



## Literature Review: Development of Credit Union Research Topics Perspectives in The Field of Financial Accounting

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Received : February 15, 2024

Accepted : April 14, 2024

Published : April 30, 2024

Citation: Setyaningrum, P., Carolina, A. (2024). Literature Review: Development of Credit Union Research Topics Perspectives in The Field of Financial Accounting. *Ijomata International Journal of Tax and Accounting*, 5(2), 465-487. <https://doi.org/10.61194/ijtc.v5i2.1144>

**ABSTRACT:** In the modern era, technological developments are changing so rapidly that they are causing social imbalances, including in the business world. Current entities must be able to adapt to changes in the modern era, one of which is the non-profit Credit Union entity. The purpose of this research is to examine trends in mapping the development of Credit Union research because considering the current conditions, many non-profit entities need information to make decisions quickly, accurately and accountably. This research uses descriptive quantitative methods with a Literature Review model using VOSviewer and Publish or Perish. The data used is secondary data obtained from the official website of the Scopus journal. The research conducted focuses on the sub areas of Financial Inclusion, Consumer Welfare, Commercial Banks and Cooperatives. The research results found a total of 200 Scopus articles from 2018 to 2024 and sorting was carried out to find articles that were relevant to Credit Unions. The results of this sorting found 59 Credit Union articles. Thus, the sample size of this research was 59 articles from the 200 articles found. The development of Credit Unions with analysis of topics, keywords, authors, journal names, organizations and countries is the result of research mapping. Researchers also found that the development of Credit Union research fluctuated every year based on the results of the researchers' analysis. The contribution of this research is to provide an overview of a broader research area for future researchers in the Credit Union research topic focused on financial accounting.

**Keywords:** Credit Union Cooperative, Financial Inclusion, Consumer Welfare, Commercial Banks, Cooperative



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## INTRODUCTION

Over the past decade, expanding financial services to more marginalized groups in developing countries has been critical for financial inclusion to reduce poverty and inequality (Alvarez-Gamboa et al., 2023). Cooperatives are democratic organizations owned and governed by members, who are also workers, producers, or customers of the organization. Despite their

ownership, it shows that they are also investors, patrons and community members ([Voigt & Oelsnitz, 2024](#); [Barra & Ruggiero, 202](#); [Ibikoule et al., 2024](#)). Cooperatives are companies where all members can take part in decision-making and governance processes ([Ferraro et al., 2024](#)). The distinctive feature of cooperatives lies in collective governance and the fact that profits are reinvested in the cooperative or local projects and activities rather than distributed to shareholders. Credit Unions are non-profit entities, providing services to their members. The Credit Union aims to mutually strengthen solidarity, empower and strengthen prosperity among its members and the achievement of goals. Credit Unions can be seen from their financial management capabilities, marketing activities, increasing and empowering membership and other business fields ([Garcia & Gonzaga, 2024](#); [Llewellyn et al., 2021](#)). Based on the understanding that a Credit Union is a financial institution, the main foundation for sustainability lies in the efficient management of funds or savings and loans within the Credit Union ([Gomez-biscarri, 2021](#)). Savings are a type of accumulation of funds to increase capital. Capital is used as principal savings and mandatory savings. Meanwhile, loans are capital or funds given to members to support and drive the economy and develop and improve businesses ([A et al., 2023](#)).

Credit Unions are becoming a more significant topic in the financial sector and have proven to be a professional game changer in overcoming socio-economic imbalances in local communities who cannot access financial services and products ([van Rijn, 2022](#); [Beccalli et al., 2023](#)). Credit Unions are increasingly recognized as having the ability of large corporate organizations to make significant contributions to individuals living on low incomes. ([Mashange et al., 2022](#); [Wang et al., 2022](#)) Credit Unions are considered the main solution to minimize information asymmetry and high transaction costs that cause market imperfections and credit rationing ([Meira & Ramos, 2023](#)). Credit Unions can increase access to financial services for low-income families ([Cuong et al., 2020](#); [Simamora et al., 2023](#)). Credit Unions seek to maximize the benefits they provide to their members, but to successfully achieve a fair socio-economic balance and meet member-driven goals, Credit Unions must be Sustainable ([Kumkit et al., 2024](#)). Credit Union sustainability is also reflected in its continuity or penetration level ([Dereeper et al., 2020](#)). To date, Credit Unions have demonstrated their true cooperative identity and demonstrated a strong commitment to cooperative values ([Simkhada & Bhattarai, 2023](#)). Credit Unions can maintain their distinct cooperative identity. Although credit unions have become larger and more diverse, they still operate as member-owned cooperatives with democratically elected boards of directors, with each member having only one vote, regardless of the amount of deposits in the credit union ([Boadu et al., 2024](#)). This structure is fundamentally different from the shareholder ownership model ([Da Silva et al., 2017](#)) Credit Unions arguably have more flexibility to focus on prosocial goals, such as financial education, financial inclusion, consumer-friendly interest rates, diversity and inclusion, and possible outcomes. Does not increase profits but remains an important part of the Credit Union's identity ([D. G. McKillop & Wilson, 2015](#)) Despite significant changes in size, membership and regulation in recent decades, Credit Unions continue to reflect the identity and values of Cooperatives and are unique compared to Institutions other financial matters in terms of structure and impact.

In the current era of modernization, business plays an important role in the economic progress of a country. Entities such as non-profit Credit Unions play a major role in business progress amidst

the rapid flow of modernization. Before the advent of sophisticated technology, the traditional system was still applied. However, as time goes by, the development of the globalization era must be accompanied by skills in mastering technology and being able to provide creative innovation to develop the business. This phenomenon is considered important as a sector in the world of finance because globally companies are owned by several members and can obtain large benefits ([Maia et al., 2019](#)). Economic benefits are mainly obtained from members who obtain better interest rates on deposits and loans than those provided by conventional financial institutions ([Alvarez-Gamboa et al., 2023](#); [Vik et al., 2023](#)). There have been several studies conducted by previous researchers that focused on cooperative financial institutions in terms of characteristics, structure, cooperative behaviour, performance and contribution of financial cooperatives to the real economy using the Literature Review method ([D. McKillop et al., 2020](#)). This research was motivated by [van Rijn's \(2022\)](#) research on the development of credit unions, the credit union movement, and cooperative values. There is research that is in line with [Cruz & Mariana \(2024\)](#) which discusses the development of Credit Unions and evaluates the financial relevance of the economic sector to the profitability of Credit Unions, ([van Rijn, 2022](#)) emphasizing the need for research on the development of Credit Unions in Asia using other methods. Therefore, researchers want to examine the development of research on Credit Unions with 4 topics: Financial Inclusion, consumer welfare, Commercial Banks, and Cooperatives.

