



The Bibliometric Analysis of Bank Stability

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Abstract

The central role of banks in the economy has been getting more attention since the global crisis occurred in 2008 which was caused by the bankruptcy of large banks in the United States. The collapse of the economic system has had implications for high recovery costs so efforts to maintain bank stability must be thought continuously. The studies to analyze literature reviews on the subject of bank stability have never been specifically conducted therefore this study aims to determine and analyze literature mapping on bank stability by meta-data network and studies trends over the last 10 years (2013-2023). We used a literature review study method (a bibliometric analysis approach) to review 165 articles during the observation period. The results of this study shows that studies of bank stability associated with other keywords such as monetary policy, bank profitability, shadow banking, and price stability are still rarely conducted. Then, based on the development of studies trends over 2013-2023 shows a downward trend. This also opens up space for the study of bank stability considering that its existence is needed to prevent a global economic crisis. Furthermore, based on the density visualization, it shows that themes that are rarely associated with bank stability are efficiency, commercial bank, systemic risk, and price stability so these three variables could become study opportunities in the future.

Keywords

bank stability, bibliometric analysis, literature review.

INTRODUCTION

As a financial institution, banks have an intermediation function in their business model, specifically connecting parties with surplus money to those with deficit money (Basaran-Brooks, 2022). Due to their actions in carrying out intermediation, banks have a central role in an economy (Abaidoo et al, 2023). The central role of banking has been increasing attention since the global economic crisis occurred in 2008 which was caused by the collapse of large banks in the United States which had systemic risks that had an impact on the collapse of the banking industry and the entire economic system (Ali & Puah, 2019; Shahriar et al. 2023).

The collapse of the economic system in 2008 also caused losses to banks globally reaching \$1.8 trillion (Ghassan & Guendoz, 2019). Meanwhile, the recovery costs that must be paid are also very expensive, for example, the United States government injected a sum of \$9.7 trillion into mortgage holders, on the other hand, the United

Kingdom government and European countries provided funds amounting to \$2 trillion for the package of rescue and bailout

funds (Dhameja, 2010). These costs did not include the social impacts caused by the global crisis, such as decreasing welfare, increasing unemployment rates, and increasing suicide rates in several countries in America and Europe (Chand, 2021; Chang et al, 2013).

The economic crisis that occurred due to bank instability also took years to recover it, so the thinking to maintain bank stability continues to be conducted by regulators, politicians and scholars (Shahriar et al, 2023; Banna et al, 2022; Boussaada, 2021).

The studies on variables related to bank stability is also constantly conducted, one of which is the existence of macro-banking governance, namely the existence of deposit insurance institutions (Haddou & Mkhinini, 2023; Anginer et al, 2014). Although deposit insurance institutions in several studies be able to maintain bank stability (Alam et al, 2021; Ashraf et al, 2020 ; Jumreornvong et al, 2018), several studies showed on the contrary that the existence of deposit insurance institutions causes an increase in moral hazard and triggers banks to invest in risky projects, particularly if insurance premium payments are used by a fixed rate

(Alam et al, 2021; Demirgüç-Kunt, A., & Detragiache, 2002, Freixas & Rochet, 2008 ; Merton, 1977).

Other macro governance, such as regulations specifically related to capital regulation, has a significant positive impact on bank stability (Adem, 2023; Zhang & Ortis, 2021; Rahman et al, 2018; Kim & Santomero, 1988). The positive relationship is caused by the bank's incentives not to invest in risky projects to avoid larger capital reserves. Meanwhile, other regulatory aspects such as the obligation to disclose information have also a significant and positive impact on the level of bank stability (Bischof et al 2021 & Nier & Baumann, 2006). Furthermore, Basaran-Brooks (2022) noted that the obligation to disclose information has become a global agenda so non-compliance with this regulation can disrupt the course of world trade transactions.

