this research aims to provide a comprehensive description of trends and determinants of global bank profitability. Emphasis is given to the importance of the developing country context as well as the influence of digital technology and banking policy in shaping the financial performance of banking institutions.

Recent empirical studies by [6] use the model to find out that profitability is an important transmission mechanism in Indonesia between macroeconomic variables and firm value during financial crisis. Moreover, [7] also found that non-performing financing is a significant moderating factor on Islamic banks profitability and financial stability are required to maintain the soundness of the bank in risk quality and efficient asset management.

## 2 Literature Review

Bank profitability is an important indicator of financial performance and signifies a bank's capacity to generate earnings in relation to its costs and available equity. It is commonly indicated by the return on assets (ROA) and ROE, which reflect managerial effectiveness on employing a firm's total assets and shareholders' funds. Other ratios such as NIM (Net Interest Margin) and ROAA (Return On Average Assets) are also used to measure profitability of lending activities on investment.

The profitability of banks is affected by internal and external factors. Internal determinants are efficiency, credit risk, capital adequacy and diversification of revenue which affect a bank's ability to develop sustainable earnings. External factors: Factors such as macroeconomic stability, etc., inflation or GDP growth and social and legal

weather also play decisive effects. A well-developed legal system, which safeguards property rights and enforces contracts, enhances the creditor–debtor nexus, it lowers uncertainty and also bank profitability [8]. Good governance and transparency to management also contribute positively on the quality of decision making besides riskmanagement[9].

Recent empirical findings from Indonesia shed more light on these determinants. Chandra Dewi [7] discovered that non performing financing as a moderator on the impact of capital adequacy to financing of Islamic banks indicating that asset quality holds an important role. Widanta & Hermuningsih [10] showed that capital structure, financing and problematic customers have a joint influence on profitability and the bank size is used as a moderator which effect to performance.

At the macro-financial level, Hermuningsih et al.[6] showed that profitability mediates the impact of macroeconomic variables on stock returns in the post-pandemic period. Similarly, Hidayat et al.[11] emphasized that profitability and capital structure significantly determine firm value in Sharia-compliant companies, with corporate social responsibility strengthening this relationship.

External shocks also influence profitability. Inflation and contraction has a negative effect on credit risk and positive effect on profitability; whereas, GDP growth positively impact the demand for credit. Climate-related risks are more and more pressing, as banks financed in 30 exposed sectors to a TCFD world may face short-term falls of profitability [12]. Among all of these, credit risk is the most important determinant; increasing NPLs and less interest income make higher loan-loss provisions which lead to decrease net profits [2]. So that's why it remains so important to strengthen risk management and asset quality.

Monetary policy also affects profitability. Higher interest rates can result in higher interest income, but extended low rate environments pressure margins[13]. The capital structure effect works on two fronts: stronger capital buffers reduce the risk but may constrain returns when risks are low and leverages high tend to raise the bottom-line, but bring more fragility in economic volatilities [14]. Governance problems such as corruption can affect asset quality and increase systemic risk, which leads to lower profitability[15].

More generally, banks' profitability is driven by a combination of internal efficiency, macro-financial stability, regulatory quality and risk environment. 6 Alternative Hypotheses for Banks Our second and third alternative hypostheses are for banks that the stronger they ability to respond with changing environments, better manage process to govern good return of balancing risk between high strength of profitability, In fact tend tendency sustain earnings and contribute system soundness is likely [1], [16].

### 3 Critical Synthesis of Literature

Based on the results of the literature review above, it can be seen that there are a number of consistencies and differences of opinion across previous research. For example, some major studies show that Return on Assets (ROA), operational efficiency, and credit risk management are the main determinants in driving bank profitability [2], [5].

However, there are also a few studies that show contradictory findings. As an example, Bulut et al.[14] state that domestic ownership structure is more efficient in driving profitability, whereas Mandalaza & Jeke [17] find that foreign ownership can increase profitability through the implementation of better governance and discipline practices. Meanwhile, in the context of monetary policy, some studies support that high interest rates increase interest income. However, Brkić [13] underlines that high inflation actually suppresses profitability as a consequence of rising funding costs and credit risk.

