International Journal of Economic sand Management Research

e-ISSN : 2830-2508
p-ISSN : 2830-2664

Research Article

Triple-Layer Themes in ROA Literature: A Bibliometric Mapping and Research Agenda for ARDL Modeling Evidence in Indonesian Banking

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Abstract: This study aims to map the literature on stagflation, fintech lending, and financial resilience in relation to Return on Assets (ROA) in the Indonesian banking sector, and to propose an ARDL-based research agenda for further development. Using a descriptive-quantitative approach, the bibliometric analysis employs tools such as Publish or Perish and VOSviewer to systematically map both global and domestic scientific publications. This analysis identifies key research trends, thematic linkages, and scholarly collaborations concerning macroeconomic stress, digital disruption, and banking performance. The study integrates bibliometric insights with ARDL-based econometric findings to examine both short- and long-term effects. Unlike previous studies that focus solely on partial variable relationships, this research provides a more holistic perspective by combining literature mapping with empirical modeling. The bibliometric analysis reveals three primary clusters: (1) Fintech Lending, which emphasizes the growth of digital financial services, with a focus on regulation and financial inclusion in the post-COVID-19 era; (2) Macroeconomic Dynamics, which explores stagflation, inflation, and GDP, with ARDL modeling applied for long-term analysis; and (3) Bank Profitability, which examines ROA, credit risk, and liquidity, highlighting the importance of banking resilience. While stagflation and ARDL are less frequently explored in current research, they remain critical in macroeconomic discussions. By combining fintech, financial stability, and macroeconomic factors, this study presents a valuable research direction, particularly for emerging economies like Indonesia.

Keywords: Stagflation, Return on Asset (ROA), Fintech Lending, Bank Resilience, ARDL Modeling, Bibliometric Analysis.

Received: MAarch, 22th 2025
Revised: April, 06th 2025
Accepted: April, 20th 2025
Published: April, 23th 2025

Curr. Ver.: April, 23th 2025

1. Introduction

In recent years, banking profitability—commonly measured by Return on Assets (ROA)—has faced significant pressure due to global economic turbulence. One of the most pressing issues is the phenomenon of stagflation, a condition marked by high inflation coupled with stagnant economic growth. Empirical evidence shows that inflation expectations and macroeconomic uncertainty have a stronger negative effect on bank performance (ROE and ROA) in the US than other macroeconomic conditions[1]. The findings suggest that higher macroeconomic risk (GDP, Inflations) and exchange rate fluctuations contribute to greater financial uncertainty[2]. The euro area continues to face risks of financial market fragmentation. At present, these risks are linked to stagflation—a situation where high inflation and economic stagnation occur at the same time[3].

Stagflation is a situation where the economy grows slowly, unemployment rises, and inflation is high. These combined factors make economic management more difficult. Stagflation and recession both reduce economic performance, but stagflation includes inflation, while recession mainly reflects a drop in economic activity.[4] This situation not only undermines purchasing power but also heightens credit risk, thereby affecting the overall financial performance of banks[5][6].

On the other hand, the rise of financial technology, particularly fintech lending, has reshaped the financial industry landscape by offering alternative financing mechanisms outside the traditional banking system. While this innovation brings efficiency, it also introduces new competition for banks in credit distribution[7][8]. The study [9] highlights the important role of FinTech in improving microfinance. The study from[10] confirms that higher levels of digital credit alternatives reduce bank profitability. ROA and NIM decline notably, especially in countries with weaker financial systems. The results hold true not only at the national level but also across individual commercial banks. The findings[11] show that fintech lending pushes banks to be more efficient and reduce credit risk. Rather than increasing risk-taking, banks improve their credit quality. The synergy between fintech and banks supports this process. The integration of financial technology with commercial banks brings both benefits and risks. These risks are transmitted through innovative products, customer experiences, and capital flows, influencing banks' risk management and operational performance[12].

To maintain financial stability and performance, banks must optimize their internal resilience, as reflected in capital adequacy (CAR) and liquidity indicators (LDR). These ratios serve as key pillars in safeguarding the banking system's stability, especially under economic stress and digital disruption[13][14]. CAR plays a role in influencing bank profitability by reflecting the bank's ability to manage risk. Some studies show that higher CAR increases ROA, while others find the impact to be negative or insignificant[15]. Economic theory assumes that a stable long-run relationship exists between variables, with constant means and variances over time. However, many empirical studies show that this assumption often does not hold true in time series analysis. As a result, cointegration methods, including the ARDL approach, are sometimes applied, estimated, or interpreted incorrectly. This study discusses the challenges related to the proper use of the ARDL cointegration method[16].

Despite the significant impact of these three dimensions—macroeconomic pressures (inflation and GDP), fintech lending developments, and banking resilience (CAR and LDR)—on ROA, their interrelations have yet to be systematically mapped within the scholarly literature, particularly through bibliometric approaches and empirical analysis in the Indonesian context. This includes the application of econometric approaches, such as the ARDL model, to determine both short- and long-term effects. The specific aims and focus of this study are to: 1). Identify global and domestic research trends related to stagflation, fintech lending, and banking stability in relation to Return on Assets (ROA); 2). Illustrate conceptual linkages and patterns of scientific collaboration through bibliometric analysis; 3). Determining the most highly cited papers and the academic journals in which they were published; and 4). Identify existing research gaps and propose directions for future studies.