This research aims to examine Credit Unions in Asia using literature review methods and bibliometric analysis studies. Previous research by [D. McKillop et al. \(2020\)](#) used a literature review of Cooperative Financial Institutions. This research was motivated by the research of [D. McKillop et al. \(2020\)](#) which discusses cooperative financial institutions and [van Rijn, \(2022\)](#) discusses the development of Credit Unions, the Credit Union Movement, and cooperative values. So this research focuses on the development of Credit Union research with 4 topics, namely Financial Inclusion, consumer welfare, Commercial Banks, and Cooperatives using bibliometric analysis with the help of VosViewer. This research uses the Scopus-indexed journal database from the Science Direct website, covering the period 2018-2024. This vulnerable period was chosen to expand previous research conducted in 2018, but this research will extend to the 2018-2024 period. The contribution of this research is that it can provide an overview of future research on the development of the credit union movement and as a future direction in overcoming socio-economic imbalances in local communities who cannot access financial services and products. In addition, this research also contributes to social movements, which is relevant considering the increasing need for strong values and ethical behaviour from financial institutions. The research objective or focus of this research is to analyze credit union research on 4 topics: Financial Inclusion, consumer welfare, Commercial Banks, and Cooperatives. Therefore, the results of this research are expected to provide complete information about the development of Credit Union research to researchers and practitioners who are interested in Credit Unions on the 4 topics of Financial Inclusion, Consumer Welfare, Commercial Banks, and Cooperatives in the future in the years that the researchers have determined.

Literature Review is a method that uses various study sources that are considered appropriate for the research objectives ([D. McKillop et al., 2020](#)). The purpose of the literature review is to identify and understand relevant previous research results so that they can be synthesized into a new

theoretical framework ([Hamed et al., 2024](#)). Bibliometric analysis is a method of bibliographic analysis that is based on the assumption that researchers always report the results of their research ([Dande et al., 2024](#); [D. McKillop et al., 2020](#)). By always communicating the results obtained and conducting joint studies on a specific research topic, it is hoped that this will provide progress and develop the knowledge of researchers ([Andoh et al., 2024](#)). Bibliometric analysis helps researchers analyze publication trends because it can be used to evaluate research results in various fields of study ([Andoh et al., 2024](#); [Trivedi et al., 2022](#)). Bibliometric analysis can be carried out using a search process, in the search process it is important to look for database sources that are relevant to the issue being discussed, increasingly to filter articles in bibliographic databases ([de Giovanni et al., 2024](#)). This bibliometric analysis uses the Scopus database, Scopus was chosen because it contains a collection of citations and abstracts of scientific publications which are considered the most complete ([Alkadi et al., 2024](#)). Research by [Liesa & Porcel \(2024\)](#) states that Scopus is widely used in the field of bibliometrics. In this bibliometric analysis, researchers used articles from the Scopus journal. The aspects used in this bibliometric analysis are the keyword Credit Union, using statistical tools to process the findings and visualization of the bibliometric analysis results with the help of Vosviewer software.

This bibliometric analysis aims to dig deeper into information about the development of Credit Unions. The results of this research analysis will be discussed further in the discussion and results of data processing using Vosviewer. With 4 topics: Financial Inclusion, consumer welfare, Commercial Banks, and Cooperatives, researchers will explain them in narrative and graphic form so that they are easier for readers to understand. Therefore, it is hoped that the results of this research will provide complete information about the development of Credit Union research with the 4 topics of Financial Inclusion, consumer welfare, Commercial Banks, and Cooperatives to researchers and practitioners who are interested in this topic in the future, in the years that the researchers have determined. This research is useful for future research, where the results of this research can produce research gaps that are rarely researched or are the newest. This latest research gap will be the perspective of future research as the latest research by future researchers so that the scope or scope of distribution of future research will be wider. Apart from that, this research can also provide benefits for parties related to entities, especially non-profits, in managing their business so that the entity's goals can be achieved.

## METHOD

Researchers used a Literature Review methodology with a Descriptive Quantitative approach to Bibliometric Analysis. For bibliometric analysis, researchers used Vosviewer software to analyze the finding data. Secondary data was used in this research. The data collection technique uses literature studies obtained from the Publish or Perish software by selecting the ScienceDirect Web Journal indexed by Scopus. For article selection, refer to the main discussion of Credit Unions for 4 topics, namely Financial Inclusion, Consumer Welfare, Commercial Banks, and Cooperatives. The population of this research is all articles about the development of Credit Union research from the Scopus Journal spanning the years 2018 to 2024. The reason the researchers took the period

2018 was that this year was the year with the highest level of Credit Union transactions and research at that time was also booming. The population in this study is 200 articles that have been collected in Publish or Perish. The sample used in this research is the subject area of financial accounting research. The sample used by the researcher was 59 Scopus articles, but the results of checking on the Scopus website turned out to be 61 Scopus articles. This is because when checking there is a time difference between checking the Publish or Perish software and the Scopus web. Therefore, the results of the number of articles include additional research that has just been published in the Scopus database. From these differences, the author can add mapping analysis based on organization, journal name, and number of countries, where the results of the data processing are processed from the results of checking the Scopus Journal web. The aim of adding this mapping is so that the analysis results can be broader and can describe future research objects more perfectly.

Bibliometric analysis applies statistical and mathematical models to analyze scientific publications to establish indicators of scientific activity and research performance (Farooq, 2024; Zyoud et al., 2015). Bibliometric analysis is used to evaluate the results of existing scientific work and map scientific fields, search for or trace the development of new knowledge in certain fields in certain periods. Bibliometrics is usually carried out using two approaches, namely the number of publications which functions as an indicator to measure productivity and the number of citations, an indicator that measures the impact of the articles produced (Farooq, 2024; Murgado-Armenteros et al., 2015; Zyoud et al., 2015). The reason researchers use bibliometric analysis is because it can provide measurement results, such as the number of journal publications, citations, keywords, and the distribution of Credit Union topics in Asia. This analysis uses Vosviewer. Vosviewer is an application that can be developed to create and display maps based on bibliometric data. This application provides a text-mining feature that allows users to build and describe visualizations of networks or relationships in journal citations. Vosviewer can present specific information about bibliometric graphic maps. If keywords appear outside the Vosviewer visualization, it means that the keywords appear together with existing publications (Erlina et al., 2024; Murgado-Armenteros et al., 2015).

A bibliometric and systematic literature review approach summarizes the scope of qualitative and quantitative literature to assess publications about Credit Unions (Qing et al., 2024). Systematic reviews increase the transparency of research. While several other researchers have used both approaches in similar studies, issues ahead in the literature include the Vosviewer software adopted to visualize bibliometric analysis. The use of Vosviewer opens up space for examining bibliometric mapping in full. (Osabutey & Jackson, 2024; Oyewole et al., 2024). Vosviewer's display capabilities make very efficient comparisons of past and present literature to reveal how a particular research area is developing. The purpose of using the Vosviewer software application is to find research gaps or loopholes that can be researched by future researchers. Vosviewer software also presents results in the form of clusters for each research topic. This can be used as a reference in looking for research ideas that will carry out similar research so that stagnant research does not occur. The meaning of stagnant research is research that has been around for a long time but is still being discussed or researched again on the same issue but only with a difference in time (research novelty that is not very significant in the research conducted). This Credit Union research also uses the



Scopus database feature in carrying out the process. The researcher took the subject area of business management and accounting for the same period, namely 2018 to 2024.

Figure 1 explains the data collection steps carried out by the author. Bibliometric data is taken automatically from Scopus data using POP (Publish or Perish). Researchers used the keyword "Credit Union Cooperatives" in the first step of the search, which resulted in an initial population of N=200 journals. Final data was obtained by refining the search using the Scopus automatic system to limit results. Researchers filtered the years 2018-2024, Subject area Business "Management and Accounting" and "Economics, Econometric, and Finance," Document type "Article," Keywords "Credit Union" and "Cooperatives." Refinement of the search yielded final data for analysis. The data is n=115 journals. Researchers sort journals that are relevant to the topic. So, the final results obtained data from n=59 journals.