In context digitalization, Zheng et al.[4] emphasize the efficiency potential gained from fintech services, whereas Masrom et al.[15] warn about systemic risks that may arise as a consequence of weak controls against digital fraud and corruption.

These findings show that although many factors influencing profitability have been studied, their impact can vary depending on the country context, macroeconomic conditions, and institutional capacity. Therefore, there is still ample room for further research to test the interaction between these variables in a more contextual manner, especially in the context of developing countries that have different characteristics from developed countries.

Complementary evidence from Indonesia supports these global findings. Hidayat et al.[11] highlighted that profitability plays a significant role in determining firm value among Sharia-compliant companies, with corporate social responsibility acting as a moderating factor. This view aligns with Hermuningsih et al.[6], who argued that profitability mediates the impact of macroeconomic forces on corporate performance, reaffirming its central position in linking financial structure, efficiency, and sustainability.

**Table 1.** Main Elements in Bank Profitability.

No	Key Factors in Bank Profitability	References
1	Return on Assets (ROA): Bank profitability can be measured through ROA, which reflects the bank's efficiency in generating profits from its assets.	[8]
2	Return on Equity (ROE): A bank's profitability can be indicated by ROE, which measures how effectively the bank generates profits from shareholders' capital.	[5]
3	Return on Average Assets (ROAA): A bank's profitability can be described by ROAA, which indicates the bank's efficiency in generating profits from assets under management.	[18]
4	Quality and Risk Credit : Bank profitability is influenced by asset quality and credit risk management, such as non-performing loans (NPLs), which have a major impact on profitability.	[2]
5	Digital Innovation and Technology: Developments in digital technology, such as digital banking, enhance efficiency and market reach, supporting bank profitability.	[4]
6	Bank Ownership and Organization Structure: Ownership structure, whether domestic or foreign, influences decision-making and managerial practices related to bank profitability.	[17]

No	Key Factors in Bank Profitability	References
7	Monetary Policy: Interest rate policies set by central banks affect interest income and bank profitability through changes in credit cost and demand.	[13]
8	Corruption and Managerial Practices: Corruption and poor management can increase non-performing loans, damages asset quality, and reduce bank profitability.	[15]
9	Bank Size: Larger banks tend to be more efficient and have greater resources, which contributes to higher bank profitability.	[16]
10	Climate Change Impact: Adverse climate can reduce bank profitability, especially for banks exposed to vulnerable sectors.	[12]
11	Impact of COVID-19: The COVID-19 pandemic has affected bank profitability by influencing credit demand and risk management in the banking sector.	[3]
12	Economic and Legal Factors in Emerging Markets: Economic conditions and banking policies in developing countries affect the profitability of banks operating in emerging markets.	[1]
13	Governance Factors: Good governance factors, such as a strong board structure and transparent management, play a major role in supporting bank profitability by ensuring effective and efficient decision-making.	[9]