Furthermore, bank stability is also affected by the level of competition. Albaity et al (2019) said that the severity of competition has a negative impact on the level of bank stability. However, there were the opposite opinions stated that bank stability has a positive impact on competition which is caused by increasing efficiency and is associated with high profitability and excellent asset quality (Goetz, 2018; Maji & Hazarika, 2018).

Moreover, bank stability is affected by interest rates, particularly low-interest rates or negative interest rates, which make banks more stable (Boungou, 2020), while Delis and Kouretas (2011) stated the opposite that low-interest rates will encourage banks to transact the off-balance sheet and disrupt the level of bank stability, hereafter, the low-interest rates will triggers banks to withdraw as much liquidity as possible, making banks have to turn their money into riskier projects to pay interest to depositors.

Regarding liquidity, creativity in generating liquidity has a positive impact on bank stability (Javid et al, 2023), nonetheless for high levels of liquidity, the studies results are still inconsistent on whether liquidity will reduce bank stability or even maintain it. Some scholars stated that high liquidity affects bank stability, particularly if the banks are in a country that has poor financial markets (Rokhim & Min, 2020; Nguyen et al, 2017; Diamond & Dybig, 1983). Meanwhile, other scholars viewed high liquidity will disrupting bank stability, characterized by increased risk

in bank portfolios (Khan et al, 2017; Nguyen & Boateng, 2015; Acharya & Naqvi, 2012).

The studies of bank stability are also often linked to various variables such as income diversification, Gross Domestic Product (GDP) growth, inflation, ownership structure, shadow banking activities, digital financial inclusion, type of ownership, ownership structure, number of independent board members, political stability and control. corruption, business models, (Adem, 2023 ; Rashid et al, 2017 ; Banna & Alam, 2021 ; Kusi et al, 2022 ; Srairi, 2013 ; Ozili, 2018 ; Moudud-Ul-Huq et al, 2022 ; Anggaredho & Rohim, 2017).

Based on this background, we consider that quite a lot of studies on bank stability have been conducted. However, considering the importance of this subject for a country's welfare, the studies related to bank stability must be carried out by looking for the variables that affect it. For this reason, this article was written to analyze literature mapping on bank stability theme by creating the following meta-data network covering studies trends. Moreover, we consider that based on our pre-study, the studies to analyze literature reviews on the subject of bank stability have never been specifically conducted.

This article was written in several parts. The first part is the introduction, the second part is the methodology, the third part is the results and discussion, the fourth part is the conclusions, the fifth part is the study limitations and recommendations, and the sixth part is the references.

METHODS

For conducting this study, we used a bibliometric analysis approach (literature review method). According to Tranfield et al (2013), the literature review is a study carried out to map existing literature within certain disciplinary boundaries, while the bibliometric analysis approach is used to analyze data descriptively on all published articles relating to variables of study so other scholars can obtain a complete explanation of the network between variables and examine trends in studies carried out during research observations (Heersmink et al, 2011).

In carrying out a bibliometric approach, we followed the steps taken by Fahminia et al (2015), include: first, formulation of keywords. In formulating keywords, we inputted the words "bank

Table 1. Screening Results

Items	Descriptions
Observation Periods	2013-2023
Keywords	Bank Stability
Source	Google Scholar
Final Screening	165 articles
Number of Citations	104.350 citation
Citations/year	10.435 citation
Citations/papers/year	63,2 x

Source: Authors own (2024)

stability" through the Publish or Perish (POP) application, which is software for obtaining statistical information to search for published articles. We used the database from Google Scholar and we limited the range of observations to the 2013-2023 period with a maximum search limit of 200 references.

Secondly, initial search results and screening stage. From the initial search results, 200 references were obtained in the form of articles, books, and speech texts. In this study, we carried out another action by only reviewing articles, so from this action we obtained final screening results totaling 165 articles.

Thirdly, compiling data. In this process, we inputted the screening results into RIS format so the data is ready for processing.

4. Data processing and analysis. In carrying out the processing, we used the Vosviewer application and analyzed by interpreting the results were obtained.