2. Preliminaries or Related Work or Literature Review

2.1 Stagflation

In the 1970s, stagflation was driven by a major oil price shock, along with strict monetary policies that may have made the situation worse. More recently, slow responses to inflation have raised fears of stagflation. If central banks are too lenient while aiming for price stability, it may unsettle inflation expectations, leading to instability in both prices and financial markets, and slowing economic growth[17]**.** Bank Indonesia defines stagflation as a condition where the economy slows down while inflation remains high, sometimes even reaching the level of recession. This situation increases uncertainty in global financial markets, causes capital outflows—especially portfolio investments from emerging markets—and leads to currency depreciation in many countries[18]. The causes of stagflation are still debated. Some experts blame loose fiscal and monetary policies, while others point to austerity or oil price shocks. Stagflation refers to a situation where high inflation and high unemployment happen at the same time[19].

2.2 Fintech Lending

Fintech is a modern financial solution that operates outside conventional banking, aiming to improve access to finance. The global trend has moved from focusing only on lending to embracing digital innovations in payments and service distribution[20]. P2P lending is an online platform that connects lenders and borrowers without traditional financial intermediaries. It offers a new form of investment and funding, but also carries high risks due to unsecured loans and limited information about borrowers. Analyzing credit risk is crucial in this system[21]. FinTech credit provided through P2P platforms serves as an alternative to traditional bank loans. It helps meet funding needs for individuals and companies using digital technology[22]. Technology Acceptance Theory explains that users are more likely to adopt a system if it is easy to use and useful[23]. The rise of peer-to-peer lending and third-party payments has reduced bank income and increased risks, especially in city, rural, and non-listed banks. These services weaken loan and deposit growth[24].

2.3 Bank Resilience and Profitability

Earnings reflect a company's net profit over a certain period. In banking, earnings show how efficient and strong a bank is in supporting operations. According to Rivai et al. (2013), earnings are assessed using ROA, ROE, and NIM[25]. Bank resilience can be measured using CAR and LDR. A high CAR shows strong capital, but too high may reduce efficiency. A high LDR may indicate liquidity risk. Bank Indonesia sets the CAR minimum at 8% and LDR maximum at 110%[26]. ROA is an indicator of bank profitability and asset efficiency. The greater the ROA, the better the bank's performance[26]. ROA is used to measure a bank's profit from its assets. A higher value indicates stronger financial performance.[27]

2.4 Bibliometric Analysis

Bibliometric analysis constitutes a rigorous quantitative approach employed to systematically examine the structural dynamics of scholarly communication, encompassing citation trajectories, co-authorship interrelations, and the evolution of thematic discourse across academic literature[28][29]. Bibliometric investigations frequently deploy advanced quantitative methodologies to interrogate bibliographic datasets, such analyses entail a comprehensive evaluation of academic outputs—including journal articles, scholarly papers, patents, and other intellectual artifacts—to uncover interrelated patterns, structural paradigms, and transdisciplinary linkages among researchers, institutions, and nations[30].

2.5 Econometric ARDL Modeling

The Panel Autoregressive Distributed Lag (ARDL) approach was employed to rigorously assess both the short-run dynamics and long-run equilibrium relationships among the explanatory variables, utilizing the Error Correction Model (ECM) framework to extract cross-sectional heterogeneity and temporal adjustments within the panel data structure[31]. The ARDL modeling framework offers nuanced insights into both long-run and short-run elasticities, enabling a rigorous assessment of the magnitude and direction of variable responses, while simultaneously validating the theoretical consistency of sign expectations associated with each regressor[32].

3. Proposed Method

This study adopts a descriptive-quantitative approach underpinned by bibliometric techniques to systematically examine the intellectual and thematic development of research on stagflation, fintech lending, and financial stability in banking performance. The methodological framework employs Publish or Perish to extract and quantify citation metrics from reputable academic databases, namely Crossref. Concurrently, VOSviewer is utilized to construct and interpret bibliometric network visualizations, enabling an in-depth analysis of co-authorship patterns, keyword co-occurrence, and citation interrelations.

4. Results and Discussion

In this research, bibliometric analysis is utilized to systematically explore the trajectory of academic literature concerning stagflation, fintech lending, and financial system resilience with a particular focus on profitability indicators such as Return on Assets (ROA) and the application of ARDL econometric models. The bibliometric mapping process involved curating scholarly data from the Crossref database, targeting up to 1,000 articles published from 2015 to 2025.

Data acquisition was initiated using the Publish or Perish (PoP) tool, applying a combination of relevant keywords—"stagflation (inflation, GDP), fintech lending, bank stability and profitability, econometric ARDL"—and filtering results between 2015 and 2025. Crossref was chosen due to its open-access nature and extensive indexing capabilities.