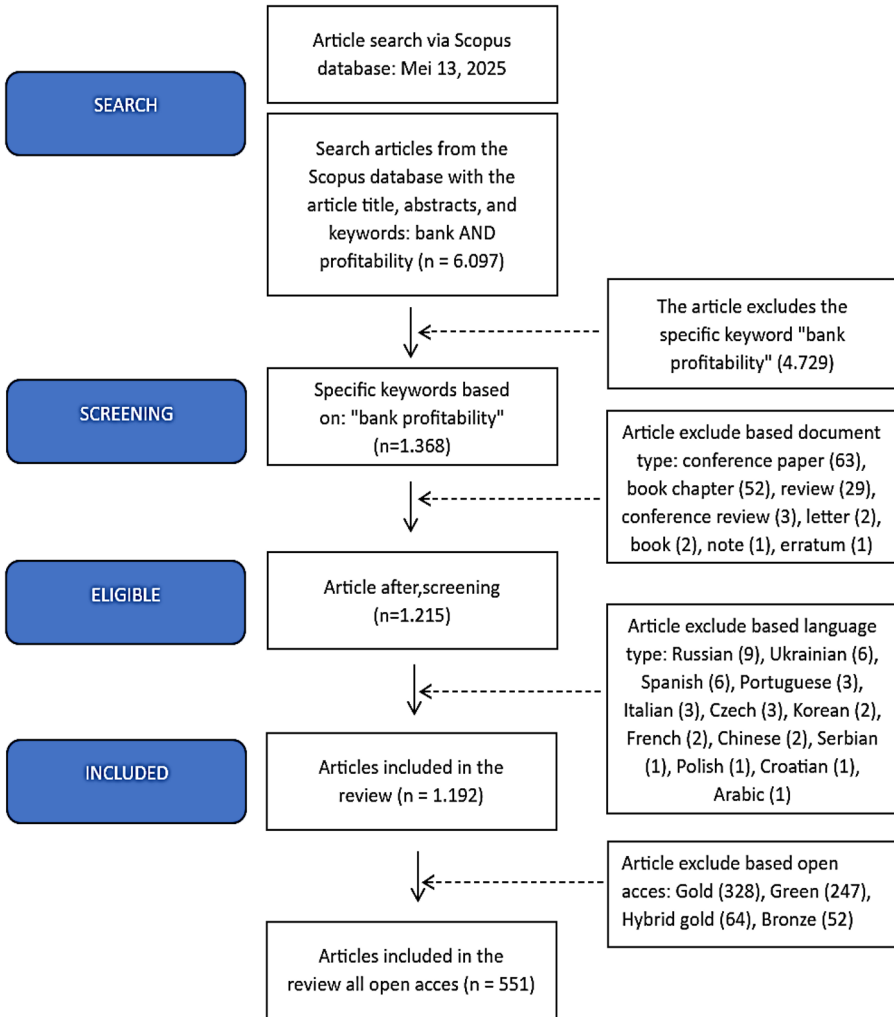
#### 4 Methods and analysis

This research employs the Systematic Literature Review (SLR) methodology which is a highly-structured and rigorous approach to source, evaluate, and interpret literature for the chosen research questions. The purpose is to better understand the determinants of banks' profitability, recent developments affecting banking and policies and techniques applied in different countries. Through the use of SLR combined with bibliometric analysis, this paper provides insights into uncovered areas in the literature and condenses how economic factors (EFs), regulations (RGs) and technological innovation (TI) affect bank financial performance. The review includes articles published in peer-reviewed journals from 1989 to 2025. Information was retrieved from a Scopus database using search term "bank profitability". The primary search yielded 6,097 records and of those only 551 articles were retained in the review based on inclusion and exclusion criteria including relevance to the topic, year of publication (1989–2025), journal quality. The selected articles were decoded and the key elements that lead to bank profitability were presented.

The inclusion criteria in this study are: (1) Articles published in English or Indonesian, (2) Focus on the banking sector, (3) Discuss factors that influence bank profitability, such as board structure, managerial ownership, or internal control systems, (4) Present quantitative or qualitative data on bank profitability such as ROA, ROE, and NIM. Articles that did not directly link these factors to bank profitability or lacked empirical data were excluded.

To illustrate the flow of the Systematic Literature Review (SLR) process, this study uses the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-

Analyses) model. The PRISMA diagram provides a clear overview of each stage of article screening, starting from identification, selection, quality evaluation, and final inclusion of studies that met the research criteria.



**Figure 1.** Systematic Literature Review Model information flow using PRISMA

According to the search results retrieved on May 13, 2025, from the Scopus database using article titles, abstracts, and keywords: “bank AND profitability” from various academic disciplines, starting from the first publication in 1989 to the most recent in 2025, the total number of articles on bank profitability is 6,097 documents (see Figure 1). After this result, the document filtering process was carried out based on its classification. The articles were filtered based on document type: conference paper