RESULTS AND DISCUSSION

Based on the PoP application input and after going through the screening process, we obtained 165 articles that were published from 2013 to 2023. The total number of citations for all these articles is 104,350 citations and if we divide it per year, the average number of citations for all articles is 10,435 citations of the total citations per year, if we reduce them per article, on average each article is cited 63,2 times/year (table 1).

After PoP processing, we processed the data through the VOSviewer application so we obtained 4 grouping clusters of keywords, as follows: (1) Cluster 1, containing assets, bank risk, banking stability, competition, efficiency, fintech, Islamic bank, shadow banking. (2) Cluster 2, containing bank credit, banking system, case, commercial bank, determinant, fund, loan. (3) Cluster 3, containing bank competition, bank stability, capital, monetary policy, price stability, and

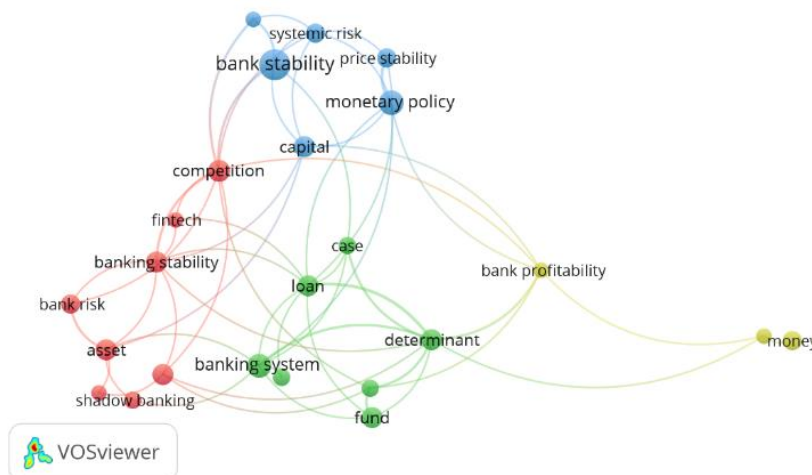


Figure 1. Network Visualization of Bank Stability

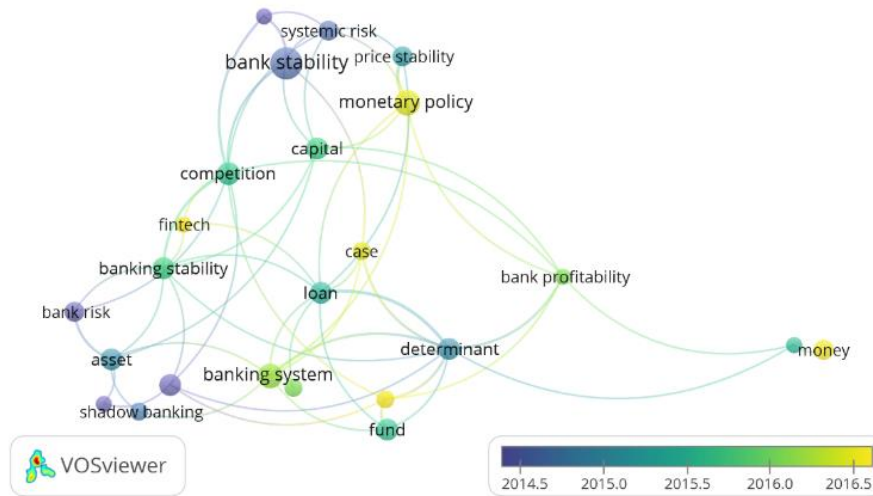


Figure 2. Overlay Visualization of Bank Stability

systemic risk. (4) Cluster 4, containing bank profitability, empirical evidence, and money.

