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Preface

Journal of Applied Sciences in Accounting, Finance, and Tax is a forum provided for researchers, both from universities, practitioners and the industrial world. The publication is a result of research, studies or ideas on Accounting, Finance, and Tax.

JASAFINT is published with a focus and scope on issues on Accounting (Financial Accounting, Management Accounting, Public Accounting, Auditing, and Accounting Information Systems), Finance (Capital Market, Financial Statements Analysis, and Financing), and Tax (Income Tax, VAT, Tax Audit, and Tax Accounting).

Managed by the Department of Accounting and published by Politeknik Negeri Bali Research and Community Service Center (P3M-PNB), this journal is intended to disseminate scientific knowledge and the application of the Accounting, Finance and Tax and is expected to be able to broaden the readers' perspective and enrich the scientific repertoire.

Published on April and October (since 2018), the journal accepts articles in English with mentioned format: research results, literature studies and work reports in line with the focus and scope of JASAFINT.

Editors

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Understanding Tax Policy Research in Indonesia: A Bibliometric Perspective

Gusti Naufal Rizky Perdana [1]✉ & Elza Fatika Nur Haliza[2]

[1] Master of Public Administration Program, Faculty of Administrative Sciences, Universitas Brawijaya, Malang, Indonesia
[2] Public Administration Study Program, Faculty of Social and Political Sciences, Universitas Mulawarman, Samarinda, Indonesia
✉ Address correspondence: Jl. MT. Haryono 163, Malang 65145, Jawa Timur, Indonesia
E-mail: gustinaufalrp@gmail.com

ABSTRACT
This study aims to conduct a bibliometric analysis of tax policy in Indonesia, focusing on identifying research trends, dominant issues, and emerging research themes in this field. Data obtained from the Scopus database using the keywords "tax policy" and "Indonesia" were analyzed using bibliometric methods to depict the structure and research trends, while thematic approaches were employed to identify dominant themes. The results indicate a steady increase in the number of publications on tax policy in Indonesia, particularly in the last five years. Specifically, in 2020 there will be 8 documents, in 2022 there will be 9 documents and in 2023 there will be 18 documents. The analysis also identifies the authors, affiliations, and countries that contribute most to this research, as well as the most common document types and subject areas. The most frequently cited articles in the context of tax policy in Indonesia are also outlined. Furthermore, visualization of concept relationships using VOSviewer software aids in identifying main themes and concept relationships in the literature. Thus, this study provides a comprehensive understanding of tax policy research in Indonesia, serving as a basis for further research and aiding policymakers in understanding key issues related to the tax system in the country.

Keywords: tax policy, bibliometric analysis, Indonesia, scopus database

1. Introduction

Taxation plays a crucial role in achieving a country's growth targets [1]. As the largest source of revenue, taxes consistently increase annually in the national budget [2]. Therefore, tax policy, as part of broader public policy, differs from other government policies due to its immediate societal reactions [3]. Taxes have been a central topic in political economy throughout history, often leading to cascading effects that burden taxpayers [4].

One of the government's main challenges in managing the country's finances is revenue collection through taxes [5]. Tax collection involves not only obligations but also certain rights. Tax revenue is used for national development and strengthening economic resilience by both central and local governments [6]. State revenue must be managed wisely and allocated for the welfare of the people. In Indonesia, one of the main sources of state revenue comes from the tax sector, contributing an average of more than 70% of total state [7]. Additionally, to achieve taxation targets, the government implements various policies, including tax policies aimed at optimizing revenue without disrupting the global investment climate [8].

Several studies have addressed tax policies in Indonesia. Tax policy to encourage investment in Indonesia includes providing tax incentives, improving ease and certainty of doing business, creating jobs and welfare for foreign workers, accelerating infrastructure development, and simplifying business regulations [9]. Changes in income tax policies can cause economic distortions and legal uncertainties if tax rates are lowered through government regulations that can change without the approval of the legislature. Therefore, simple tax regulations are needed, without overlaps, providing legal certainty, and encouraging voluntary compliance to reduce collection costs [10]. In Indonesia, the Directorate General of Taxes continues to strive to increase tax revenue by modernizing the tax system, considering the relatively small number of taxpayers compared to the population and the business world [11]. From previous research, it is evident that there are still many dynamics occurring in tax policies in Indonesia. Therefore, this study will conduct bibliometric analysis on tax policies in Indonesia. Bibliometrics has become an important tool for evaluating and analyzing research outcomes, institutional cooperation, the influence of public research funding on national research and development performance, educational efficiency, and other applications [12]. Bibliometric analysis is a well-known and rigorous method for exploring and analyzing large amounts of scientific data, allowing us to delve into the evolution and highlight emerging areas in a specific discipline [13].

Several studies have been conducted on tax policies using bibliometric analysis. A retrospective analysis of the tax gap management concept shows its ambiguous nature, with the first publication appearing in 1935 and the majority since 2013, low international cooperation, dominance of local research, and confirmation that work in the informal sector affects the country's economic development [14]. Tax research has attracted the attention of many academics, practitioners, and policymakers worldwide, including in Malaysia, but such research trends are rarely tracked; hence, this study uses bibliometric analysis to review trends and literature frequency on taxation in Malaysia based on Scopus data, revealing an increase in the number of publications from 1977 to 2020 peaking in 2016-2017, and showing that Universiti Teknologi MARA is the most influential institution, while Advanced Science Letters is the highest publication source [15]. The results show a significant increase in publications on tax compliance, with most articles published in English-language journals and conferences, and many authors and cited articles originating from the United States, Australia, Europe, Malaysia, and Indonesia; this study identifies frequently discussed themes and potential themes for future research, recommending expanding the use of databases and including more fields in the [16].

From previous studies, the novelty of the research to be conducted is a specific bibliometric analysis of tax policy themes in Indonesia. With the research objectives (1) to describe research trends related to tax policies in Indonesia, and (2) to analyze dominant issues and research themes emerging in tax policy studies in Indonesia.

2. Method

This study employs bibliometric analysis to depict tax policy studies in Indonesia. This method has rapidly evolved and become an essential tool in research, useful for assessing contributions in specific study areas or journals [17]. Bibliometric analysis is widely known for its ability to evaluate characteristics, structures, relationships, patterns, and trends in current and future disciplines [18].

In this research, we utilize VOSviewer software, leveraging co-occurrence features to examine relationships and analyze the interconnections between keywords in the paper set [19]. Additionally, to enhance data representation, we apply document analysis using Nvivo12 Plus to identify keyword patterns and dominant themes through a thematic approach. Word cloud techniques are also employed to visualize the most frequently occurring keywords in the text [20].

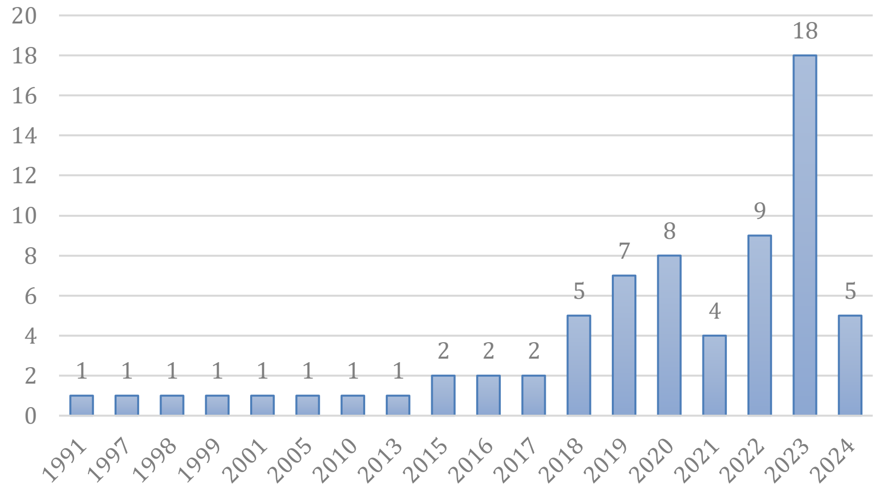
The data used in this study are sourced from the Scopus database, a multidisciplinary database encompassing citations and abstracts from various literature sources such as peer-reviewed journals, trade journals, books, patent records, and conference publications (Joshi, 2016). The Scopus database was chosen for this study due to its comprehensive coverage of high-quality research across various disciplines, ensuring a robust and reliable dataset for the analysis of 'tax policy' and its implications in the context of Indonesia. The search was conducted using the keywords "tax policy" AND "Indonesia" (TITLE-ABS-KEY). These two keywords indicate the research topic and locus of the documents for which the data will be processed. Each document was analyzed based on various criteria such as access type, year of publication, author name, document type, keywords, and country of origin. The analysis results were exported in CSV format for further analysis using VOSviewer and NVivo12 software. From this search, a total of 70 documents were identified.