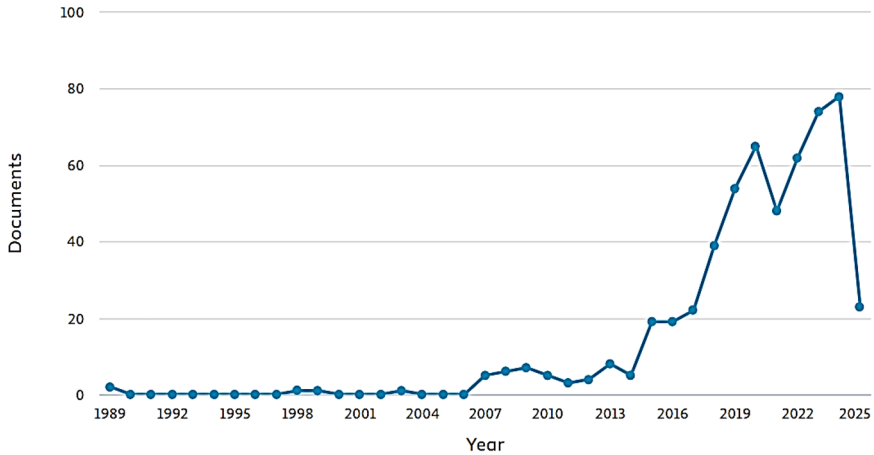
(63), book chapter (52), review (29), conference review (3), letter (2), book (2), note (1), and erratum (1), which resulted in a total of 153 documents. This filtering result, categorized by article, resulted in 1,215 articles, and through the all open access filtering, resulted in 551 documents. These documents were then further analyzed to answer the following research questions: RQ1: Is the exploration of bank profitability a subject of significance for future academic research. RQ2: How is the current allocation of research related to bank profitability. RQ3: What are the theoretical and practical implications from a future perspective.

## 5 Results & Discussion

The results of this study focus on findings from 551 articles in the Scopus database on bank profitability. This data is sourced from identifying the number of articles published, publications throughout the years, and relevant sources. This study will also highlight the most influential elements of bank profitability, including authors, affiliations, and stakeholders.

RQ1: Does the exploration of bank profitability continue to be a subject of significance for future academic research.

Based on data obtained from the Scopus database, it has been known that for more than four decades, research on bank profitability includes 551 articles. This shows that research on bank profitability continues to grow rapidly, as depicted in Figure 2. The exploration of bank profitability began with its progressive development in the last decade, especially since 2019. The first inaugural study was conducted by [19] and entitled “Marketing Planning and Expert Systems: An Epistemology of Practice,” and [20] and entitled “The Effect of Quality of Management on the Profitability of Commercial Banks: A Comparative Study from Nigerian Banking Environment” which introduced the vocabulary called bank profitability till date. Secondly, research on bank profits has recently started drawing the attention of A high number of scholars and is found to centre in studies around financial regulation, macroeconomic factors, competition, bank size, ownership and effects from digitalization and climate change [1], [2], [4], [5], [8], [12], [13], [16]



Source: Scopus database 2025

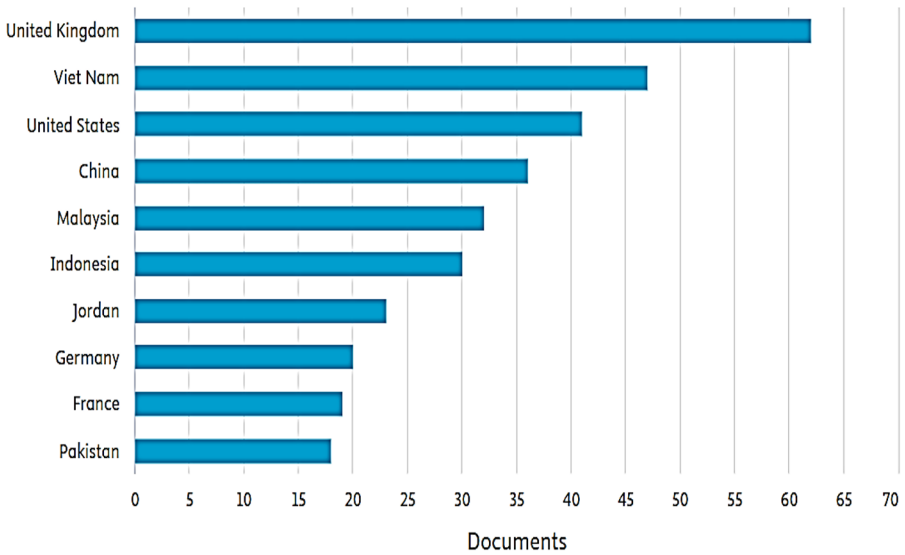
**Figure 2.** Development of Bank profitability publications