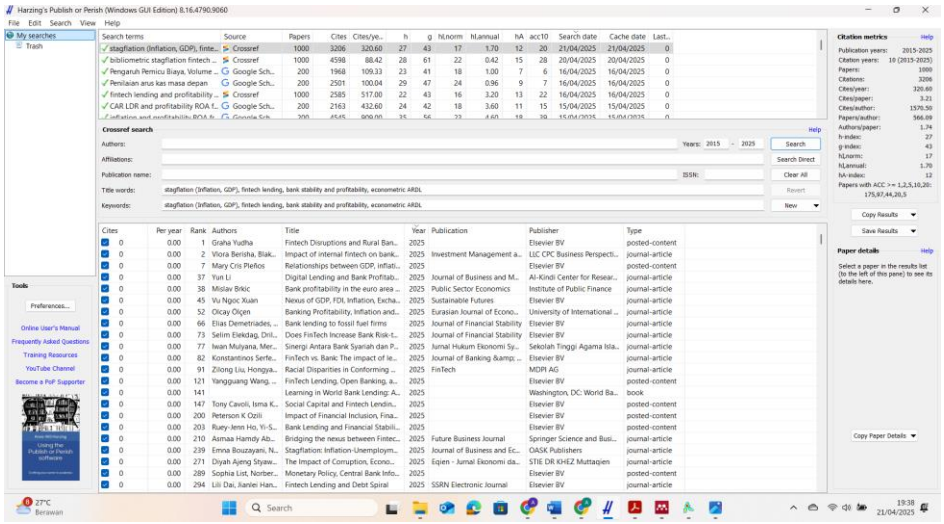

Figure 1. Metadata Search Results Through Publish or Perish Software

The metadata retrieved via Publish or Perish were subsequently formatted into RIS files, which are required for bibliometric visualization processes. These RIS datasets were imported into VOSviewer, a tool that enables the graphical mapping of scholarly output on topics such as stagflation, fintech lending, banking resilience, ROA, and ARDL econometric approaches. The visual outputs generated include network, overlay, and density visualizations, each offering distinct insights into publication trends, thematic clusters, and research intensity. Through this integrative visualization strategy, the study seeks to elucidate the evolution of discourse within this domain and propose directions for future academic inquiry.

Citation metrics Help

Publication years:	2015-2025
Citation years:	10 (2015-2025)
Papers:	1000
Citations:	3206
Cites/year:	320.60
Cites/paper:	3.21
Cites/author:	1570.50
Papers/author:	566.09
Authors/paper:	1.74
h-index:	27
g-index:	43
hI,norm:	17
hI,annual:	1.70
hA-index:	12
Papers with ACC >= 1,2,5,10,20:	175,97,44,20,5

Figure 2. Citation Metric Data and Search Results from Publish or Perish Software

The bibliographic search resulted in a detailed dataset comprising journal titles, publication years, publishers, and citation frequencies. These data were systematized to establish a citation-based ranking, enabling the identification of the most influential works in the field. The bibliometric analysis revealed that Publication and Citation Range: Publications span from 2015 to 2025, with 1,000 papers and 3,206 total citations. Productivity and Impact: The average citations per year is 320.60, and per paper is 3.21. The average authors per paper is 1.74, indicating collaboration. However, the papers per author value (566.09) seems incorrect. Quality Indices: An h-index of 27 and a g-index of 43 suggest several well-cited papers. hI,norm = 17 and hI,annual = 1.70 reflect steady impact. Citation Distribution: 175 papers have at least one citation, but only 5 papers have more than 20 citations, indicating limited high-impact publications. These publications show steady impact with some highly cited papers. Collaboration contributes to citation growth. However, improving quality, visibility, and ensuring data accuracy is needed to enhance future research impact.

4.1 Bibliometric Interpretation Based on Network Visualization

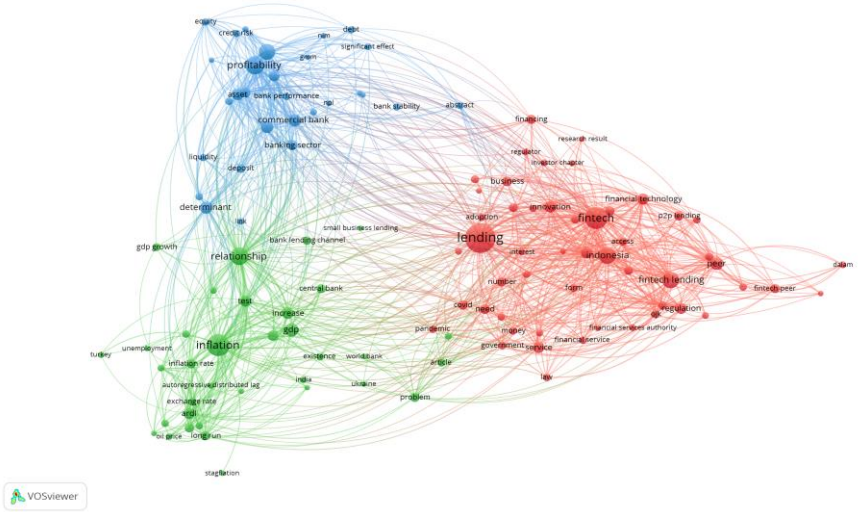

Figure 3. Visual depiction of these interrelationships based on metadata processed through Publish or Perish and analyzed using VOSviewer

The following is a bibliometric interpretation based on overlay visualization :

1. Cluster Identification by Color

The network visualization identifies three major thematic clusters, each differentiated by color:

a) **Red Cluster**: Centers around themes such as *fintech*, *lending*, *peer-to-peer lending*, and *Indonesia*, suggesting a regional and technological focus on digital financial services.

b) **Green Cluster**: Comprises terms like *inflation*, *ARDL*, *GDP*, *relationship*, and *stagflation*, indicating a strong emphasis on macroeconomic modeling and long-run economic variables.

c) **Blue Cluster**: Includes concepts such as *profitability*, *commercial bank*, *credit risk*, and *ROA*, highlighting the analytical focus on financial performance and risk assessment in banking institutions.