3. Results and Discussion

Trends in Tax Policy Research in Indonesia

Data extracted from the Scopus database reveal the trends in tax policy research in Indonesia over the past few decades. Initially, research in this area was relatively sparse, with only one publication per year in certain years such as 1991, 1997, 1998, 1999, 2001, 2005, and 2010. However, since 2013, there has been a gradual increase in the number of publications, indicating a growing interest in the topic. In 2015 and 2016, there were two publications each, and this trend continued with two publications in 2017, five in 2018, and seven in 2019. The peak of attention to tax policy in Indonesia was observed in 2020 with eight publications. This upward trend persisted in 2021 with four publications, nine in 2022, and peaked at 18 publications in 2023. Although there was a slight decrease in 2024 with five publications, the figure still reflects significant interest compared to previous years.

Overall, the data from Scopus demonstrates a steady increase in tax policy research in Indonesia, particularly in the last five years, figure 1. This reflects a growing recognition of the importance of tax policy in the realms of economics and public policy in Indonesia.



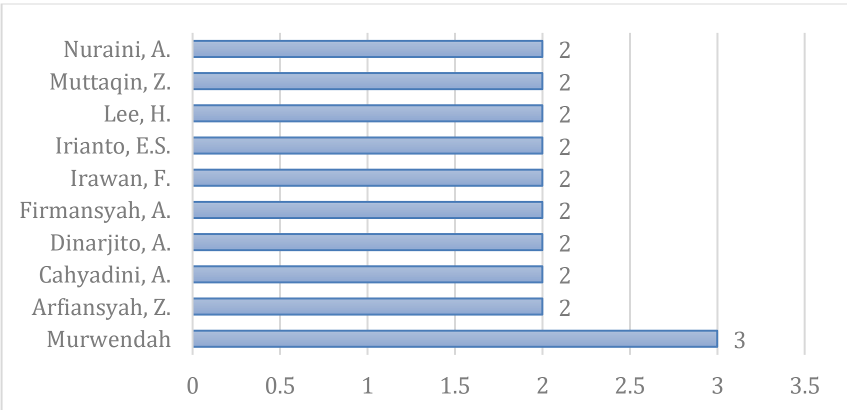
Source: Scopus Database (Year 1991-2024)

Figure 1. Trends in Tax Policy Research in Indonesia

Based on the data of authors contributing to research on tax policy in Indonesia, several names stand out with the highest number of publications. The author with the highest number of publications is Murwendah with three publications. Additionally, there are several other authors, each with two publications, namely Arfiansyah, Z., Cahyadini, A., Dinarjito, A., Firmansyah, A., Irawan, F., Irianto, E.S., Lee, H., Muttaqin, Z., and Nuraini, A.

The presence of several authors with significant contributions indicates a high level of interest and dedication to tax policy research in Indonesia. Murwendah, as the author with the most publications, stands out in this academic community. Meanwhile, other authors such as Arfiansyah, Z., and Cahyadini, A., demonstrate that there are active researchers focusing on this topic, providing important contributions to the development of tax policy in Indonesia.

The consistency of publications from these authors helps enrich the literature on tax policy in Indonesia and indicates the presence of a growing research community in this field. This also reflects the importance of collaboration and ongoing research to understand and develop effective tax policies in Indonesia.



Source: Scopus Database (Year 1991-2024)

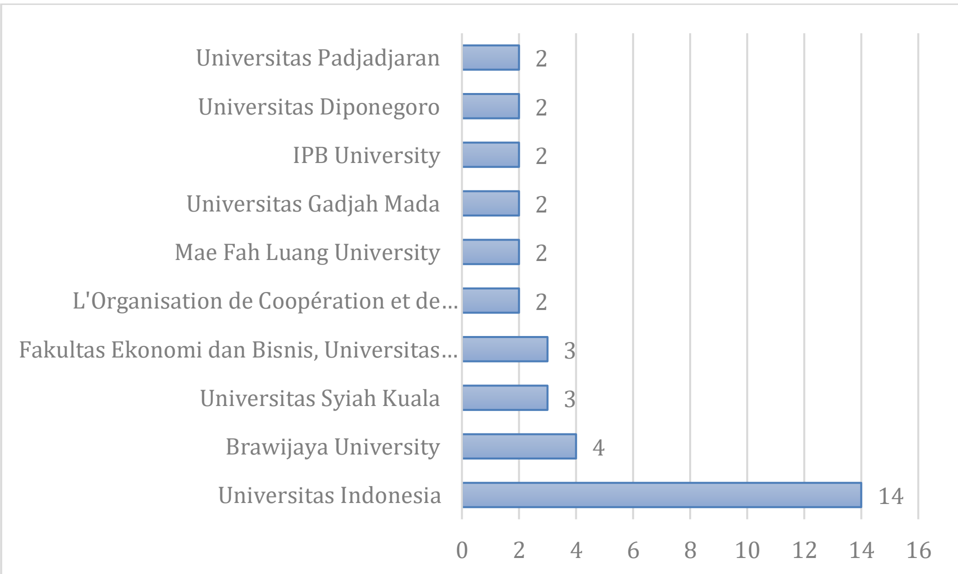
Figure 2. Top Authors on the Theme of Tax Policy in Indonesia

Based on data from the Scopus database, Universitas Indonesia stands out as the affiliation with the highest number of publications on tax policy in Indonesia, with a total of 14 publications. This indicates that Universitas Indonesia has made a significant contribution to tax policy research, highlighting its important role in developing literature in this field. This excellence reflects the academic capacity and strong resources of the institution in supporting relevant and impactful research.

In addition to Universitas Indonesia, Brawijaya University also has a substantial contribution with 4 publications related to tax policy in Indonesia. The involvement of Brawijaya University in this research indicates significant efforts from this institution to engage in academic discussions on tax policy, which is an important component of the Indonesian economy.

Universitas Syiah Kuala and the Faculty of Economics and Business, Universitas Indonesia each have 3 publications. This indicates that the Faculty of Economics and Business at Universitas Indonesia also plays a significant role in advancing tax policy research specifically, in addition to the overall contribution of the university. On the other hand, Universitas Syiah Kuala demonstrates that tax policy research is not only centered in Java Island but also involves institutions from various regions of Indonesia, enriching perspectives and analysis in this literature.

Other institutions that also contribute to tax policy research in Indonesia include the Organisation for Economic Co-operation and Development, Mae Fah Luang University, Universitas Gadjah Mada, IPB University, Universitas Diponegoro, and Universitas Padjadjaran, each with 2 publications. The participation of various institutions indicates diversity in research and international collaboration that strengthens understanding and development of tax policy in Indonesia. The presence of various universities and organizations in tax policy research reflects the importance of cross-institutional and cross-country cooperation in addressing complex issues related to taxation.

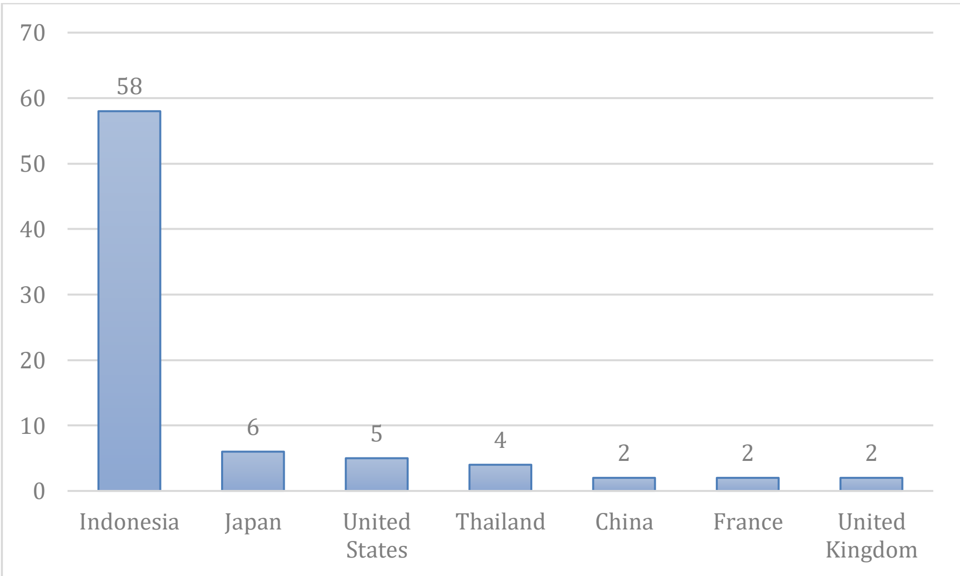


Source: Scopus Database (Year 1991-2024)

Figure 3. Top Affiliations on the Theme of Tax Policy Research in Indonesia

Based on data from the Scopus database, Indonesia dominates the publications related to tax policy in this country with a total of 58 publications. This figure indicates that the majority of research on tax policy in Indonesia is conducted by domestic researchers, who understand the local context and policy dynamics deeply. This dominance reflects the high attention from Indonesian academics and researchers to tax issues relevant to economic development and public policy in the country.