Since 1989, the literature on bank profitability has been relatively limited, primarily due to the lack of published research in leading journals. This creates a significant opportunity for future researchers to fill this gap. Further research is crucial to broaden insights into bank profitability, which not only influences banking sector behavior but also contributes to the development of a more comprehensive profitability framework. This, in turn, can facilitate a deeper understanding of the practical and sustainable application of the bank profitability concept across various sectors.

*RQ2: How is the allocation of research related to bank profitability.*

A distribution analysis of research on bank profitability from 551 articles was conducted by categorizing the articles based on classifications such as country, region, affiliation, source, and author, focusing on the top 10 articles in each category. Understanding the allocation of research related to bank profitability will be very useful for academics and practitioners in formulating future research agendas, especially those related to financial governance and how factors such as board structure, managerial ownership, and internal control systems affect bank profitability.

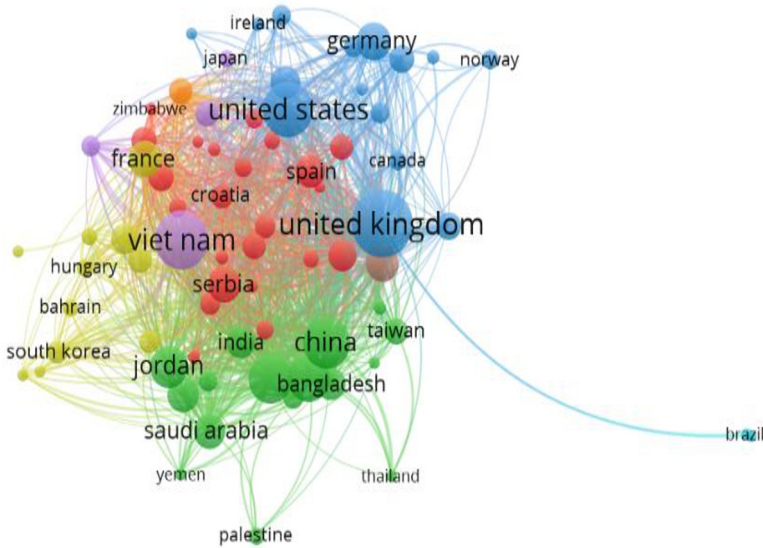
First, the allocation of academic research related to bank profitability categorized by country or geographic region is dominated by the United Kingdom with 62 articles, Vietnam with 47 articles, the United States with 41 articles, China with 36 articles, Malaysia with 32 articles, Indonesia with 30 articles, Jordan with 23 articles, Germany with 20 articles, France with 19 articles, and Pakistan with 18 articles (see Figure 3).



Source: Scopus database 2025

**Figure 3.** Distribution of Countries in the bank profitability

The results suggest that the problem regarding bank profitability is also sensitive for not only those countries with emerging crypto banking industry but for developed countries too, showing that this concern has global implications. In addition, researchers will explore the country links on bank profitability research with the help of VOSviewer software. This phase is essential to developing an organized prospective research agenda. The results of the VOSviewer analysis reveal how countries cooperate on bank profitability (see Figure 4).