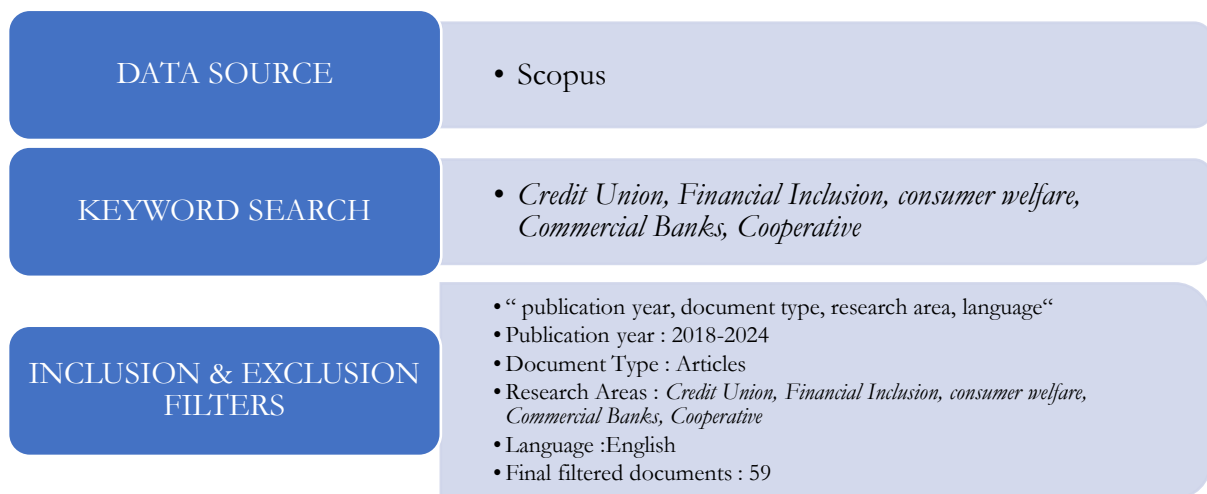
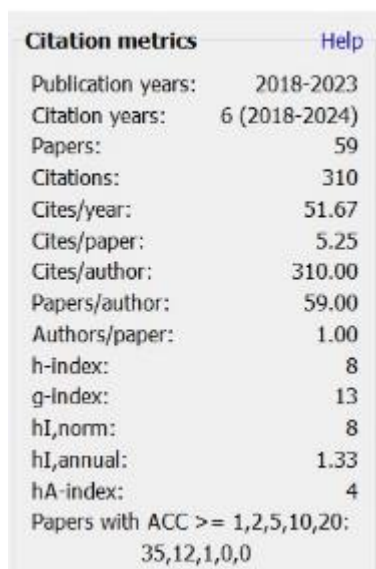


Figure 1. Inclusion and Exclusion Criteria

Figure 1 shows a strict process, Data Source Process, Keyword Search, and Inclusion & Exclusion Filters. Thus, the final filtered documents obtained were 59 articles that would be used for bibliometric analysis.



Citation metrics		Help
Publication years:	2018-2023	
Citation years:	6 (2018-2024)	
Papers:	59	
Citations:	310	
Cites/year:	51.67	
Cites/paper:	5.25	
Cites/author:	310.00	
Papers/author:	59.00	
Authors/paper:	1.00	
h-index:	8	
g-index:	13	
hI,norm:	8	
hI,annual:	1.33	
hA-index:	4	
Papers with ACC >= 1,2,5,10,20:	35,12,1,0,0	

Figure 2. Final Data Filtered Documents Publish or Perish

Figure 2 shows the metric results by Publish or Perish. This research uses the Scopus data source, Publish or Perish data collection, and Document Filter with the keyword "Credit Union Cooperative" for publication years 2018 to 2024. The results obtained in the citation metric for the number of publications were 59 papers with 51.67 citations.

## RESULT AND DISCUSSION

### Number of Publications

In academia, developments in research interests are primarily identified by the volume of published work. Figure 3 depicts the total volume of publications and citations each year. This publication and citation covers "Credit Union Cooperative" from 2018-2024. Annual publications and citations experience ups and downs every year. The highest number of publications will be in 2023, and the highest number of citations will be in 2018. This graph decreased from 2019 to 2020; in 2021, it increased until 2023 and decreased in 2024. It is possible that 2024 has not yet been half a year, and there are limited data. They were obtained by researchers. So, the researcher concluded that only a few people have researched the topic of credit unions. The researcher concluded that annual publications and citations could increase in the coming year because, looking at the graph in 2023, it rose drastically even though 2024 decreased drastically. Still, according to the researcher, 2024, it will increase if articles are published on credit unions in the next few months.

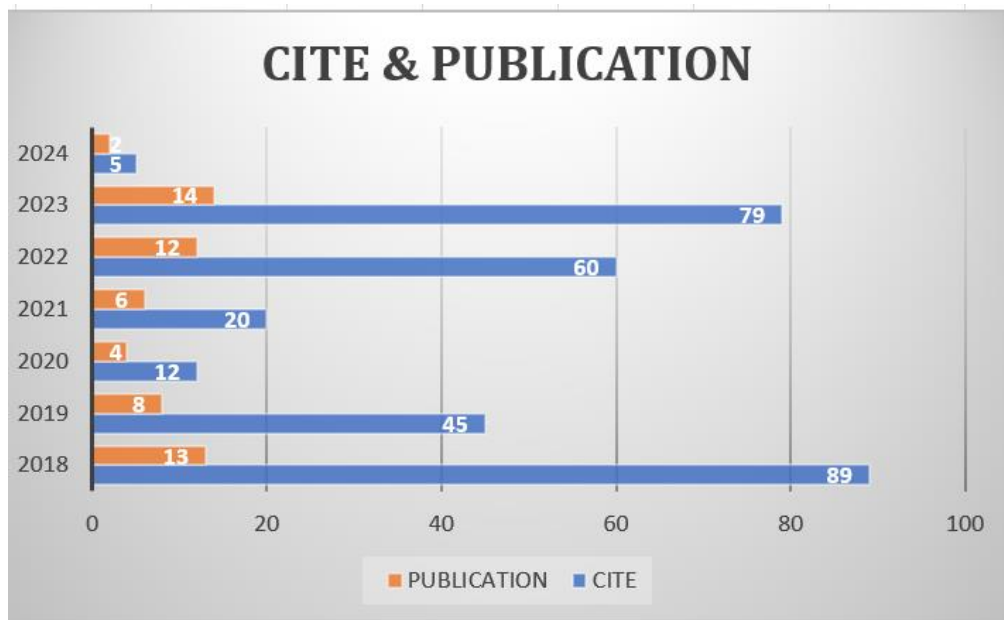


Figure 3. Yearly Literature Growth

### Author Analysis

This authorship analysis uses Vosviewer to describe a list of authors who show significant influence in Credit Unions with four topics: Financial Inclusion, consumer welfare, Commercial Banks, and Cooperatives. This analysis identifies each author based on the number of articles published on the research topic.