2. Node and Edge Visualization Analysis

Nodes (Keywords Representation):

a) Each node in the network represents a frequently occurring keyword or concept derived from the analyzed literature.

b) The size of the node reflects the frequency of occurrence—larger nodes such as *lending*, *fintech*, and *relationship* denote their central role across various publications.

c) Keywords like *ROA* (Return on Assets) and *ARDL* are situated in key positions within their clusters, indicating their significant thematic interconnections.

Edges (Keyword Linkages):

a) Edges depict the co-occurrence of terms within the same publication. The thickness and quantity of edges demonstrate the strength and frequency of these associations.

b) For example, *ARDL* shows strong connections with *inflation*, *GDP*, and *exchange rate*, underscoring its frequent application in macroeconomic analyses.

c) Similarly, *fintech lending* is tightly connected with *regulation*, *access*, and *peer*, reflecting scholarly attention toward regulatory concerns and financial accessibility.

Proximity Between Nodes:

a) Spatial closeness between nodes implies frequent joint appearances in academic articles.

b) For instance, *profitability* and *commercial bank* appear in close proximity, supported by multiple linkages, as profitability metrics like ROA are commonly applied in banking studies.

c) *Stagflation* appears more peripheral but maintains linkages with *inflation*, *oil price*, and *unemployment*, consistent with its economic implications.

3. Thematic Interpretation by Topic

Stagflation:

a) Positioned within the green cluster and surrounded by related macroeconomic terms such as *inflation*, *oil price*, *exchange rate*, and *unemployment*.
b) Commonly studied within the context of macroeconomic instability, and typically analyzed using econometric techniques like the ARDL model.
c) Indicates a research interest in examining long-term dynamics between inflationary pressures and economic stagnation.

Fintech Lending:

a) Located within the red cluster with strong emphasis on *lending*, *fintech*, *peer*, *regulation*, and the geographical tag *Indonesia*.
b) Suggests an academic focus on regulatory frameworks, technological adoption, and the evolution of digital credit systems in developing economies.
c) Associated keywords such as *financial service*, *access*, and *COVID* reflect the pandemic's role in accelerating digital financial inclusion.

Financial System Resilience & ROA:

a) Represented in the blue cluster, where keywords such as *profitability*, *credit risk*, and *commercial bank* are dominant.
b) *ROA* serves as a central profitability indicator, widely employed in empirical studies of financial institution performance.
c) The proximity of terms like *liquidity*, *credit risk*, and *bank performance* suggests an integrated approach to analyzing banking sector stability and risk management.

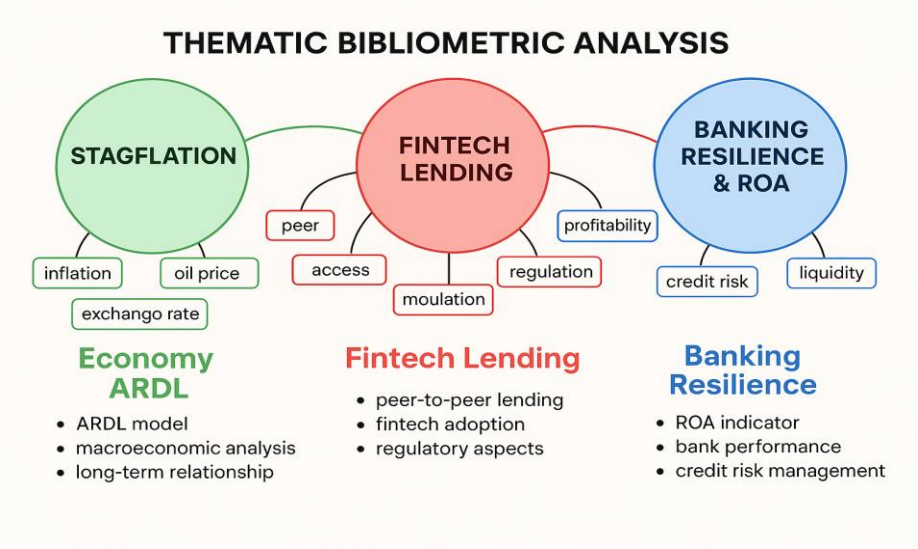

Figure 4. Infographic thematic bibliometric analysis

The infographic and bibliometric analysis show three main research areas: fintech lending, macroeconomic analysis using ARDL, and bank profitability (especially using ROA). The fintech lending cluster focuses on digital financial services like peer-to-peer lending, especially in countries like Indonesia. Research here often discusses technology use, regulation, and financial inclusion, with added attention during the COVID-19 pandemic. The ARDL cluster highlights studies using the ARDL model to understand long-term effects between macroeconomic variables such as inflation, GDP, and stagflation. This method is popular for examining economic instability and shocks. The banking and profitability cluster centers on how banks manage risks and stay profitable, with ROA being a common measure. This area explores how factors like credit risk and liquidity affect financial performance.

Overall, the connections between these topics show that fintech, macroeconomics, and banking performance are closely linked. Understanding these relationships helps researchers and policymakers improve financial systems in today's changing economic environment.