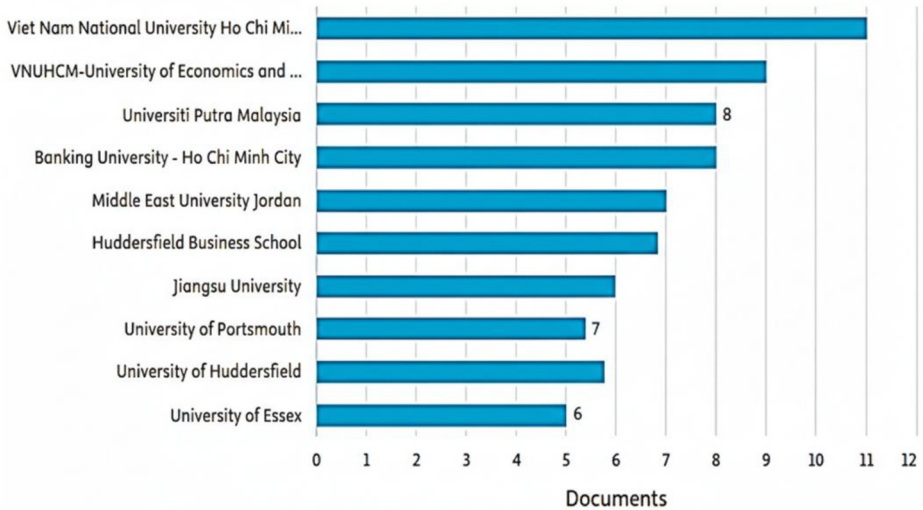


Source: VOSviewer software output 2025

**Figure 4.** Network country visualization

This picture shows the links amongst countries who often study bank profitability. Each node represents one country. The size of the node depends on the number of publications from this country. The links between two nodes represent the interrelations or relationships of research activities between these countries and nodes with thicker lines show a higher degree of collaboration in publishing studies on bank profitability. This visualization demonstrates the spatial distribution of research and international collaboration on the topic in a clear way.

Second, the allocation of publications related to bank profitability based on institutional affiliation is mainly characterized by Viet Nam National University Ho Chi Minh City with 11 articles, VNUHCM–University of Economics and Law with 9 articles, Universiti Putra Malaysia with 8 articles, Banking University – Ho Chi Minh City with 8 articles, Middle East University Jordan with 7 articles, Huddersfield Business School with 7 articles, Jianguo University with 6 articles, University of Portsmouth with 6 articles, University of Huddersfield with 6 articles, and University of Essex with 5 articles (see Figure 5).



Source: Scopus database 2025

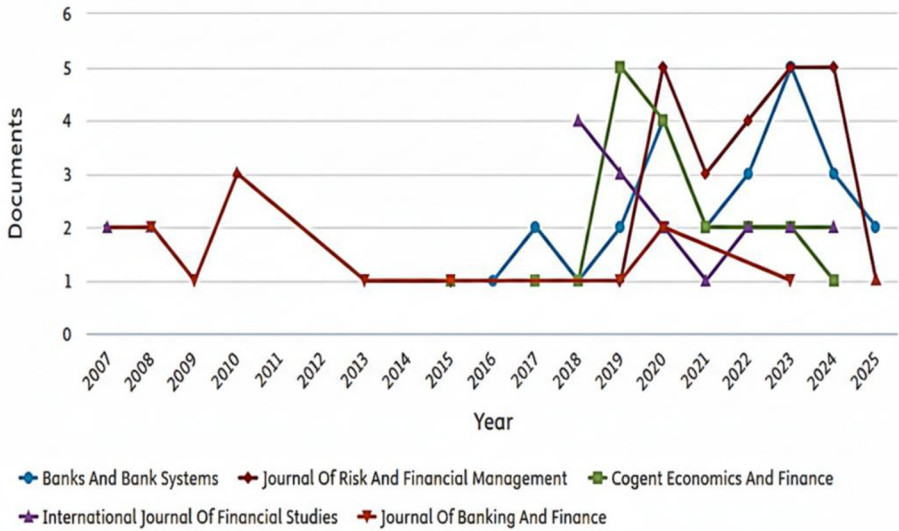
**Figure 5.** Distribution of Publications on Bank Profitability

The visualization in Figure 5 clearly shows the distribution of publications on bank profitability across global universities, demonstrating significant contributions from leading institutions. This finding confirms that research in this area is not only a primary focus in certain countries but also attracts attention in educational institutions around the world.

Emerging markets are essentially different from developed economies and under-researched. The studies analyzed suggest that economic (in)stability in the forms of inflation rate uncertainty, exchange rates volatility and high informality present unique challenges to bank's risk management processes and credit provision practices. Financial inclusion is also key, with banks expanding services via microfinance and digital banking. Digital transition cleans up the functioning and market exposability, however, suboptimal implementation has been hindered by low digital fluency and inadequate technological placings.