Outside Indonesia, Japan has the next highest number of publications with a total of 6 publications. This indicates significant interest from Japanese academics in understanding and analyzing tax policies in Indonesia, perhaps due to the close economic relationship between the two countries or interest in fiscal policy in the Southeast Asian context. The United States follows with 5 publications, reflecting the interest of researchers and institutions in the country in tax policies in Indonesia. Research from the United States may focus on the impact of tax policies in a global context and how international best practices can be applied in Indonesia. Thailand has 4 publications on this topic, indicating that this neighboring country also has an interest in understanding tax policies in Indonesia, perhaps due to similarities in economic and policy challenges in the Southeast Asian region. China, France, and the United Kingdom each have 2 publications, reflecting smaller but still significant contributions from academics in these countries. The participation of these countries indicates global attention to tax policies in Indonesia and the importance of international studies in understanding fiscal policies in developing countries. Overall, this data indicates that while research on tax policy in Indonesia is dominated by local researchers, there is also significant interest from the international academic community, contributing to a more comprehensive and in-depth understanding of tax policies in Indonesia.



Source: Scopus Database (Year 1991-2024)

Figure 4. Top Countries in Research Themes on Tax Policy in Indonesia

Document Types and Subject Areas in the Theme of Tax Policy in Indonesia

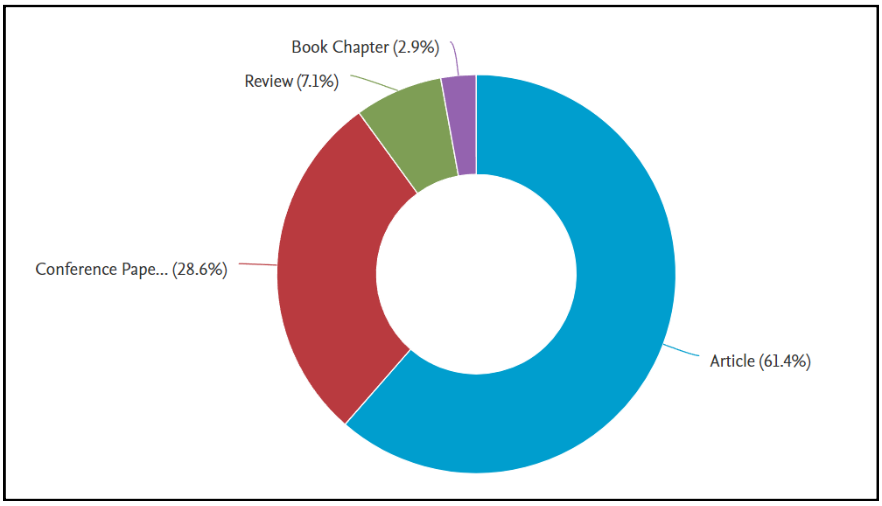
Based on data from the Scopus database, publications related to tax policy in Indonesia encompass various types of documents, indicating diverse approaches in exploring and discussing this issue. Journal articles dominate with a total of 43 publications, reflecting that most research is presented in the form of scholarly articles that undergo rigorous peer-review processes, ensuring the quality and validity of the published findings.

Additionally, there are 20 conference papers, indicating that tax policy is also a topic frequently discussed in various academic and professional forums. These conference papers provide a platform for researchers to present preliminary findings, engage in peer discussions, and receive constructive feedback before publishing in journals.

The number of review articles reaches 5 documents, reflecting efforts to reassess and synthesize existing literature, thereby providing a more comprehensive perspective on trends and recent developments in tax policy in Indonesia. These review articles are crucial as they help identify research gaps and offer directions for future studies.

Furthermore, there are 2 book chapters indicating that some research on tax policy in Indonesia is also presented in broader contexts, perhaps as part of books on economics, public policy, or regional studies. These book chapters provide deeper analysis and often present a more holistic perspective on this topic.

Overall, the diversity of document types indicates that research on tax policy in Indonesia is not limited to one format but is disseminated through various academic media, enabling broader access and dissemination of information among researchers and practitioners.



Source: Scopus Database (Year 1991-2024)

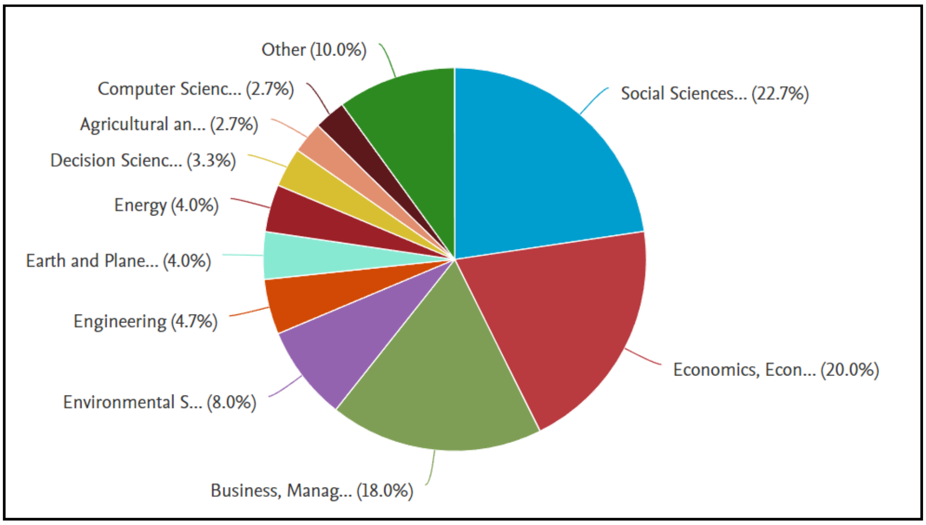
Figure 5. Document Types of Tax Policy in Indonesia

Data from the Scopus database indicates that research related to tax policy in Indonesia is spread across various subject areas. Social Sciences are most represented with 34 publications, followed by Economics, Econometrics, and Finance with 30 publications. Business, Management, and Accounting encompass 27 publications, highlighting a focus on the impact of tax policies on business and accounting.

Environmental Science has 12 publications, indicating an interest in the influence of tax policies on environmental issues. Engineering fields have 7 publications, while Earth and Planetary Science and Energy each have 6 publications, showing attention to the impact of tax policies in these sectors. Decision Science has 5 publications, and Agriculture and Computer Science each have 4 publications, highlighting the effects of tax policies on agriculture and technology. Medicine also has 4 publications, indicating the influence of tax policies on the healthcare sector.

Physics and Astronomy have 3 publications, and Arts and Material Science each have 2 publications. Mathematics also has 2 publications, reflecting quantitative analyses of tax policies. There is one publication each in the fields of Multidisciplinary and Veterinary Medicine, showcasing the broad coverage of tax policy research in Indonesia. Overall, this research spans across numerous disciplines, providing diverse and comprehensive insights into tax policies in Indonesia.

Interestingly, research on tax policy in Indonesia is not only limited to fields like Social Sciences, Economics, and Business, but also appears in areas that seem less related, such as Engineering, Environmental Science, and Computer Science. This phenomenon requires further investigation to understand whether tax policy is truly relevant to these fields or if this is just a way to increase publication numbers. It is important to ensure that these studies genuinely contribute to the understanding of tax policy and are not merely a form of academic misconduct.



Source: Scopus Database (Year 1991-2024)

Figure 6. Subject Areas of Tax Policy Research in Indonesia

Top-Cited Articles in Tax Policy Research Theme in Indonesia

Based on data from Scopus, several articles on tax policy in Indonesia have received significant attention from the academic community, as evidenced by their citation counts. The top-cited article is "The environment and welfare implications of trade and tax policy" by Lee & Roland-Holst (2001) published in the Journal of Development Economics in 1997, with a total of 45 citations. This article explores the impact of trade and tax policies on the environment and welfare [21].