4.2 Bibliometric Interpretation Based on Overlay Visualization

The following is a bibliometric interpretation based on overlay visualization :

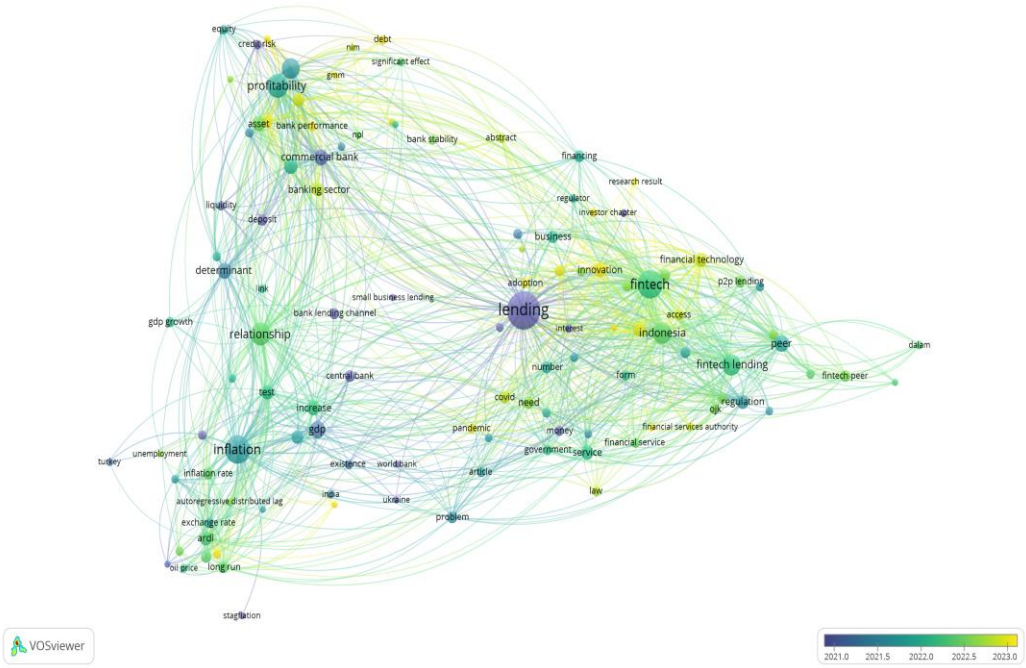

Figure 5. Overlay Visualization

The overlay visualization represents :

1. **Stagflation & ARDL (Inflation and ARDL Econometric Model)**
   Keywords like stagflation, inflation, oil price, exchange rate, and ARDL appear in the bottom-left area with colors ranging from blue to green, indicating most of this research was conducted in 2021–2022. The ARDL model is commonly applied in macroeconomic studies to analyze long-run relationships among variables such as inflation, interest rate, and oil price. This shows stagflation-related studies were more prominent early in the timeline, particularly as a response to post-pandemic economic shocks.
2. **Fintech Lending**
   Keywords like fintech, peer, P2P lending, Indonesia, and regulation are in green to yellow shades, indicating growing relevance and research interest from 2022 to 2023. Studies focus on technology adoption, OJK regulation, and digital financial inclusion, with specific attention to Indonesia's context. The topic is closely linked to terms like covid, innovation, and access, suggesting fintech's rapid growth in response to the pandemic.
3. **Financial System Resilience & ROA**
   Keywords like profitability, ROA, bank performance, credit risk, and commercial bank are mostly in blue-green hues, indicating research in banking resilience and profitability peaked around 2021–2022, and is still ongoing though not as intense as fintech topics. ROA remains a key indicator for assessing how well banks withstand external shocks and manage credit risk.

The overlay visualization reveals a shift in research focus from macroeconomic issues like stagflation and ARDL (early 2021) toward more contemporary topics such as fintech lending and digital financial regulation (2022–2023). Meanwhile, financial system resilience and banking profitability remain consistent themes, with ROA serving as a key indicator. The interconnection among keywords suggests a strong relationship between digital transformation and financial stability, emphasizing the need for a multidisciplinary approach in analyzing today's economic dynamics.

4.3 Bibliometric Interpretation Based on Density Visualization

The following is a bibliometric interpretation based on density visualization:

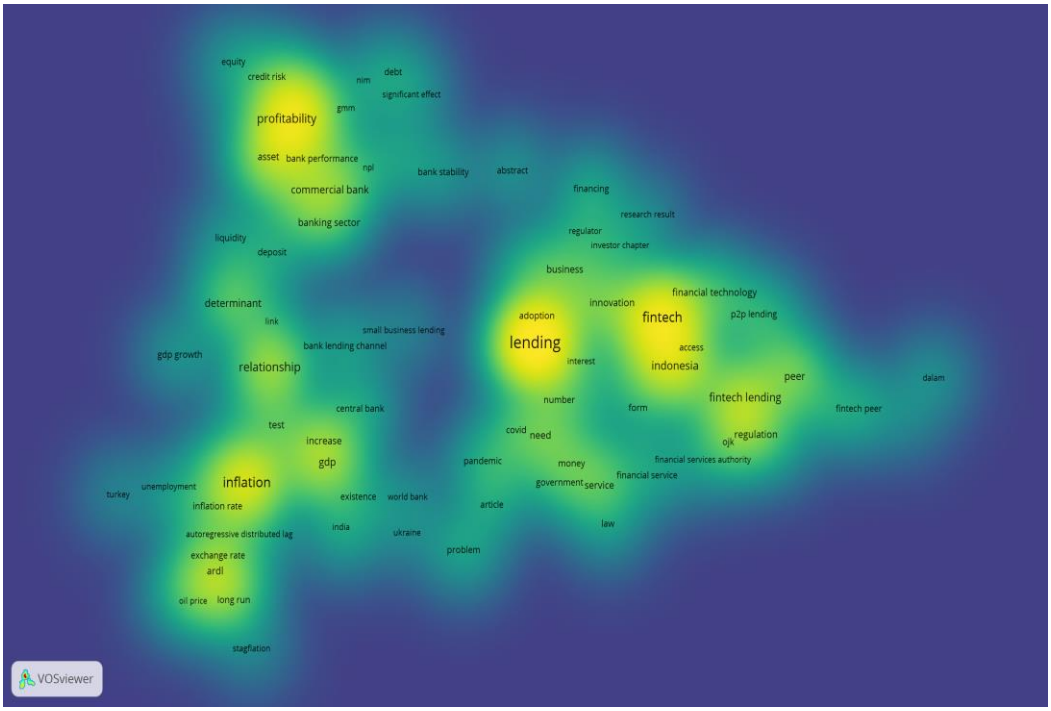

Figure 6. DensityVisualization

1. **Stagflation & ARDL (Inflation and ARDL Econometric Model)**
   Keywords such as stagflation, ARDL, oil price, and inflation appear in light green zones, indicating moderate to low publication density compared to central themes like lending or fintech. Their position in the lower left quadrant suggests this is a niche research area. The ARDL model is primarily used to explore long-run impacts of macroeconomic variables like inflation and oil prices in stagflation contexts.
2. **Fintech Lending**
   Keywords like fintech, fintech lending, P2P lending, Indonesia, and regulation appear in bright yellow zones, highlighting high research activity in this area. This implies that fintech lending is a rapidly emerging and highly relevant topic in current literature. Its connection with terms such as access, innovation, and OJK (Indonesia's financial authority) indicates a strong focus on technological adoption, financial inclusion, and regulation in the Indonesian context.
3. **Financial System Resilience & ROA**
   Keywords like profitability, ROA, commercial bank, and credit risk lie in the yellow to light green region on the upper left of the map. This indicates strong research presence, although not as dominant as fintech-related themes. ROA is widely employed as a key indicator to evaluate bank efficiency and resilience, especially under economic pressure or risk.

This density visualization shows that fintech lending is the most intensely studied topic, followed by banking profitability and inflation. Stagflation and ARDL, while less prominent, remain relevant in macroeconomic discussions. This suggests that an interdisciplinary approach—linking fintech, financial stability, and macroeconomic dynamics—is a promising direction for research, particularly in developing economies like Indonesia.

4.4 Bibliometric Interpretation Based on Co-authorship Density Visualization

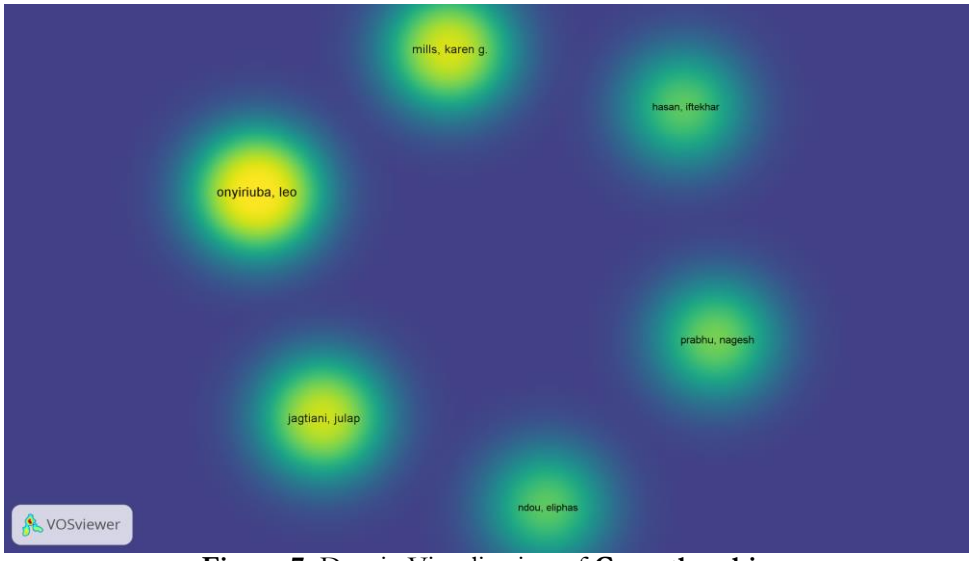

Figure 7. DensityVisualization of **Co-authorship**

This co-authorship visualization reveals the key contributing authors in the relevant research domain. The bright yellow to light green colors signify higher publication density or scholarly impact. Each author appears in a distinct cluster, suggesting that collaborative networks are relatively fragmented, and no central or dominant research community has emerged yet in this thematic area.

1. Onyiriuba, Leo High density suggests strong contributions in banking resilience and financial system risk, especially in developing economies. 2. Mills, Karen G. Closely linked to fintech lending and financial inclusion, particularly with SMEs and digital transformation research. 3. Jagtiani, Julapa Actively publishes on fintech, P2P lending, and the impact of technology on bank profitability. 4. Hasan, Iftekhar & 5. Prabhu, Nagesh Both emphasize regulatory frameworks and monetary policy, possibly contributing to ARDL-based empirical research in global contexts. 6. Ndou, Eliphas More aligned with research on inflation, stagflation, and macroeconomic dynamics in developing countries, often utilizing ARDL modeling.