These conditions underline the need for research that aligns profitability strategies with the structural and institutional realities of emerging markets. Such context-specific studies will strengthen the global literature and support policymakers and practitioners in developing more adaptive and sustainable banking models.

Third, the allocation of questions about bank profitability based on their sources is dominated by Banks And Bank Systems with 25 articles, Journal Of Risk And Financial Management with 24 articles, Cogent Economics And Finance with 19 articles, International Journal Of Financial Studies with 16 articles, Journal Of Banking And Finance with 14 articles, Sustainability Switzerland with 13 articles, Investment Management And Financial Innovations with 9 articles, Asian Economic And Financial Review with 8 articles, Cogent Business And Management with 8 articles, and Journal Of Central Banking Theory And Practice with 8 articles (see Figure 6).



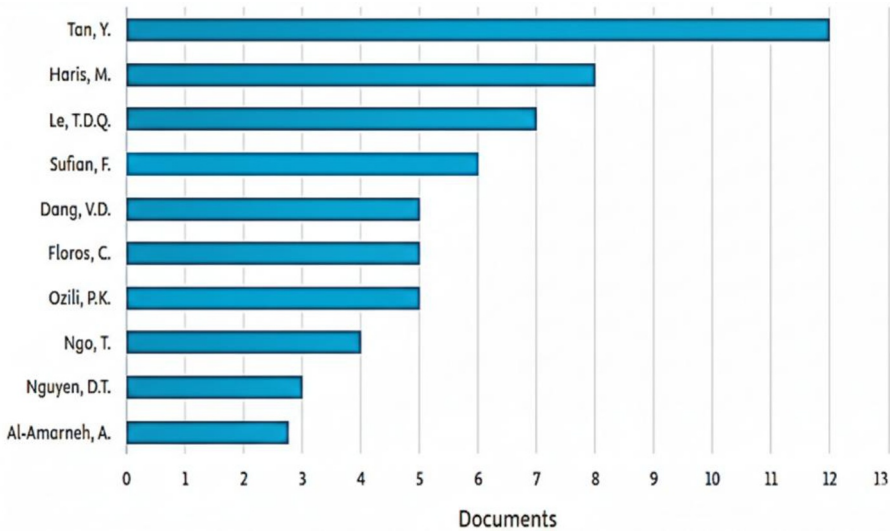
Source: Scopus database 2025

**Figure 6.** Distribution of publications related to bank profitability (top 10 sources)

Figure 6 shows the distribution of publications related to bank profitability based on the journal sources in which they were published. The available data shows that Banks and Bank Systems is the primary source with 25 articles, then the Journal of Risk and Financial Management 24 items. It means that the studies focusing on banking profit are mainly published in risk and financial management journals. These sources have made an important contribution to the literature on bank profitability.

In addition, the present analysis also shows that top economics and finance journals are contributing significantly to breaking research in bank profitability and showing considerable focus on risk management, macroeconomic policies, and external determinants affecting banks' performance. These findings provide a clearer picture of the main publication channels for research related to bank profitability and highlight the importance of the literature originating from these sources.

Fourth, the distribution of research related to bank profitability based on authors shows no clear dominance. Among the top 10 authors, Tan, Y. has written 12 articles, Haris, M. has written 8 articles, Le, TDQ has written 7 articles, Sufian, F. has written 6 articles, Dang, VD has written 5 articles, Floros, C. has written 5 articles, Ozili, PK has written 5 articles, Ngo, T. has written 4 articles, Nguyen, DT has written 4 articles, and Al-Amarneh, A. has written 3 articles (see Figure 7).



Source: Scopus database 2025

**Figure 7.** Distribution Of Publications Regarding Bank Profitability (top 10 authors)

In Figure 7, the distribution of publications regarding bank profitability is presented by author. Data indicate that no author consistently dominates although there are a number of prolific authors in this area. For example, Tan, Y., has 12 articles, followed by Haris, M., with 8. However, most authors in this field are involved in a small number of articles spread across various journals, reflecting the collaboration and diverse contributions of many researchers.