Figure 4. Co-Authorship Visualization

Using the established criteria, only 59 met the criteria. As seen in Figure 4. Authors unrelated to each other are not included in the visualization. The size of the circular nodes corresponds to the number of articles, while the lines connecting the nodes indicate collaborative authorship. The colors represent collaborative groups. Green and purple clusters have the same number of



reference items; green has the highest number of links. In that sense, the author who contributed a lot was Pavlovskaya; Marianna was in the highest cluster. A relatively large number of researchers dominate network visualization.

### Keyword Analysis

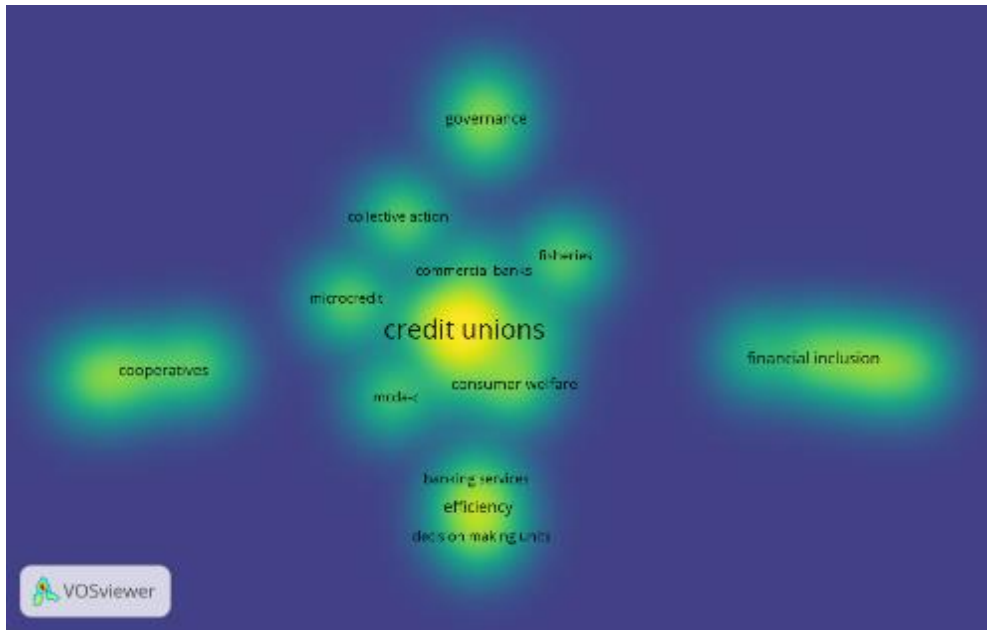


Figure 5. Density Visualization of most cited literature

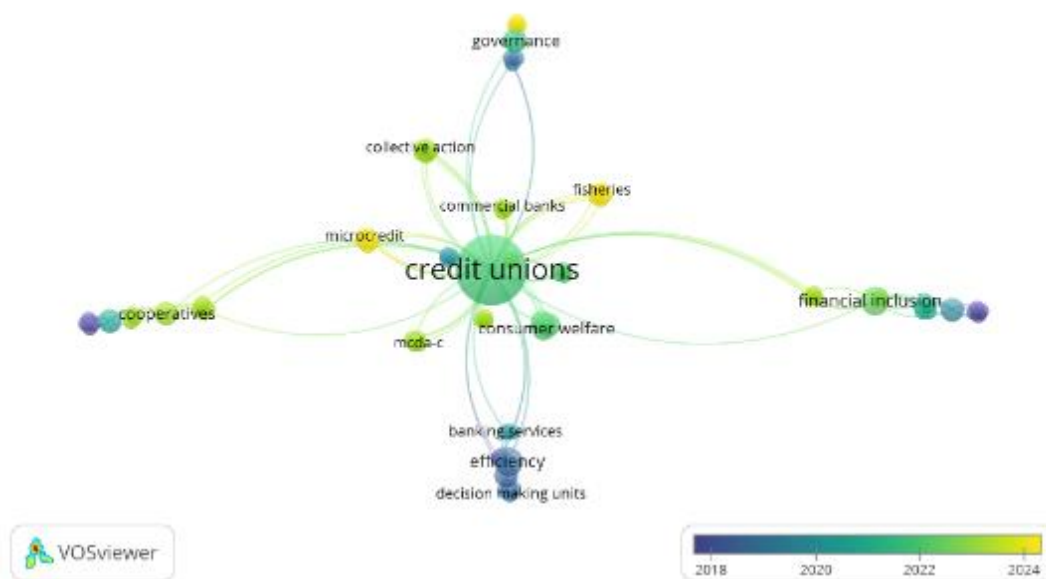


Figure 6. Author Keyword Co-Occurrence

In the Credit Union research, four topics, Financial Inclusion, consumer welfare, Commercial Banks, and Cooperatives, are some essential keywords found through searches, as shown in Figure 6. Financial Inclusion is the keyword most frequently used by authors, appearing 15 in total—link strength 12. The second keyword, Cooperative, which is the most commonly used Cooperative, appears 10 with a total link strength of 9; the third keyword, Consumer Welfare, appears 10 with a total link strength of 8, and the fourth commercial bank keyword appears 10 with a total link strength of 5. It is not surprising that financial inclusion is at the top of the ranking because it is essential for economic empowerment and encouraging sustainable development (Gao *et al.*, 2024; Ghosh, 2024).

### Topic Analysis

This article will develop research on credit unions on four topics: financial inclusion, consumer welfare, commercial banks, and cooperatives. Based on Scopus data. Based on the mapping results, 59 articles met the research study criteria.

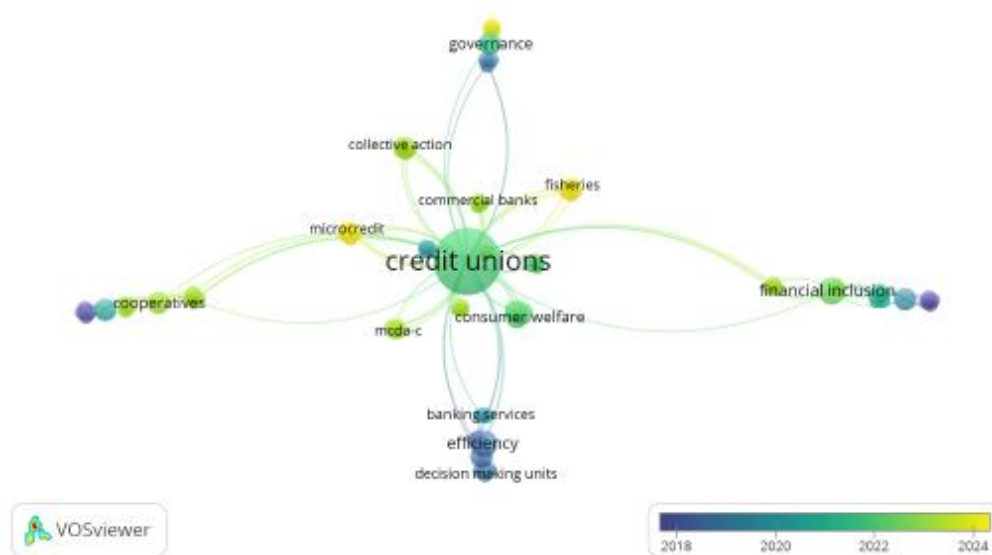


Figure 7. Vosviewer Credit Union mapping data processing

The results of mapping the Credit Union topic, the results of absorption from scientific journal article data originating from Scopus where the Credit Union relationship between the issues above uses Vosviewer Network Visualization, including issues related to Credit Unions are Financial Inclusion, consumer welfare, Commercial Banks, Cooperative. The larger the node size, the more often the author's name appears in the asset data, or it can be interpreted as the author being dominant on a particular research topic because he has a strong network of authorship relationships with other authors. To show the dominance of journals, the focus was on 59 journals according to the research topic; data collection was carried out by looking at various citation indices for each journal, which were then analyzed using VOSviewer software. All clusters that have been visualized have an interest in other clusters. As shown in Figure 7, "financial inclusion" is the most

popular in credit union research. This topic is a trending research topic with the highest number of publications.