6. Conclusions

The study provides a comprehensive integration of bibliometric and econometric analyses to explore the impact of stagflation, fintech lending, and financial stability on ROA in Indonesian banking. The bibliometric analysis reveals three dominant clusters: Fintech Lending (Red Cluster): Highlights the rapid growth of digital financial services in Indonesia, emphasizing regulatory challenges and financial inclusion post-COVID-19. Macroeconomic Dynamics (Green Cluster): Focuses on stagflation, inflation, and GDP, with ARDL modeling as a key tool for long-term analysis. Bank Profitability (Blue Cluster): Centers on ROA, credit risk, and liquidity, underscoring the need for resilience in banking performance. While the topics of stagflation and ARDL may not be at the forefront of current research, they continue to hold significance within macroeconomic discourse. This implies that an integrated research approach, combining fintech, financial stability, and macroeconomic factors, presents a valuable avenue for exploration, especially in emerging economies such as Indonesia.

Limitations: The bibliometric data relies solely on Crossref, which may not fully represent the breadth of global academic discourse. The study is limited to Indonesia and a specific timeframe (2015–2025), restricting broader generalization and long-term trend analysis. Academic collaboration remains fragmented, as shown in co-authorship mapping.

Practical Implications: Regulators must strike a balance between fostering financial innovation through fintech and maintaining the stability of the banking system. Banks need to strengthen their internal resilience and embrace digital transformation to stay competitive and profitable. Monitoring Return on Assets (ROA) is crucial in the digital era to assess the financial health of institutions.

Future Research Recommendations: Expand the literature review by using additional bibliometric databases like Scopus and Web of Science for a more comprehensive inclusion of studies. Conduct comparative studies across different countries to test the findings in diverse economic contexts. Incorporate qualitative research methods, such as interviews and

case studies, to gain deeper insights into the fintech-banking relationship. Investigate the use of hybrid methodologies, combining bibliometric mapping, econometric modeling and machine learning, to forecast future trends in the sector.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data Availability Statement: All data generated or analyzed during this study are included in this published article [and its supplementary information files]. Additional datasets may be made available by the author upon request, subject to ethical and legal considerations.

Acknowledgments: The author sincerely appreciates the valuable support and academic guidance provided by the Master of Management Program, Faculty of Economics and Business, University of 17 August 1945 (UNTAG) Surabaya, which significantly contributed to the successful completion of this research.

Conflicts of Interest: The author declares no conflict of interest. The funders had no involvement in the study's design; in the collection, analysis, or interpretation of data; in the preparation of the manuscript; or in the decision to publish the findings.

References

[1] R. Abaidoo and H. Anyigba, "Bank performance variability and strands of inflationary conditions," *European Journal of Management and Business Economics*, vol. 29, no. 3, pp. 235–253, 2020, doi: 10.1108/EJMBE-09-2018-0100.

[2] R. Abaidoo and E. K. Agyapong, "Financial market uncertainty and the macro economy: the role of governance and institutional quality," *Economics (Emerald Publishing Limited)*, vol. 26, no. 1, pp. 89–107, 2024, doi: 10.1108/ECON-02-2023-0034.

[3] P. Benigno, P. Canofari, G. Di Bartolomeo, and M. Messori, "Stagflation and fragmentation: the euro area at the crossroads," *Monetary Affairs and Policy*, 2022. [Online]. Available: https://sep.luiss.it/wp-content/uploads/2022/06/WP4.22-Stagflation-and-fragmentation.-the-euro-area-at-the-crossroads-1.pdf

[4] Y. Liu, "Detailed Review of Stagflation and Recession," *SHS Web of Conferences*, vol. 169, p. 01057, 2023, doi: 10.1051/shsconf/202316901057.

[5] International Monetary Fund (IMF), "World Economic Outlook: War Sets Back The Global Recovery," *World Economic Outlook*, April 2022, p. 199. [Online]. Available: https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022

[6] Badan Pusat Statistik, "Laporan Perekonomian Indonesia 2024," Jakarta, 2024.

[7] M. A. Chen, Q. Wu, and B. Yang, "How Valuable Is FinTech Innovation?," *Review of Financial Studies*, vol. 32, no. 5, pp. 2062–2106, 2019, doi: 10.1093/rfs/hhy130.

[8] R. P. Buckley, D. W. Arner, and D. A. Zetzsche, "Driving Digital Financial Transformation in Support of the SDGs - A Strategy to Leverage FinTech for Financial Inclusion, Development, Stability and Integrity," *SSRN Electronic Journal*, 2019, doi: 10.2139/ssrn.3387359.

[9] U. P. Offiong, K. Szopik-Depczyńska, K. Cheba, and G. Ioppolo, "FinTech as a digital innovation in microfinance companies – systematic literature review," *European Journal of Innovation Management*, vol. 27, no. 9, pp. 562–581, 2024, doi: 10.1108/EJIM-04-2024-0462.

[10] P. J. Cuadros-Solas, E. Cubillas, and C. Salvador, "Does alternative digital lending affect bank performance? Cross-country and bank-level evidence," *International Review of Financial Analysis*, vol. 90, p. 102873, 2023, doi: 10.1016/j.irfa.2023.102873.

[11] E. Junarsin, R. Y. Pelawi, J. Kristanto, I. Marcelin, and J. B. Pelawi, "Does fintech lending expansion disturb financial system stability? Evidence from Indonesia," *Heliyon*, vol. 9, no. 9, p. e18384, 2023, doi: 10.1016/j.heliyon.2023.e18384.