Based on network visualization from Vosviewer, over the last 10 years, the keyword bank stability (as an entity) has often been associated with systemic risk, price stability, capital, competition, and case. Meanwhile, the keyword banking stability (as an industry) is often associated with competition, capital, bank risk, loan, fintech, asset, efficiency, and determinant. The network visualization shows that both in terms of entity (bank stability) and industry (banking stability) there has been no research that links the keywords monetary policy, bank profitability, shadow banking, and price stability so that future research can be carried out on this matter. (see figure 1).

Then, based on the development of studies trends by VosViewer results. The

growth of published articles in 2013-2023 has been a downward trend, it shows from the massive development of articles only up to 2018 (see figure 2). Furthermore, if checked manually, the highest publications for this keyword occurred in 2014 and 2013, such as 36 and 34 articles in each year. Then these publications decreased in 2015 and decreased after 2018 with the lowest point being in 2022 with zero (0) publications (see figure 3). This also opens up study space for bank stability considering that its existence is urgently needed to prevent the global economic crisis (Saif-Alyousfi & Saha 2021).

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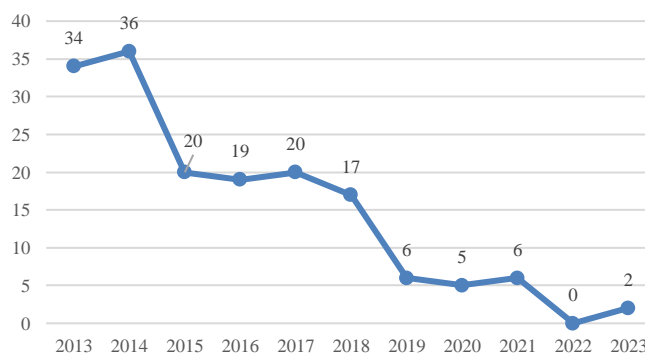


Figure 3. Publication Trends of Bank Stability

Table 2. Top Three of Journal Publishers on the Theme of Bank Stability

Journal Name	Number of Publications
Journal of Banking & Finance	24 articles
Journal of Financial Stability	11 articles
Journal of Financial Intermediation	9 articles

Source: Authors own processed (2024)

Table 3. Top Five Highest Citation Authors

Authors	Titles	Years	Citation
Laeven & Valencia	Systemic Banking Crises Database	2013	4.010 x
Brunnermeier & Sannikov	A Macroeconomic Model with a Financial Sector	2014	2.600 x
Acemoglu et al	Systemic Risk and Stability in Financial Networks	2015	2.302 x
Beck et al	Islamic vs. Conventional Banking: Business Model, Efficiency and Stability	2013	2.212 x
Berger & Bouwman	How Does Capital Affect Bank Performance During Financial Crises?	2013	1.940 x

Source: Authors own processed (2024)

Table 4. Authors Productivity on the Theme of Bank Stability

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Based on the trends of the studies, it shows that the journal publisher the most articles related to bank stability is the Journal

of Banking & Finance (24 articles), followed by the Journal of Financial Stability (11 articles) and the Journal of Financial Intermediation (9 articles). Furthermore, based on the number of citations, the article "Systemic Banking Crises Database" written by Leaven & Valencia (2013) is the most cited (4.010 citations). The articles number 2 and 3 that are most frequently cited are "A Macroeconomic Model with a Financial Sector" (2.600 citations) written by Brunnermeier & Sannikov (2014) a total of 2,600 citations and the article "Systemic Risk and Stability in Financial Networks" (2.302 citations) written by Acemoglu et al (2015).