### **Analysis Based on 10 Journal Names For Top Total Link Strength**

Analysis based on journal names has been obtained by researchers from the results of the collection which is presented in Table A with journal name, number of documents, citations, and total link strength. Qualitative research in accounting and management is the journal with the highest total link strength, namely 54, and only has 1 document included in Scopus on the topic of Credit Union research. Furthermore, Review of Quantitative Finance and accounting is a journal with a total link strength of 48. The number of link strengths in the journal Review of Quantitative Finance and accounting has a difference of 6. The journal Review of Quantitative Finance and accounting has a greater number of documents, namely 3. Social and environmental accountability journal is a research journal that examines credit unions, the same as the previous journal. The Social and Environmental Accountability Journal has a total link strength of 46, a difference of 2 from the Review of Quantitative Finance and accounting journal. Social and environmental accountability journal has 1 research document. Of the 10 journals described by researchers, the Journal of Business has the lowest total link strength, namely 16. For this reason, researchers in the future can use journal sites with the fewest documents to be able to publish their work.

No	Source	Document	Citations	Total Link Strength
1	Qualitative research in accounting and management	1	3	54
2	Review of quantitative finance and accounting	3	26	48
3	Social and environmental accountability journal	1	2	46
4	International journal of managerial finance	1	5	37
5	Research in international business and finance	1	2	35
6	Journal of financial service research	3	42	34
7	Latin American business review	1	3	24
8	Rausp management journal	3	17	23
9	Public money and management	2	3	17
10	Journal of business	2	59	16

Table A. 10 journals with the top total link strength

Apart from the results of presenting the top total link strength created by the researchers, the researchers also presented the results in the form of Vosviewer data processing images. This aims to determine the dissemination of research results on the Credit Union research topic. The

# Literature Review: Development of Credit Union Research Topics Perspectives in The Field of Financial Accounting

Setyaningrum and Carolina

following are the results of research data processing based on journal names using Vosviewer software which are presented in Figure 8. From the results of data processing with VOSviewer software, it is known that there are a total of 9 clusters, 38 items, 186 links, and a total link strength of 421.

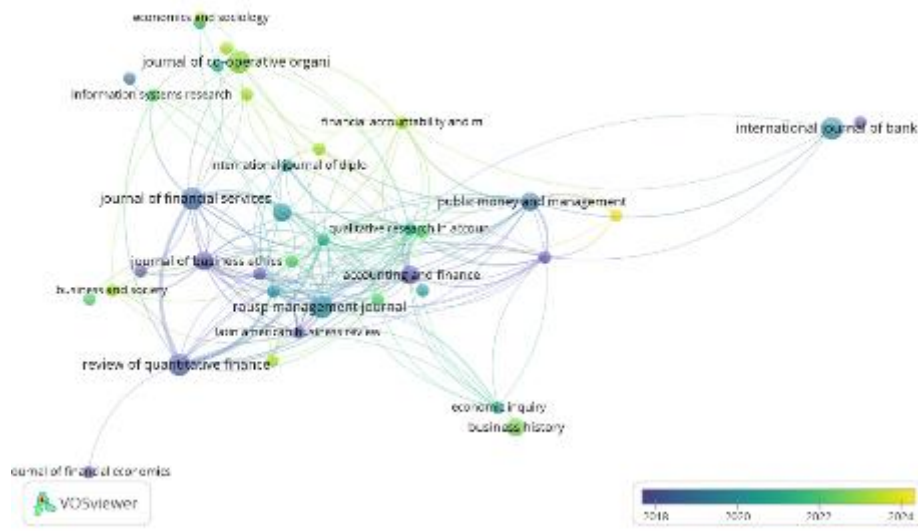


Figure 8. Overlay visualization analysis results for mapping based on journals

Source: Vosviewer Data Processing

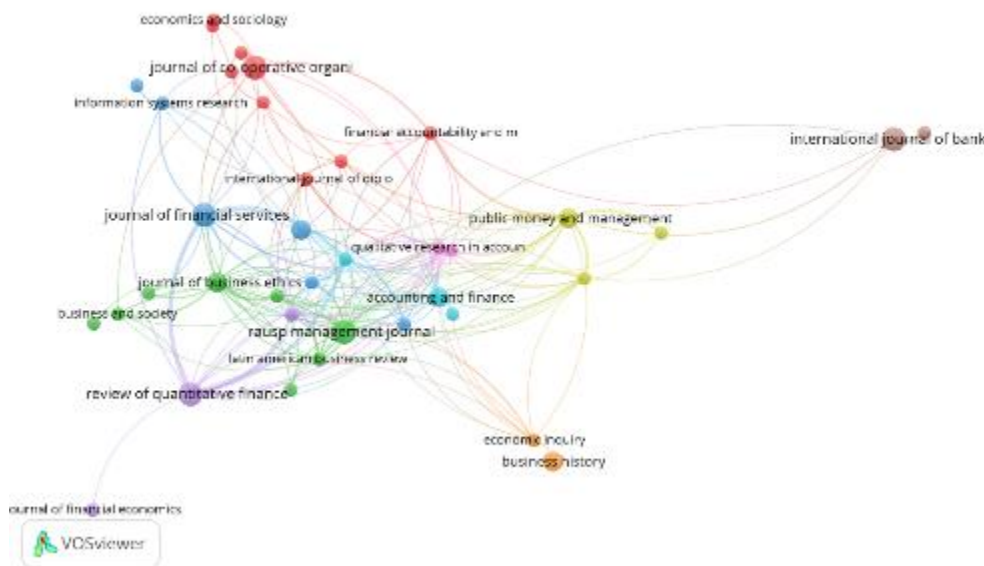


Figure 9. Results of network visualization analysis for mapping based on journals Source: Vosviewer Data Processing

The purpose of density analysis is to see which parts of the research are rarely used. In Figure 10, density visualization analysis for mapping based on journals, there is a yellow color with a wide range. For the slightly yellow color range, it can be confirmed that research on the topic of Credit

Unions is a topic that is rarely researched in this journal. Future authors will likely conduct Credit Union research if they submit it to journals that rarely research Credit Unions.