[12] G. Li, E. Elahi, and L. Zhao, "Fintech, Bank Risk-Taking, and Risk-Warning for Commercial Banks in the Era of Digital Technology," *Frontiers in Psychology*, vol. 13, p. 934053, 2022, doi: 10.3389/fpsyg.2022.934053.

[13] Basel Committee on Banking Supervision, "Evaluation of the impact and efficacy of the Basel III reforms," Bank for International Settlements, 2022. [Online]. Available: www.bis.org

[14] Otoritas Jasa Keuangan (OJK), "Penguatan Sektor Jasa Keuangan Dalam Menjaga Pertumbuhan Ekonomi: Laporan Kinerja OJK Tahun 2023," 2024.

[15] M. Aryasari and B. Usman, "Exploring the Impact of Digital Transformation and Banking Factors on the Financial Performance of Conventional Banks Listed on the Indonesian Stock Exchange," *Jurnal Ekonomi, Bisnis & Entrepreneurship*, vol. 18, pp. 733–756, 2024.

[16] Emeka and A. Kelvin, "ARDL için ayrıntılı bir döküman," *Journal of Statistical and Econometric Methods*, vol. 5, no. 3, pp. 63–91, 2016.

[17] D. P. Rath, "Low Stagflation Risk in India," *RBI Bulletin*, vol. 77, pp. 93–104, Dec. 2023.

[18] W. Prawira, S. Arifin, and Nuryadi, "The Impact of Spillover Stagflation on Capital Utilization in East Java (in Macroeconomic Perspectives) 2014-2022," *International Journal of Global Accounting, Management, Education & Entrepreneurship*, vol. 4, no. 1, pp. 49–59, 2023, doi: 10.48024/ijgame2.v4i1.109.

[19] B. Chineme and K. A. Okoro, "Impact of Inflation and Stagflation on Economic Growth in Nigeria," *Sustainability*, vol. 11, no. 1, pp. 1–14, 2019.

[20] M. Fersi, M. Boujelbéne, and F. Arous, "Microfinance's digital transformation for sustainable inclusion," *European Journal of Management and Business Economics*, vol. 32, no. 5, pp. 525–559, 2023, doi: 10.1108/EJMBE-10-2022-0332.

[21] C. F. Dharmastuti and J. Laurentxius, "Factors and Benefits that Affect Lender's Interest in Giving Loans in Peer to Peer (P2P) Lending Platform," *Binus Business Review*, vol. 12, no. 2, pp. 121–130, 2021, doi: 10.21512/bbr.v12i2.6359.

[22] K. Y. Kwon, P. Molyneux, L. Pancotto, and A. Reghezza, *Banks and FinTech Acquisitions*, vol. 65, no. 1, Springer US, 2024, doi: 10.1007/s10693-022-00396-x.

[23] H. Medyawati, M. Yunanto, and E. Hegarini, "Financial Technology as Determinants of Bank Profitability," *Journal of Economics, Finance and Accounting Studies*, vol. 3, no. 2, pp. 91–100, 2021, doi: 10.32996/jefas.2021.3.2.10.

[24] J. D. T. Tobing and C. Wijaya, "The effect of peer-to-peer lending and third-party payments on conventional commercial bank profitability in Indonesia," *International Journal of Management*, vol. 11, no. 5, pp. 691–701, 2020, doi: 10.34218/IJM.11.5.2020.062.

[25] T. R. Panglipursari and U. P. Lesno, "Reinforcing Indonesian Banks' Earnings Stability: A GCG-Moderated Analysis of Risk Profile, Bank Digitalization, and FinTech P2P Lending," *Seybold Reports*, vol. 18, pp. 440–453, Jan. 2024, doi: 10.5281/zenodo.10394407.

[26] D. N. Sari, "The effect of the growth of financial technology companies peer to peer lending on the performance of banking in Indonesia," *Bulletin of Fintech and Digital Economy*, vol. 1, no. 1, pp. 42–60, 2020.

[27] W. Prawira and H. Susilowati, "Assessing How FinTech Peer-to-Peer Lending, Banking Digitization, and Banking Credit Risk Affect the Financial Performance of Indonesian Commercial Banks KBMI 4 in Digital Era," *Jurnal PAMATOR*, vol. 17, no. 4, pp. 620–638, 2024, doi: https://doi.org/10.21107/pamator.v17i4.27944.

[28] L. Judijanto and W. S. Astutik, "Fintech and Traditional Banking: A Bibliometric Study of Financial Innovation," *Western Scientific Interdisciplinary Studies*, vol. 3, no. 3, pp. 528–539, 2025.

[29] Y. Kryvych and T. Goncharenko, "Banking strategic management and business model: bibliometric analysis," *Financial Markets, Institutions and Risks*, vol. 4, no. 1, pp. 76–85, 2020, doi: 10.21272/fmir.4(1).76-85.2020.

[30] R. K. Sharma, "Bibliometric Analysis of Fintech Trends," *International Journal of Scientific Research in Engineering and Management*, vol. 8, no. 5, pp. 1–5, 2024, doi: 10.55041/ijsrem33833.

[31] M. Busu, "Analyzing the Impact of the Renewable Energy Sources on Economic Growth at the EU Level Using an ARDL Model," *Mathematics*, vol. 8, no. 8, 2020, doi: 10.3390/math8081367.

[32] Y. N. Ahmed and H. Delin, "Current Situation of Egyptian Cotton: Econometrics Study Using ARDL Model," *Journal of Agricultural Science*, vol. 11, no. 10, p. 88, 2019, doi: 10.5539/jas.v11n10p88.