The second highest-cited article is "Factors Influencing SME Tax Compliance: Evidence from Indonesia" by Inasius (2019) published in the International Journal of Public Administration in 2019, with 44 citations. This research highlights the factors influencing tax compliance among small and medium-sized enterprises (SMEs) in Indonesia [22].

The third article is "Survey of recent developments" by Pardede (1999) published in the Bulletin of Indonesian Economic Studies in 1999, with 41 citations. This article presents a survey of recent developments in Indonesia in the context of economic and tax policies [23].

Additionally, the article "Cigarette price level and variation in five Southeast Asian countries" by Liber et al., (2015) published in Tobacco Control in 2015, has 18 citations. This article discusses cigarette price variation in five Southeast Asian countries, including Indonesia, and its tax policy implications [24].

The article "Local government levy optimization" Usman et al., (2020) published in the Proceedings of the International Conference on Industrial Engineering and Operations Management in 2020, has 15 citations. This research focuses on optimizing local government tax collection [25].

Overall, these articles demonstrate strong interest in various aspects of tax policy in Indonesia, including environmental impacts, SME tax compliance, economic development, cigarette pricing, and local government tax optimization.

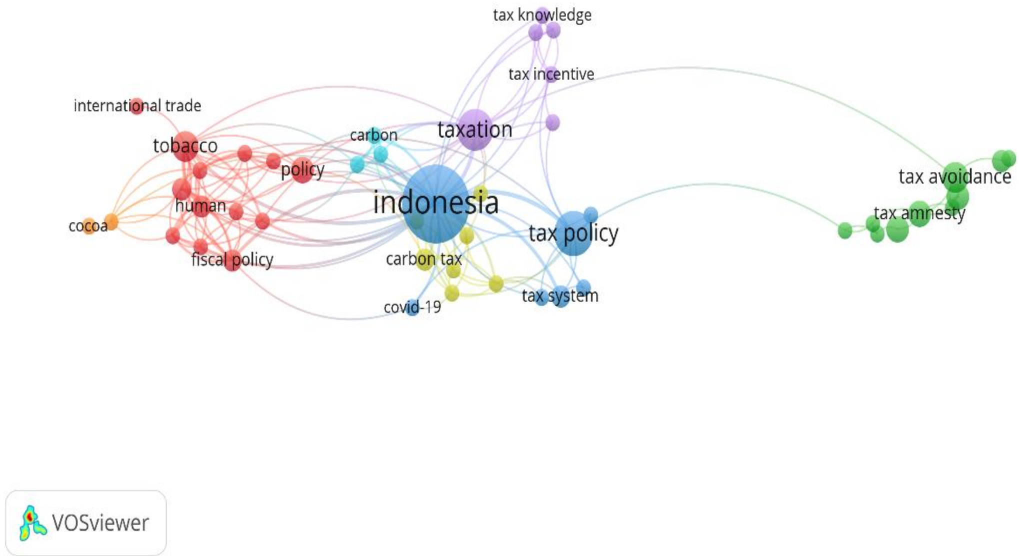
Table 1. Most Cited Documents on Tax Policy in Indonesia

Number	Title	Author	Sources	Year	Citation
1	The environment and welfare implications of trade and tax policy	Lee, H., Roland-Hoist, D.	Journal of Development Economics , 52(1), pp. 65–82	1997	45
2	Factors Influencing SME Tax Compliance: Evidence from Indonesia	Inasius, F.	International Journal of Public Administration , 42(5), pp. 367–379	2019	44
3	Survey of recent developments	Pardede, R.	Bulletin of Indonesian Economic Studies , 35(2), pp. 3–40	1999	41
4	Cigarette price level and variation in five Southeast Asian countries	Liber, A.C., Ross, H., Ratanachena, S., Dorotheo, E.U., Foong, K.	Tobacco Control, 24(E2), pp. e137–e141	2015	18
5	Local government levy optimization	Usman, M.Y., Wibowo, A.D., Laksana, W.U., ... Yusriadi, Y., Sahid, A.	Proceedings of the International Conference on Industrial Engineering and Operations Management, (August)	2020	15

Source: Scopus Database

Visualization of the Relationship between Tax Policy Concepts in Indonesia

To understand the conceptual relationships in tax policy research in Indonesia, we conducted visualization using VOSviewer software with co-occurrence analysis. This analysis focused on keywords appearing in 70 documents from the Scopus database. This approach allowed us to identify and map relationships between various concepts frequently discussed in tax policy research in Indonesia. This visualization helps uncover main themes and dominant trends in the literature, as well as show how these concepts are interrelated and evolving over time.



Source: Scopus Database

Figure 7. Cluster Analysis of Tax Policy Research in Indonesia

Tabel 2. Cluster and items of concept

Cluster	Concept Name	Number of Items (Color)
Cluster 1	Alcohol, article, commerce, fiscal policy, international trade, policy, public health, public policy, smoking, tax, tobacco, tobacco products	13 items (Red)
Cluster 2	Corporate tax policy, covid-19 pandemic, effective tax rate, independent comissic, smes, tax aggressiveness, tax amnesty, tax avoidance, tax compliance, tax incentives	10 items (Green)
Cluster 3	Covid-19, export, finanxe, Indonesia, tax plicy, tax reform, tax system	7 items (Blue)
Cluster 4	Agriculture, carbon tax, climate change, economic impact, local government, numerical model, pollution policy	7 items (Yellow)
Cluster 5	Sentiment analysis, tax incentive, tax knowledge, taxtation, taxpayer awareness, taxpayer compliance	6 items (Purple)
Cluster 6	Carbon, carbon taxes, tax polixies	3 items (Light Blue)
Cluster 7	Cocoa, price	2 items (orange)

Source: Scopus Database

In the analysis using VOSviewer, we identified seven clusters reflecting the main concepts that emerge in tax policy research in Indonesia. First, Cluster 1, marked in red, consists of 13 items covering topics such as alcohol, international trade, public health, and cigarettes. These concepts are directly related to the implementation of tax policies related to specific products and their impact on public health. For example, a study by Ahsan et al., (2023) found that although tobacco tax policies in Indonesia receive the most attention due to tariff increases and structural reforms, political factors and opposition from major industry players and politicians, especially during election years, significantly hinder the implementation of health taxes on sweetened beverages and alcohol, highlighting the need for strong public health advocacy and support from key opinion leaders and the Ministry of Finance [26].

Second, Cluster 2, marked in green, consists of 10 items related to corporate tax policies, including effective tax rates, tax policies related to the COVID-19 pandemic, and corporate tax compliance rates. This cluster highlights important aspects of tax regulations for companies and their fiscal policy impacts. Research by Utami & Ilyas (2021) emphasizes the importance of flexibility, solidarity, and transparency in tax policies to respond to the economic impact of COVID-19 in Indonesia, considering the GDP decline and the role of taxes as the primary source of state funding [27].

Third, Cluster 3, marked in blue, includes 7 items covering topics such as the economic impact of the COVID-19 pandemic, export-related tax policies, and tax reforms in Indonesia. This cluster underscores the importance of fiscal policy in addressing the economic challenges facing the country, especially in the context of the global pandemic. Research by Ispriyarso & Wibawa (2023) indicates that the COVID-19 pandemic has affected nearly all sectors in Indonesia, and the government responded with tax incentive policies that, while successful in driving economic recovery, also led to a decline in state tax revenues [28].

Fourth, Cluster 4, marked in yellow, consists of 7 items covering topics such as agriculture, carbon taxes, and climate change impacts. This cluster highlights the role of taxes in managing natural resources and efforts to reduce the negative impacts of climate change. Tax policies are a key component of long-term development, focusing on addressing externalities such as carbon emissions and global warming to support Sustainable Development Goals (SDGs) [29].

Fifth, Cluster 5, marked in purple, includes 6 items related to sentiment analysis, taxpayer awareness, and taxpayer compliance. This cluster emphasizes the importance of taxpayer understanding and awareness in improving tax compliance. Tax knowledge, tax administration modernization, and taxpayer awareness have a significant positive impact on taxpayer compliance in Indonesia [30].

Sixth, Cluster 6, marked in light blue, includes 3 items related to carbon taxes. This cluster highlights the role of taxes in reducing carbon emissions and efforts to address climate change. Carbon tax policies can significantly reduce greenhouse gas emissions from Indonesia's oil and gas industry, but they also have negative impacts on the profitability and investment of these industries [31].