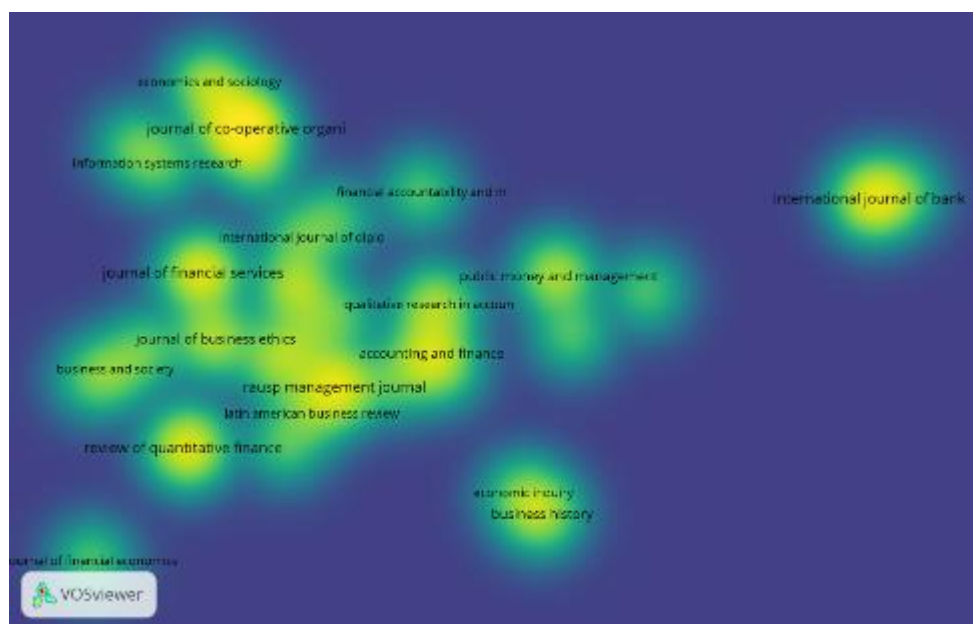


Figure 10 Results of density visualization analysis for mapping based on journals Source: Vosviewer Data Processing

### **Analysis Based on Top 10 Organizations For Total Link Strength**

Mapping based on organizational analysis is presented by researchers in Table B. The purpose of this presentation is to find out which agencies carry out research related to Credit Unions. By knowing the agency conducting the research, researchers in the future, if there is an opportunity, can collaborate in improving research development, especially research on Credit Unions. In this presentation, the order from top to bottom is based on total link strength. Goizueta Business School, Emory University, Atlanta, United States is an organization or agency that has the highest total link strength, namely 405. The second place is occupied by the organization Business School, University of Colorado Denver, United States with a total link strength of 389. Indian School of Business, Telangana, Hyderabad, India is the organization in third place in the total link strength ranking, namely 389. Terry College of Business, University of Georgia, Athens, United States is the organization in fourth place in total link strength 389. There is something unique about the results This mapping is that the Indian School of Business, Telangana, Hyderabad, India, and the Terry College of Business, University of Georgia, Athens, United States have the same total link strength, documents, and citations. John Molson School of Business, Concordia University, Montreal, QC, Canada is one of the organizations with the lowest total link strength, namely 160.

## Literature Review: Development of Credit Union Research Topics Perspectives in The Field of Financial Accounting

Setyaningrum and Carolina

No	Organization	Documents	Citations	Total Link Strength
1	Goizueta Business School, Emory University, Atlanta, United States	2	35	405
2	Business School, University of Colorado Denver, United States	1	12	389
3	Indian School of Business, Telangana, Hyderabad, India	1	12	389
4	Terry College of Business, University of Georgia, Athens, United States	1	12	389
5	Departement of Accountancy, Queensland University of Technology – Qut, Brisbane	1	3	260
6	Master of Management, Sanata, Dharma University, Yogyakarta, Indonesia	1	3	260
7	School of Accountancy, Queensland University of Tecchonology, Brisbane, Australia	1	3	260
8	Arhur J. Bauernfeind College of Business, Murray State University, 130 Business Building	1	2	160
9	Cirano, Montreal, qc, Canada	1	2	160
10	John Molson School of Business, Concordia University, Montreal, qc, Canada	1	2	160

Table B. 10 Organizations with the top total link strength

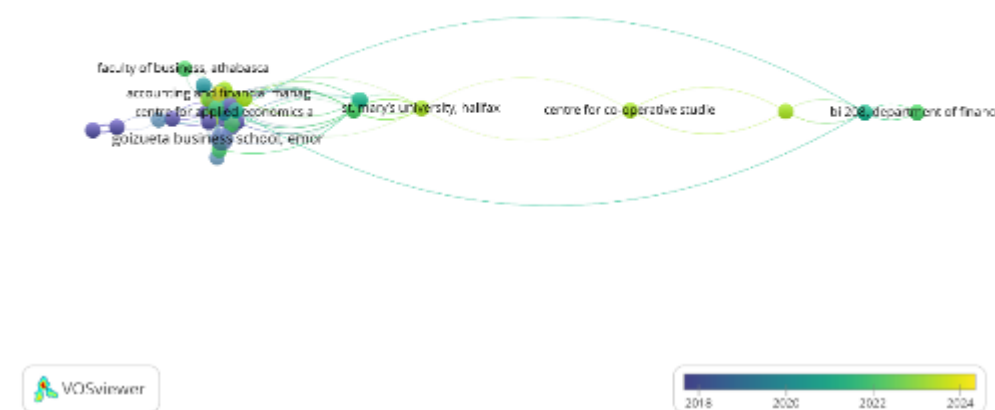


Figure 11. Results of network visualization analysis for mapping based on organization Source: Vosviewer Data Processing



Figure 11 is an image that presents the results of network visualization analysis for mapping based on organization. Meanwhile, Figure 12 is an image that presents the results of density visualization analysis for mapping based on organization. The purpose of presenting this image is to define the influence of the development of Credit Union research which continues to grow rapidly and look for research opportunities. Many organizations publish work on credit unions as a research topic. This will add to the latest research results in the future. If you look at it based on color. The year 2024 is defined by the color yellow. The yellow color appears in financial accounting and management. Likewise, blue with the year 2018, purple for 2020, and so on. For a complete distribution of data results, see Figure 11.

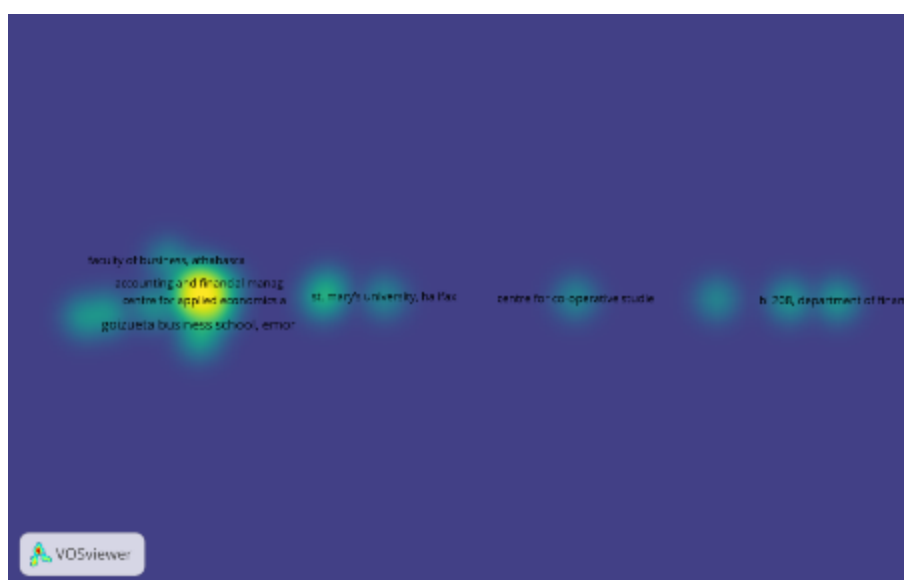


Figure 12. Density visualization analysis results for mapping based on organization Source: Vosviewer Data Processing