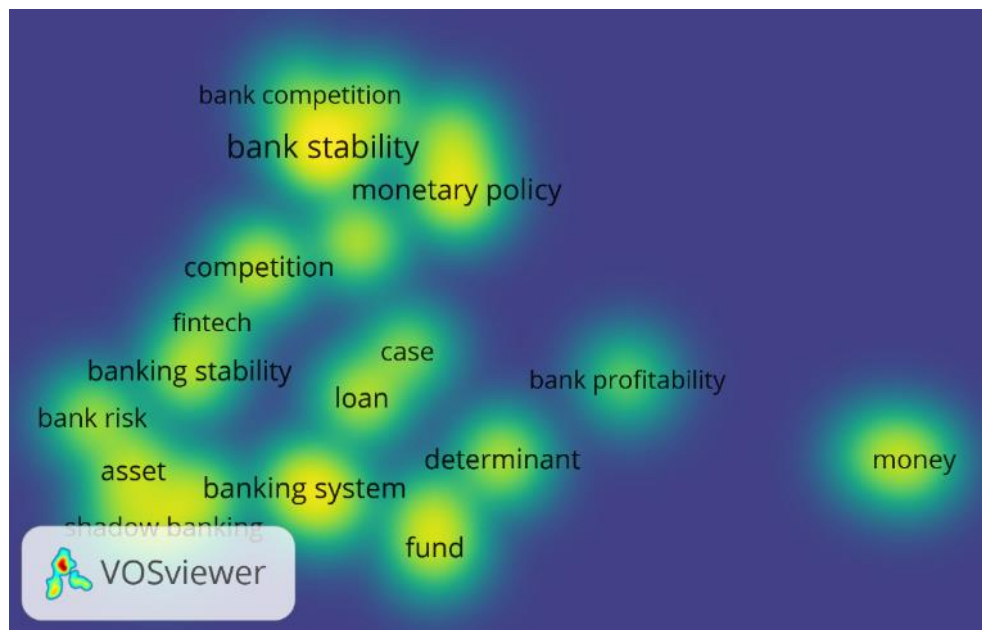


Figure 4. Density Visualization of Bank Stability

Source: Authors own processed (2024)

Then, based on studies trends, it can be shown that from the articles reviewed, there are the names of authors who have often written as first authors regarding bank stability over the last 10 years, namely Berger, Dell'Araccia, and Jimenez, each of whom has written as many as 3 articles. Based on the density visualization in the VosViewer application, it shows that the themes that appeared frequently about bank stability were bank competition, determinants, and monetary policy, meanwhile, the themes that rarely appeared were efficiency, commercial banks, systemic rice, and price stability so that the third thing is this variable could be a future research opportunity (figure 4).

CONCLUSIONS

Based on our pre-study, the studies to analyze literature reviews on the subject of bank stability have never been specifically conducted therefore this study aims to determine and analyze literature mapping on bank stability by creating a meta-data network including studies trends. This article was written with several writing sections. The first part is the introduction, the second part is the methodology, the third part is the discussion, the fourth part is the conclusions, the fifth part is the limitations and recommendations of future study, and the sixth part is the references. For conducting this study, we

used a bibliometric analysis approach (literature review method).

In carrying out a bibliometric approach, we followed the steps taken by Fahminia et al (2015) including (1) Formulating keywords by inputting the words "bank stability" through the Publish or Perish (POP) application based on the database from Google Scholar in the range observations from 2013-2023, (2) Initial results of the search and screening stage, were a collecting of articles, books and also speech manuscripts. After the screening process, the final results obtained were 165 articles. (3) Compiling data (4) Data processing and analysis. The results of this study shows that the keyword of bank stability (as an entity) is often associated with systemic risk, price stability, capital, competition, and case. Meanwhile, the keyword banking stability (as an industry) is often associated with competition, capital, bank risk, loan, fintech, asset, efficiency, and determinant. However, the studies that relationship between bank stability and the keywords of monetary policy, bank profitability, shadow banking, and price stability is still rarely conducted.

Then, based on the development of studies trends from VosViewer data. The growth of published articles in 2013-2023 shows a downward trend. These also opens up study space for bank stability is considered

that its existence is needed to prevent the global economic crisis.

Based on the density visualization in the VosViewer application, it shows that the themes that appeared frequently about bank stability were bank competition, determinants, and monetary policy, meanwhile, the themes that rarely appeared were efficiency, commercial banks, systemic risk, and price stability so that the third thing is this variable could be a future research opportunity.

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