Lastly, Cluster 7, marked in orange, consists of 2 items covering topics such as cocoa and prices. This cluster may reflect research on taxes related to the cocoa industry and factors influencing the commodity's prices. Export tax policies significantly reduce the export competitiveness of cocoa beans, but do not affect the integration of the domestic and international cocoa markets [32]. Overall, this cluster analysis provides an overview of the diversity of topics studied in the context of tax policy in Indonesia, as well as the relationships between these concepts.

Word cloud and Dominant Themes in Tax Policy in Indonesia

In an effort to gain a deeper understanding and explore the dominant themes emerging in tax policy research in Indonesia, we utilized NVivo12 software. This tool enabled us to conduct in-depth analysis of documents collected from the Scopus database. By utilizing the autocode feature and word cloud, we were able to identify the most frequently occurring words and uncover the primary themes commonly discussed by researchers in this field. This approach provides visual insight into the distribution and frequency of keywords, aiding in identifying emerging research trends and main focuses in the literature on tax policy in Indonesia.

Source: Processed from Scopus Database using NVivo 12 Plus
Figure 8. Word cloud of abstract using Nvivo 12

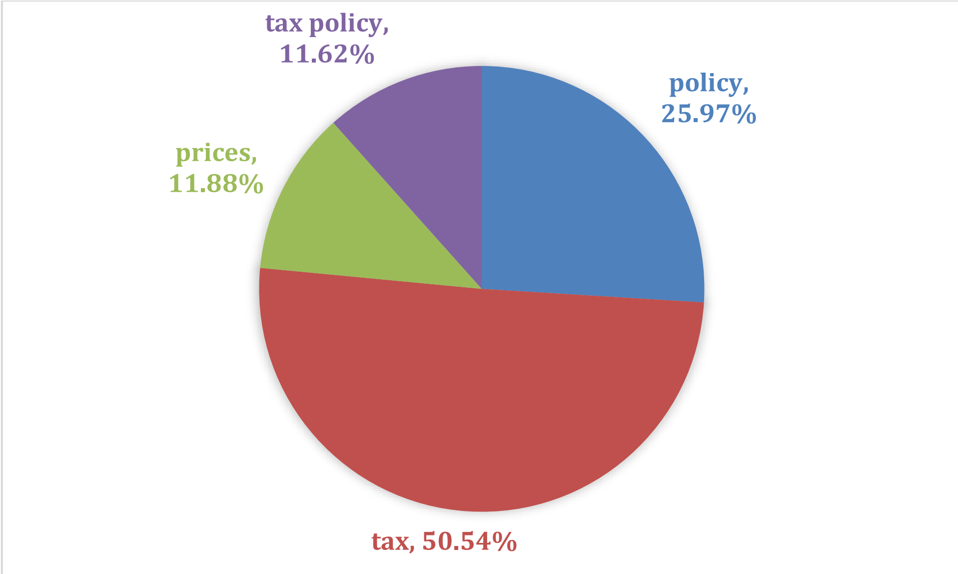
The frequency analysis of words reveals that "tax" and "policy" are the most frequently occurring terms in discussions about tax policy in Indonesia. This indicates that almost all articles highlight the same research focus. Additionally, words such as "government," "compliance," "consumption," "business," and "economic" also stand out, highlighting important issues related to tax policy in Indonesia. The presence of these words depicts key components necessary for the implementation of effective tax policies. Furthermore, other identified words in the analysis provide additional insights into tax policy research trends. It is hoped that future researchers can direct their attention to less-explored aspects, thereby deepening understanding of the issues.

In research related to tax policy in Indonesia, several dominant themes emerge based on the frequency of commonly used keywords. The most prominent theme is "tax," which comprises 50.54% of the total analyzed keywords. This indicates that taxation aspects are the primary focus in these studies, reflecting the importance of taxation in the economic and fiscal policy context in Indonesia.

The next theme is "policy," covering 25.97% of the keywords. This signifies that policies, in various forms, are an important area frequently discussed in the literature. The focus on policy reflects researchers' attention to how tax regulations and policies are implemented and their impacts on the economy.

Additionally, "prices" and "tax policy" each encompass 11.88% and 11.62% of the total keywords, respectively. "Prices" as a dominant theme indicates that research often discusses the impact of tax policies on prices of goods and services, which in turn influence consumer behavior and the economy as a whole. Meanwhile, "tax policy" highlights specific discussions about tax policies themselves, including regulations, rates, and their implementation.

Overall, these themes reflect broad and in-depth attention to various aspects of tax policy in Indonesia, from implementation and regulation to economic impacts and prices. Understanding these dominant themes can assist researchers and policymakers in focusing on key issues and identifying areas that require further research.



Source: Processed from Scopus Database using NVivo 12 Plus

Figure 9. Dominant Themes of Tax Policy in Indonesia using Theme Analysis by NVivo 12 Plus

4. Conclusion

This study reveals that research related to tax policy in Indonesia has experienced significant growth in recent decades, especially in the last five years. This increase reflects a growing interest in the importance of tax policy in the context of economics and public policy in Indonesia. Bibliometric analysis shows that the University of Indonesia is the most active institution in related publications, and that research on tax policy in Indonesia spans various subjects, including social sciences, economics, and the environment. Visualization of concept relationships using VOSviewer identifies seven main clusters covering various aspects of tax policy, ranging from public health to climate change impacts, indicating the diversity and depth of research in this field.

This research has several limitations. First, the data used only comes from the Scopus database, so research not indexed in Scopus is not included in this analysis. Second, this bibliometric analysis only covers research published in English, overlooking significant contributions from research published in Indonesian in local journals. It is important to also consider articles on tax policy in Indonesian-language journals, as these often overlooked sources may provide richer empirical data on the types of research being studied. This consideration opens new avenues for exploration and broadens our perspective to include diverse sources of information. Third, the analysis methods using VOSviewer and NVivo12 Plus have limitations in interpreting the context and nuances of the keywords and abstracts analyzed. Therefore, the results of this research need to be supplemented with more in-depth qualitative analysis to provide a more comprehensive understanding of the development of tax policy research in Indonesia.

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Assessing the Financial Performance of Nias Local Goverment

Sahala Purba[1]✉ , Melani Pardede[2], Esra Ronatio Pakpahan[3], Aditia Sebayang[4] & Aldinus Simandalahi[5]

[1,2,3,4,5] Universitas Methodist Indonesia
✉ Address correspondence: Jl. Hang Tuah No.8, Madras Hulu, Kec. Medan Polonia, Kota Medan, Sumatera Utara 20151
E-mail: sahala824@gmail.com

ABSTRACT
This research aims to evaluate the financial performance of the Nias Regency Regional Government based on financial report data from 2013 to 2022. The data collection method used is the documentation method, and data analysis is carried out using financial ratio analysis. The research results show that the financial performance of the Nias Regency Regional Government from 2013 to 2020 has several characteristics. The level of regional financial independence is still low with an average of 83.41%, but is in the high category. Nias Regency's regional autonomy also has a very low category with an average of 13.16%. The ratio of the degree of fiscal decentralization in Nias Regency is relatively low with an average of 10.88%. However, the effectiveness of Nias Regency's original regional income (PAD) from 2013 to 2022 is classified as very effective with an average of 108.46%. The regional original income (PAD) efficiency ratio shows a very efficient category with an average of 0.21%. The regional tax efficiency ratio is also classified as very efficient with an average of 2.43%. Meanwhile, the contribution ratio of regionally owned enterprises (BUMD) shows a fairly good contribution with an average of 11.31%. Overall, analysis of the financial reports of the Nias Regency Regional Government shows that their financial performance is quite good, effective and efficient.

Keywords: financial statement analysis, financial performance measurement, South Nias District government

1. Introduction

Statement on the purpose of study is to explain the types of government financial statements and their components, identify and integrate financial information contained in financial statements, assess the level of government accountability and transparency based on information in financial statements, and analyze accrual issues such as government spending, budget deficits, and fiscal policies based on financial statement data. Today, local governments have significant authority in administering all aspects of government activities, including planning, implementation, and evaluation. This happened as a result of the enactment of Law No. 32 of 2004 concerning Regional Government and Law No. 33 of 2004 concerning Financial Balance between the Central Government and Regional Government. The law was later replaced by Law No. 1 of 2022 concerning Financial Relations between the Central Government and Local Government. Local governments have the responsibility to improve community services and welfare evenly and fairly by optimizing local potential, including natural resources, human resources, and finance. Improving services and welfare to the community is an obligation of the local government that must be carried out evenly and fairly, by optimally regulating regional potential, both natural resources, human resources, and finance, the Nias Regional District Government in managing regional finances forms the organization and working procedures of regional apparatus, namely the Regional Financial and Asset Management Agency (BPKAD). [1]. Nias has been chosen as the research site because regional and economic development in the relatively remote area of Nias provides opportunities for research on regional development, economic development, and studies on poverty and social inequality.