### Mapping Analysis by Country

Analysis by country was carried out by researchers to find out which countries contributed to research on Credit Union research. Table C presents the results of the mapping analysis based on the top 10 countries with the top total link strength. Research on Credit Unions is mostly conducted in the United States. The United States has a total of 20 documents and 167 citations with a total link strength of 491. Australia is the country with the second highest total link strength, namely 439, and the number of documents created is 20 documents. The next country with the third highest total link strength is Indonesia. Indonesia conducted research on Credit Unions by publishing 4 articles and these articles were published in the international journal Scopus. The total number of citations made by Indonesia based on Table C data is 67. Further research was carried out by the United Kingdom. The United Kingdom has the fourth largest number of studies with a total link ranking. The country with the lowest total link strength is in tenth place, namely Spain with a total link strength of 33. Spain has also published 2 research documents with 10 citations. Research on Credit Unions has been carried out a lot and has become a unique research development for researchers. Researchers in the future can collaborate with researchers across countries so that their work can achieve the best index.

No	Country	Documents	Citations	Total Link Strength
1	United States	20	167	491
2	Australia	6	33	439
3	Indonesia	4	6	336
4	United Kingdom	9	87	263
5	Brazil	12	33	211
6	Germany	2	4	152
7	Canada	3	6	147
8	India	2	12	141
9	Vietnam	1	5	131
10	Spain	2	10	33

Table C. 10 countries with the top total link strength

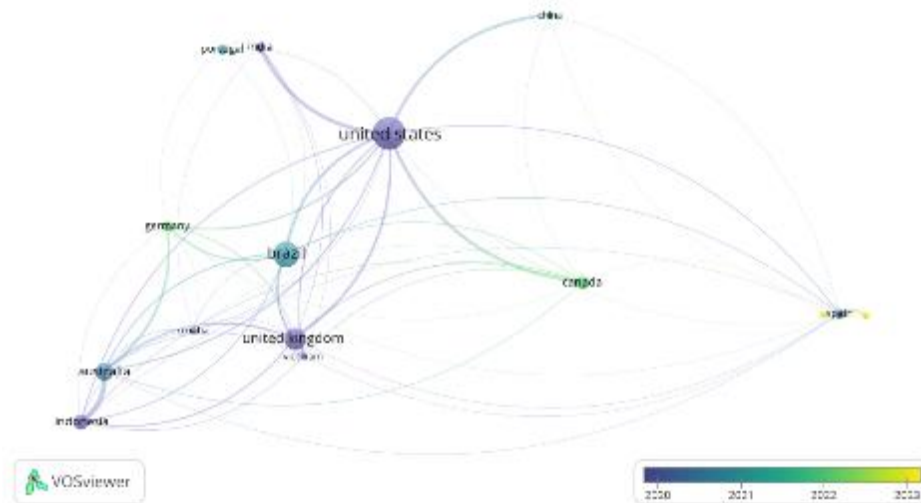


Figure 13. Results of network visualization analysis for mapping by country

Source: Vosviewer Data Processing

Figure 13 is an image that presents the results of network visualization analysis for mapping by country. This image explains that since 2020 there has been a lot of research development on Credit Unions. Purple is a color with prominent areas and shows that the research carried out has developed and is being carried out a lot.

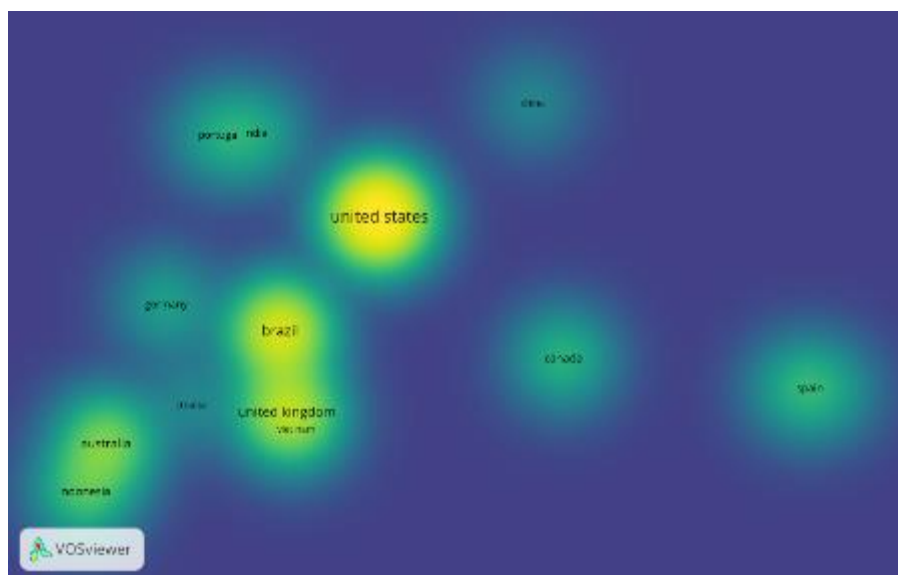


Figure 14. Density visualization analysis results for mapping by country Source: Vosviewer Data Processing

Figure 14 is a presentation of the results of density visualization analysis for mapping by country. The density visualization analysis aims to find out which countries have conducted research on Credit Unions with sustainable development results. This also applies to knowing the extent to which researchers in a country contribute to research results aimed at the development of science.

This research aims to evaluate trends and mapping in the development of credit union research through bibliometric analysis. Findings from the study of annual publications show that only a few people have researched the topic of credit unions. The researcher concludes that yearly publications and citations can be increased in the coming year because the graph in 2023 has increased drastically. However, in 2024, it has decreased drastically, but according to the researchers, in 2024, it will grow. In the next few months, articles will be published on credit unions. Among the topics in this research, "Financial Inclusion" is a topic that is more common in credit union research. Therefore, the most popular and actively researched credit union research topic today is Financial Inclusion. In the author analysis, the author who contributed a lot was Pavlovskaya; Marianna was in the highest cluster in the VosViewer analysis. Financial Inclusion is the keyword most frequently used by writers, appearing 15 with a total link strength of 12. The second keyword, Cooperative, which is the most commonly used Cooperative, appears 10 with a total link strength of 9; the third keyword, Consumer Welfare, appears 10 with a total link strength of 8, and the fourth commercial bank keyword appears 10 with a total link strength of 5.

From the results of research on the development of the topic of financial inclusion (Financial Inclusion), the development of research on the topic of financial inclusion provides a direction of knowledge that is very important for business actors in running their businesses, especially for MSMEs (Micro Small and Medium Enterprises). This is because financial inclusion can have an influence on financial planning which has an impact on the sustainable performance of MSMEs (Micro Small and Medium Enterprises). In the results of Consumer Welfare, the researchers concluded that when doing business for the MSME type of business, systematic steps are needed.