"The distribution provides an evidence of the multidisciplinary nature of this research on bank profitability among the academics across countries and institutions. The range of authors further shows increasing international cooperation and the global dimension of a topic such as bank profitability. Large numbers of researchers have worked on some aspects of this research question and, with each applied theoretical approach, the richness of the observations becomes more interesting for a better appreciation to how banks make profit.

*RQ3: What are the theoretical and practical implications from a future research perspective.*

This research was conducted on 551 articles retrieved from the Scopus repository. VOSviewer was used to demonstrate that the results may have theoretical and practical implications for further research on bank profitability. The results of data analysis using VOSviewer will help researchers and practitioners to better understand the assumptions and findings related to bank profitability. The results of bibliometric analysis using VOSviewer can indicate which variables have been extensively studied by previous researchers and which variables have not been widely explored, which serves as a basis for future research. From a practitioner's perspective, the results of literature analysis using VOSviewer will assist practitioners in implementing sustainable bank profitability in financial institutions and promote the development of more effective



**Table 2.** Keywords by authors.

<b>Rank</b>	<b>Keyword</b>	<b>Total link strength</b>
1	Profitability	709
2	Bank profitability	461
3	Banking	339
4	Credit risk	112
5	Bank performance	94
6	Financial crisis	88
7	Return on assets	88
8	Covid-19	85
9	Financial system	81
10	Commercial banks	78

Source: Scopus data, 2025

Based on the mapping results and the review of previous studies, clear gaps remain in the existing literature. Most prior research has focused on countries or regions with similar and more advanced banking market conditions (see Figures 3 and 5), which limits the generalizability of the findings. Future research should therefore include countries or regions with developing banking systems or more diverse market structures to better capture variations in institutional, regulatory, and economic environments. Filling this gap will offer a more holistic view of bank profitability across the world and explain its importance in meeting challenges and opportunities confronted by differing banking systems. A more comprehensive view covering (additional) aspects will facilitate an enhanced knowledge of the drivers of bank profitability in different economic markets and thus also serve to promote models of banking which are more dynamic, inclusive and sustainable.

## 6 Conclusion

Bank profitability is still one of the most fundamental barometers for financial soundness, as well as a prerequisite for competitiveness and long-term survivability. What we find in our systematic review and bibliometric analysis of research from Scopus index during 1989 to 2025 is that there is growing interest in the topic of bank performance, though primarily for the most developed banking systems allowing for limited generalizability. This raises the question for further studies in emerging markets with heterogeneous institutions and business environment. All in all, this study contributes to an overall understanding of the economic, regulatory and technological drivers of bank profitability aimed at guiding more effective policies and strategies in order to strengthen financial performance in a highly globalized banking industry.

## 7 Research Limitations and Suggestions for Further Research

This study has several limitations. First, relying solely on the Scopus database may introduce selection bias and exclude relevant studies from other reputable sources such as Web of Science, ProQuest, or Google Scholar, thereby limiting the breadth and

generalizability of the findings. Second, the analysis included only open-access articles, which may reduce the diversity of perspectives typically represented in a comprehensive review. Third, the bibliometric analysis, which relies on metadata and keyword co-occurrence using VOSviewer, provides a broad overview of trends but cannot fully capture deeper theoretical, methodological, or contextual insights from each study.

Future research is recommended to:

1. Use multiple databases to expand literature coverage and strengthen external validity.
2. Include non-open access articles to enhance diversity and representativeness.
3. Combine bibliometric techniques with qualitative thematic analysis or quantitative meta-analysis to obtain deeper insights into the determinants of bank profitability, particularly in developing countries.

## Authors' contributions

Conceptualisation, Intan Puspita Sari; Methodology, Riskin Hidayat; Investigation, Intan Puspita Sari; Analysis, Intan Puspita Sari and Sri Hermuningsih; Original draft preparation, Intan Puspita Sari and Sri Hermuningsih; Review and editing, Riskin Hidayat, Sri Hermuningsih, and Taufik Abd Hakim; Supervision, Sri Hermuningsih and Riskin Hidayat.

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