The Regional Financial and Asset Management Agency has the task of carrying out the preparation and implementation of regional policies in the course of regional financial and asset management as stated in Regent Regulation Number 5 of 2014 Article 4. BPKAD is a regional financial management official who also acts as the regional general treasurer [2]. It can be said that changes in government in Nias follow changes in regional governance that apply nationally. At the time when Nias Regency had not been divided into 5 regencies/cities, there were 657 villages in it. These villages arose because of community alliances according to local law, each of which used to exist independently without a higher level of government. Since the beginning of independence, Indonesia has implemented a democratic system of government. In this system, people have the freedom to participate in the administration of government as rights and obligations as Indonesian citizens. The Government of Indonesia has the responsibility to achieve the state's goal, which is to improve the general welfare of the Indonesian people, as explained in the Preamble to the Law of the Republic of Indonesia Year 1945.

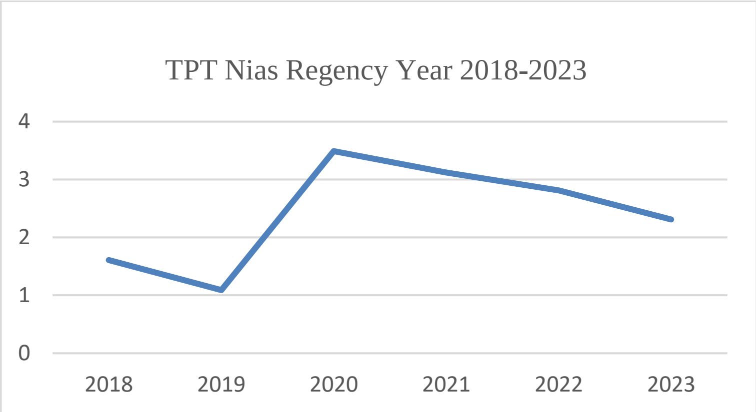
Economy Macro

Nias Regency in North Sumatra, Indonesia, is influenced by agriculture, fisheries, tourism and industry. Agriculture is the main sector with the production of rice, corn, cassava, and coffee, chocolate, and coconut plantations. Fisheries involve fishing such as tuna and swallowfish, as well as the cultivation of whitefish, shrimp, and grouper. Tourism potential lies in the beautiful beaches and traditional culture of Nias tribe. The industrial sector is still developing, especially in food processing and traditional handicrafts. Infrastructure development is also important to facilitate economic growth. The government needs to encourage the development of these sectors through policies, infrastructure investment, human resource development, and tourism promotion, in order to encourage economic growth and welfare of local communities. What is often a problem that exists in the economy of every poor and developing country is unemployment. The higher the unemployment rate, and the HDI, it has an impact on how the Poverty Rate increases even though vice versa This phenomenon is not in line with [1] which states that unemployment is found to have a positive influence and low HDI reflects a low level of population welfare.

Table 1. Unemployment, HDI, and Poverty of Nias Regency in 2018-2023

Year	Unemployment	IPM	Poverty
2018	1.61%	60.82%	22.61%
2019	1,09%	61.65%	22.20%
2020	3,49%	61.93%	23.12%
2021	3,12%	63.37%	24.33%
2022	2,81%	64.30%	23.22%
2023	2,31%	65.15%	21.99%

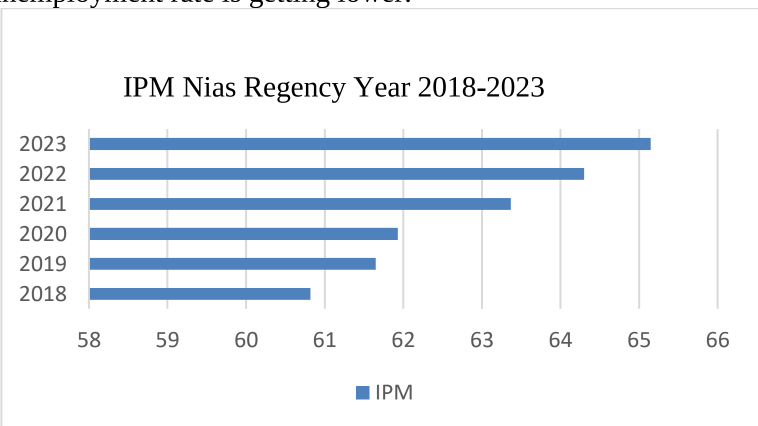
Source: [2]



Source: [3]

Figure 1. Open unemployment rate (TPT) 2018-2023

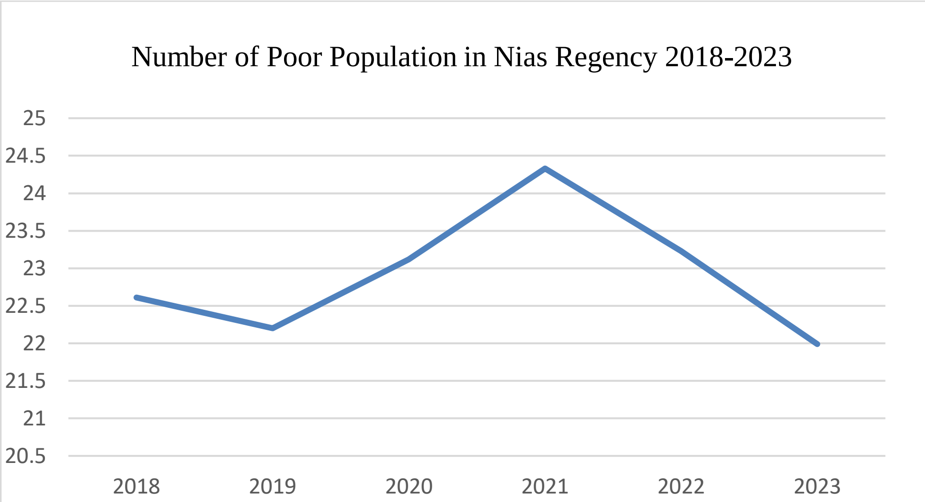
The open unemployment rate (TPT) is the percentage of the number of unemployed to the total labor force. The figure above shows a comparison of TPT Nias district from 2018-2023. Where the highest TPT occurred in 2020 while the lowest TPT occurred in 2019. The high TPT in Indonesia is generally caused by people who have not worked, are in college/ school and looking for work, have just graduated from college / school and just want to find work, and people who have just stopped working, and are looking for work in the year. According to [4] [5] and this research is not in line with research conducted by [6] which states that the open unemployment rate is getting lower.



Source: [3]

Figure 2. Nias Human Development Index (HDI) 2018-2023

The Human Development Index (HDI) is a measure of human development achievements based on a number of basic components of quality of life. From the figure below, it can be concluded that the HDI of Nias Regency has increased significantly every year. The Human Development Index (HDI) measures human development achievements based on a number of basic components of quality of life. As a measure of quality of life, HDI is built through a basic three-dimensional approach. Such dimensions include longevity and healthy knowledge, and a decent life. As has been researched by [7] who said the Evaluation of Village Fund Allocation (ADD) in Supporting Village Development in Nias and is not in line with research [8] which states that HDI has not increased in development achievements.



Source: [3]

Figure 3. Number of Poor People in Nias Regency in 2018-2023

The number of poor people on Nias can be viewed as a condition where a person or group does not have the economic capacity to meet their basic needs, whether they are related to food or non-food, which is not measured solely on the basis of expenditure. The picture above shows a comparison of the number of poor people in Nias district from 2018-2023. Where the poverty rate of Nias Regency is highest in 2021, while the poverty rate of Nias Regency is the lowest in 2023.This research is important, considering the high poverty rate in Nias Islands. In addition, four of the five regions in the Nias Islands are designated as underdeveloped areas in Presidential Decree No. 63 of 2020. This research on the financial performance of local governments has been carried out by several researchers such as [4] which states that the level of financial independence is still very low, but it is different from research conducted by [10] which states that the level of financial poverty is still relatively moderate.