## Literature Review: Development of Credit Union Research Topics Perspectives in The Field of Financial Accounting

Setyaningrum and Carolina

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This systematic stage is conducting a survey of the types of businesses in the surrounding area, online surveying the partners who have been determined, determining the right resource person to provide webinar material if needed, and planning for the webinar activity once it has been completed. The results of research on the topic of Commercial Banks and Cooperatives provide information that non-profit institutions such as Credit Unions have the advantage of paying higher deposit interest rates to their members. Additionally, charging lower fees for services such as checking accounts and ATM withdrawals. In conclusion, Credit Unions can save their members money on borrowing, deposits and savings products.

The results of this research show that there has not been much research on Credit Unions since 2018-2024, but the researchers conclude that interest in research on Credit Unions will increase looking at the graph. The results of the mapping show that the most researched Credit Union research topic with a sample of 59 articles is "Financial Inclusion" and the year with the highest number of publications is 2023, but the highest number of citations is in 2018. The researcher concludes that the results of this research can provide research ideas future regarding Credit Unions. The implementation of Credit Union accounting has its characteristics, such as having operational objectives for the company and meeting user needs in the decision-making process. Apart from that, the characteristic of presenting Credit Union financial information lies in conveying the form of terms according to the level of knowledge of the users. In practice, three processes must be carried out, ensuring input and output processes. The transaction input used can be cash or non-cash. For the process stage itself, transactions have been grouped by each account and can be found in the member book, KSPA, SUM/SUK summary, Journal Book, etc. Below, the researcher will present the flow stages of how to process Credit Union (CU) transactions.

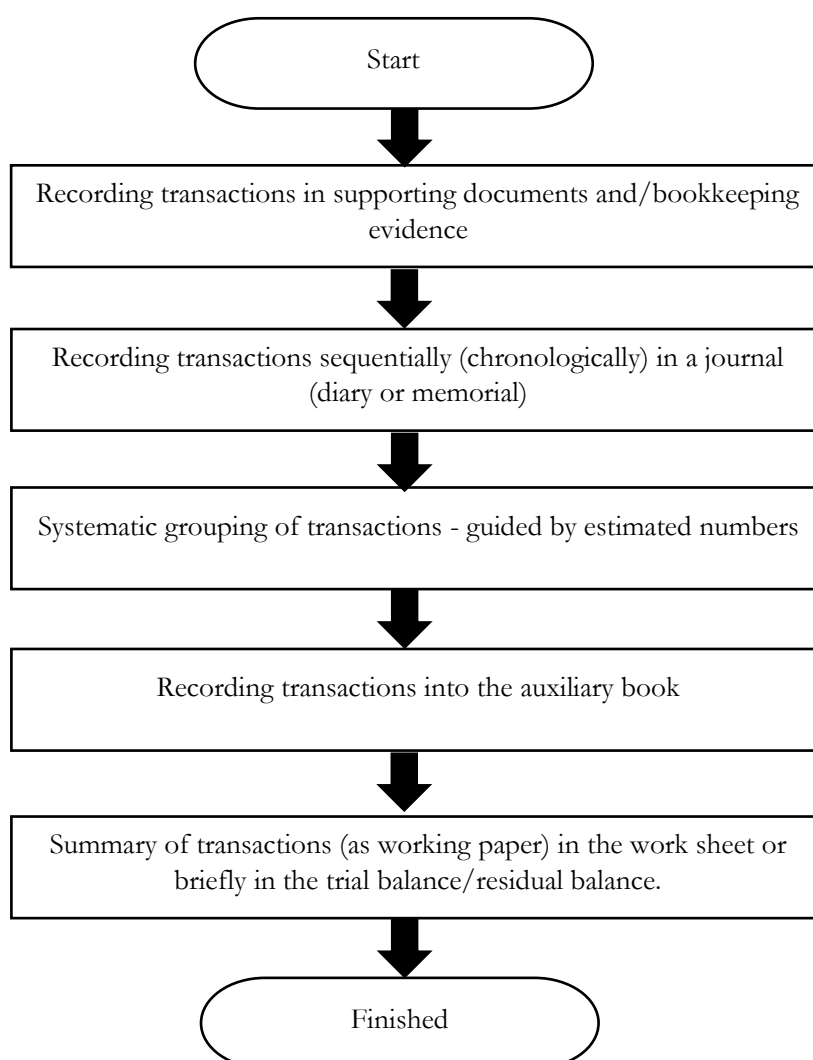


Figure 15 transaction process flow at the Credit Union

In Credit Union transactions, the first stage begins, namely the transaction in supporting documents is recorded or entered into a book called the supporting evidence book. After the first stage is completed, an accountant can create a journaling process which is obtained from transactions that have been provided in previous bookkeeping. After the journaling process is complete, the next stage is to group transactions which will be given an account code and will be entered into the ledger. In this ledger, transactions are grouped for each account and can finally be entered into the balance sheet. At the stage of creating a balance sheet or working paper, you need to pay careful attention to what is included in assets, liabilities, and equity. This is because this process will be used for decision-making by interested parties within an entity. The interested parties themselves include internal and external. Internal parties, namely employees and managers. Meanwhile, for external parties, namely creditors, government, and investors. Of course, these interested parties take policies, such as investing, by looking at the company's financial reports to assess several things, such as employee performance and the company's growth and development, whether it can progress or, conversely, the value of a company's performance will decrease day by day.

## CONCLUSION

The rapid development of technology provides encouragement for business people to adapt to utilize technology based on qualified skills. Many entities or companies are competing to create new innovations so that these entities can develop rapidly, for example, Credit Union entities. This research aims to dig up more in-depth information about Credit Union research topics with the subject areas of Financial Inclusion, Consumer Welfare, Commercial Banks and Cooperatives. The results of this research are that 200 Scopus articles have been found on the ScienceDirect website and 59 articles or 61 articles have been used as samples. This research seeks to explore the development of Credit Unions from 2018 to 2024. The research uses a bibliometric approach to analyze the findings of research articles that are relevant to the subject area and the Quantitative Descriptive method is used in this research. Mapping is also carried out by researchers to find out the results of research that has been carried out previously. This mapping includes analysis of topics, keywords, authors, journal names, organizations and countries. The research results show that the development of Credit Union research experiences ups and downs every year. The benefit of this research is that it can provide knowledge for readers and related parties such as non-profit entities in managing their business and the vision and mission can be achieved optimally. This research also contributes to providing an overview of the scope of the research area for future researchers so that it is broader in terms of further research development.

It is hoped that this research can provide complete information to researchers and practitioners who are interested in future Credit Union research, about variables that are relevant to Credit Unions and variables that have not been researched much before. Apart from that, it is also hoped that the results of this researcher's research can be used as reference material or solutions for entities, especially non-profit entities, in developing their business. Thus, it is not only practitioners or academics who reap the benefits of this research, non-profit entities and related institutions can benefit from this research. Based on the benefits of this research, the researcher is aware that there are limitations to this research. This research has limitations in the number of samples, topics related to Credit Unions, and types of research methods. Therefore, future researchers can review more samples from international journals indexed by Scopus, especially Quartile 1 and 2. Future research also uses different topics such as the subject areas of business management and accounting and uses descriptive qualitative methods or mixed methods between quantitative and qualitative. Apart from that, the results of future research can be compared with research made by current researchers in order to update research from time to time, especially in the field of financial accounting.

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