Literature Review

Regional Financial Independence Ratio

The regional financial independence ratio serves as an evaluation tool to measure the extent to which local governments are able to manage their finances independently without relying on revenue or funds from the central government or other parties. This ratio reflects the ability of local governments to finance operational and development expenditures using their own internal financial resources. One indicator that is often used to measure regional financial independence is the ratio of Regional Original Revenue (PAD) to total regional income. In addition, the self-reliance ratio also reflects the level of community participation in the regional development process. The self-reliance ratio also describes the level of community participation in regional development. The higher the independence ratio means that the level of regional dependence on external assistance is getting lower and vice versa [4]. The calculation formula is:

$$Independence\ Ratio = \frac{Realization\ of\ the\ total\ regional\ origional\ revenue\ budget}{Total\ Transfer\ Income} \times 100\%$$

Table 1. Benchmarks Regional Financial Independence Ratio

Level %	Monetary Capacity	Relationship Patterns
0%-25%	Very Low	Instructive
25%-50%	Very Low	Constructive
50%-75%	Keep	Partipative
75%-100%	Tall	Delegative

Source:
The higher this ratio number indicates that the higher the independence of an area [9]

Regional Autonomy Ratio

The level of regional dependence is an indicator that measures the extent to which a region is able to finance regional development activities through the optimization of Regional Original Revenue (PAD), which is calculated as a ratio between PAD and total Regional Budget (APBD) receipts without subsidies (Dana Perimbangan). The degree ratio of fiscal decentralization, on the other hand, is a financial ratio that reflects the ability of local governments to increase local revenues to finance development. This scale is to measure how much the total realization contribution of PAD is compared to the transfer income obtained [10]. The calculation formula is:

$$Dependency\ Rasio = \frac{Total\ Transfer\ Income}{Total\ regional\ Income} \times 100$$

Table 2. Benchmarks Regional Autonomy Ratio

Dependency %	Monetary Capacity
0-25%	Very Low
25%-50%	Low
50%-75%	Enough
75%-100%	Tall

Source:
The higher this ratio, the greater the level of dependence of local governments on central and/or provincial revenues [11]

Degree Ratio of Fiscal Decentralization

The degree ratio of fiscal decentralization is a measure that assesses the extent to which authority and responsibility in financial management are transferred from the central government to local governments. This can be calculated by comparing the amount of revenue collected and managed by local governments with the total revenue of the government as a whole. The higher this ratio, the greater the level of fiscal autonomy possessed by local governments.

$$Degree\ of\ fiscal\ desentralization = \frac{Total\ PAD}{Total\ regional\ income} \times 100\%$$

Table 3. Benchmarks Degree Ratio of Fiscal Decentralization

Level%	**Information**
0-10%	Very Low
10-30%	Low
31-40%	Enough
41-50%	Tall

Source:
The higher the Fiscal Decentralization, the lower the economic growth and vice versa [12]

Regional Original Revenue Effectiveness Ratio (PAD)

The local original revenue effectiveness ratio is a measure that indicates how efficient the local government is in collecting local original revenue (PAD) compared to the potential revenue that should be obtained. This ratio can be calculated by comparing the amount of local original revenue collected with the estimated potential local original income that can be obtained. Regional revenues from other sources come from funds sourced from state budget revenues and other legitimate sources of funds [13] The higher this ratio, the more effective local governments are in optimizing their local original revenues. The calculation formula is:

$$PAD\ effectivness\ rasio\ = \frac{Total\ Realization\ of\ local\ original\ income}{Total\ regional\ original\ revenue\ budged} x\ 100\%$$

Table 4. Benchmarks Regional Original Revenue Effectiveness Ratio (PAD)

Effectiveness Rate %	**Monetary Capacity**
>100	Highly Effective
100	Effective
90-99	Quite Effective
75-89	Less Effective
<75	Ineffective

Source:
The higher the effectiveness ratio reflects the increasing financial capacity of the region [14]

Regional Original Revenue Efficiency Ratio (PAD)

This ratio measures the efficiency of local revenue management by comparing the total revenue collected with the total cost of collection. The higher this ratio, the more efficient the local government is in managing its local revenue. The way to find out the value of this efficiency is to analysis and calculate the difference between the amount of expenditure realization and the budget obtained by the local government. When the ratio value is lower, it shows that performance in government will be more efficient City [15]. The calculation formula is:

$$PAD\ Efficiency = \frac{PAD\ Acquisition\ Costs}{Realization\ PAD\ (\ local\ tax + Regional\ levies)}$$

Table 5. Benchmarks Regional Original Revenue Efficiency Ratio (PAD)

Coefficient Level%	Monetary Capacity
<10%	Highly Efficient
10%-20%	Efficient
21%-30%	Quite Efficient
31%-40%	Less Efficient
>40%	Not Efficient

Source:
The smaller the efficiency ratio means the better the performance of local governments [16]

Local Tax Effectiveness Ratio

An important aspect of the local tax system is its contribution to local revenues. Local taxes provide a significant source of revenue for local governments to finance various public services such as infrastructure, education, and health. The purpose of measuring the PAD Effectiveness Ratio itself is to show the ability of local government implementation in terms of mobilizing PAD income according to what was the initial target [13]. The calculation formula is:

$$Regional\ tax\ effectiveness\ Rasio\ = \frac{Realization\ of\ regional\ taxes}{Local\ tax} \times 100\%$$

Table 6. Benchmarks Local Tax Effectiveness Ratio

Effectiveness Rate %	Monetary Capacity
>100	Highly Effective
100	Effective
90-99	Quite Effective
75-89	Less Effective
<75	Ineffective

Source:
The smaller the Regional Financial Efficiency Ratio means that the better the Financial Performance of the Local government [17]

Local Tax Efficiency Ratio

This ratio measures the ratio between the amount of tax collected by the local government and the estimated amount of tax that should be obtained. Local tax efficiency is a value calculated based on the percentage of collection costs [18]. The calculation formula is:

$$Regional\ tax\ effectiveness\ Rasio = \frac{Local\ tax\ collection\ Costs}{Realization\ of\ regional\ taxes} \times 100\%$$

Table 6. Benchmarks Local Tax Efficiency Ratio

Coefficient (%)	Monetary Capacity
<10%	Highly Efficient
10%-20%	Efficient
21%-30%	Less Efficient
31%-40%	Less Efficient
>40	Inefficient

Source:
The smaller the value of this ratio, the more efficient the performance of a region in implementing government [9]

BUMD Contribution Degree Ratio

The ratio of the degree of contribution of BUMD reflects the extent to which Regional Owned Enterprises (BUMD) play a role in advancing the regional economy. This ratio measures the ratio between the revenue or profit generated by BUMD with the total revenue or profit generated by all economic sectors in the area. The higher the ratio of BUMD contribution degrees, the higher the local original income [19]. The calculation formula is:

$$Rasio\ degree\ of\ BUMD = \frac{BUMD\ profits}{Realization\ of\ PAD} \times 100\%$$

Table 7. Benchmarks BUMD Contribution Degree Ratio

Contribution Classification	Criterion
<0%	Not Contributing
0%- 10%	Contribute Very Low
10%-30%	Low Contribution
31%-40%	Simply Contribute
41%-50%	High Contribution
>50%	Very High Contribution

Source: [20]

2. Method

This research method uses a quantitative descriptive approach that analysis financial information that has been audited by BPK Sumut. Quantitative descriptive research is research that describes, examines and explains a phenomenon with data (numbers) as it is without intending to test a certain hypothesis [22]. The data is analysis based on expert opinions, which states that the research method is a quantitative descriptive approach where the data is collected through documentation techniques and calculation of the weight of financial data and the results of the analysis are depicted in the context of the actual situation on the ground to provide a basis for decision-making about the financial performance of local governments. Financial statement analysis is used to evaluate the problems and opportunities contained in the financial statements. The analysis of financial performance in this study aims to provide information about local government finances as an important factor in decision making and assessment. Some of the proportions to be analysis include Regional Financial Autonomy, Regional Financial Independence, Fiscal Decentralization Measures, Regional Original Revenue (PAD) Effectiveness, PAD Efficiency, Regional Fiscus Effectiveness, Regional Fiscus Efficiency, and Contribution Measures of Regional Owned Enterprises (BUMD).

3. Results and Discussion

Regional Autonomy Ratio

The regional autonomy scale is used to estimate the contribution of local original income (PAD) proportional to the transfer income received by Nias district each year. This research revealed that the average financial autonomy ratio of Nias Regency from 2013-2022 was in the Very low category. The higher this ratio, the greater the level of dependence of local governments on the central government [4]. If the ratio is small, it means that the total realization contribution of PAD is very low to regional revenues, this means that the Nias district government always expects from the center to cover the operational costs of running the Nias district government. From the results of observations during 2013-2022, the ratio is on a scale of 0%-25% with a very low category with an instructive relationship pattern.

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Table 8. Regional Autonomy Ratio

Year	Realization of	Transfer Earnings	Race	Financial Capabilities
2013	44.726.140.940,93	418.424.187.243,00	10.69%	Very Low
2014	65.082.210.841,36	450.003.985.037,00	14.46%	Very Low
2015	70.892.590.607,92	608.246.044.556,00	11.66%	Very Low
2016	82.840.434.008,95	731.036.152.945,00	11.33%	Very Low
2017	95.726.167.744,20	599.493.520.084,00	15.97%	Very Low
2018	88.754.606.114,77	611.725.678.757,00	14.51%	Very Low
2019	107.639.139.179,52	824.114.907.846,00	13.06%	Very Low
2020	103.755.392.881,74	747.492.983.268,00	13.88%	Very Low
2021	103.944.559.551,26	744.068.439.978,00	13.97%	Very Low
2022	100.574.354.406,88	830.055.046.589,00	12.12%	Very Low
Everage	86.393.559.627,75	656.466.094.630,30	13.16%	Very Low

Source: [21]

Regional Financial Independence Ratio

Below table showing the indepence ratio of the Nias Regency Regional Government.

Table 9. Regional Financial Independence Ratio

Year	Transfer Earnings	Regional Revenue	Race	Indicator
2013	418.424.187.243,00	463.150.328.183,93	90.34%	Tall
2014	450.003.985.037,00	515.836.195.878,36	87.24%	Tall
2015	608.246.044.556,00	691.021.858.641,92	88.02%	Tall
2016	731.036.152.945,00	818.455.989.241,95	89.32%	Tall
2017	599.493.520.084,00	870.868.735.873,20	68.84%	Keep
2018	611.725.678.757,00	901.833.538.568,77	67.83%	Keep
2019	824.114.907.846,00	964.445.047.025,52	85.45%	Tall
2020	747.492.983.268,00	891.842.456.149,74	83.81%	Tall
2021	744.068.439.978,00	884.742.401.671,26	84.10%	Tall
2022	830.055.046.589,00	930.629.400.995,88	89.19%	Tall
Everage	656.466.094.630,30	793.282.595.223,05	83.41%	Tall

Source: [21]

Research reveals that the independence of the Nias Regency Regional Government has increased from 2013 to 2022.In 2013, the regional financial independence ratio had the lowest value of 67.83%, while in 2013 it reached the highest value of 90.34%. However, there was a significant decrease in 2018, where the value of the independence ratio fell from 67.83% to 68.84%, or a decrease of 1.01%. Despite the overall increase, the average value of the regional financial independence ratio of Nias Regency is still relatively high. The scale of regional financial independence is calculated by comparing the total transfer income received by regional income with total regional income [22].

Fiscal Decentralization Degree Ratio

Table 10. Fiscal Decentralization Degree Ratio

Year	Native Income of the Region	Regional Revenue	Race	ndicator
2013	44.726.140.940,93	463.150.328.183,93	9.66%	Very Low
2014	65.082.210.841,36	515.836.195.878,36	12.62%	Low
2015	70.892.590.607,92	691.021.858.641,92	10.26%	Low

2016	82.840.434.008,95	818.455.989.241,95	10.12%	Low
2017	95.726.167.744,20	870.868.735.873,20	10.99%	Low
2018	88.754.606.114,77	901.833.538.568,77	9.84%	Low
2019	107.639.139.179,52	964.445.047.025,52	11.16%	Low
2020	103.755.392.881,74	891.842.456.149,74	11.63%	Low
2021	103.944.559.551,26	884.742.401.671,26	11.75%	Low
2022	100.574.354.406,88	930.629.400.995,88	10.81%	Low
Everage	86.393.559.627,75	778.021.839.026,07	10.88%	Low

Source: [21]

This scale is used to measure the level of fiscal decentralization in generating local original revenue (PAD) by comparing the original revenue of the area with the total regional revenue the higher the value, the more table 5. Local Original Revenue Effectiveness Ratio (PAD) optimal the local government in obtaining local original revenue, but based on observations from 2013-2022 the ratio of fiscal decentralization of Nias district can be categorized as low.

Regional Original Revenue Effectiveness Ratio (PAD)

Table 11. Regional Original Revenue Effectiveness Ratio (PAD)

Year	Realization of PAD	PAD Budget	Race	Financial Capabilities
2013	44.726.140.940,93	42.342.411.000,00	105.63%	Highly Effective
2014	65.082.210.841,36	64.391.074.046,00	101.07%	Highly Effective
2015	70.892.590.607,92	68.357.829.183,00	103.71%	Highly Effective
2016	82.840.434.008,95	74.265.040.188,00	111.55%	Highly Effective
2017	95.726.167.744,20	86.904.610.549,00	110.15%	Highly Effective
2018	88.754.606.114,77	92.004.061.426,00	96.47%	Quite Effective
2019	107.639.139.179,52	94.733.312.780,00	113.62%	Highly Effective
2020	103.755.392.881,74	97.762.243.711,00	106.13%	Highly Effective
2021	103.944.559.551,26	83.505.748.976,00	124.48%	Highly Effective
2022	100.574.354.406,88	89.951.184.517,00	111.81%	Highly Effective
Evarage	86.393.559.627,75	79.421.751.637,60	108.46%	Highly Effective

Source: [21]

The Regional Original Revenue (PAD) effectiveness ratio describes the ability of local governments to achieve planned revenue targets based on regional economic potential. The results showed that the effectiveness ratio of PAD Nias Regency fluctuated during the period 2013-2022. In 2021, the effectiveness ratio of PAD reached its peak with a figure of 124.48%, while in 2018 it recorded the lowest figure of 96.47%. Although fluctuating, the average effectiveness ratio of Nias Regency PAD is categorized as Very effective.

PAD Efficiency Ratio

Table 12. PAD Efficiency Ratio

Year	PAD Acquisition	Realization of PAD	Race	Financial
2013	136.392.885,00	44.726.140.940,93	0.30%	Highly Efficient
2014	0,00	65.082.210.841,36	0.00%	Highly Efficient
2015	247.922.380,00	70.892.590.607,92	0.35%	Highly Efficient
2016	288.439.845,00	82.840.434.008,95	0.35%	Highly Efficient
2017	308.744.460,00	95.726.167.744,20	0.32%	Highly Efficient
2018	313.703.495,00	88.754.606.114,77	0.35%	Highly Efficient

2019	400.337.525,00	107.639.139.179,52	0.37%	Highly Efficient
2020	0,00	103.755.392.881,74	0.00%	Highly Efficient
2021	0,00	103.944.559.551,26	0.00%	Highly Efficient
2022	0,00	100.574.354.406,88	0.00%	Highly Efficient
Average	169.554.059,00	84.817.915.763,41	0.21%	Highly Efficient

Source: [21]

The measurement of the efficiency ratio of Local Original Revenue (PAD) has importance in evaluating the amount of costs incurred by local governments to obtain realized revenue. This ratio is calculated by comparing the costs incurred by local governments with the revenues successfully obtained from PAD. The research findings show that the efficiency of Nias Regency PAD has varied during the period 2013-2022, with fluctuations between increases and decreases each year. It was noted that the highest point occurred in 2019 with a percentage of 0.37%, while the lowest percentage was recorded in 2014, 2020, 2021, and 2022 at 0.00%. Although the efficiency of PAD has fluctuations, the overall value of the efficiency ratio of Nias Regency PAD is included in the category of Very efficient.

Local Tax Effectiveness Ratio

Table 13. Local Tax Effectiveness Ratio

Year	Realization of Regional	Regional Fiscus Budged	Race	Financial
2013	4.830.738.787,00	3.253.000.000,00	148.50%	Highly Effective
2014	3.961.669.273,00	3.443.000.000,00	115.06%	Highly Effective
2015	5.275.453.482,00	4.413.000.000,00	119.54%	Highly Effective
2016	7.062.252.388,44	5.347.870.000,00	132.06%	Highly Effective
2017	7.079.590.530,00	5.005.000.000,00	141.45%	Highly Effective
2018	5.224.750.000,00	8.383.136.734,42	62.32%	Highly Effective
2019	8.635.779.993,64	5.899.603.276,00	146.38%	Highly Effective
2020	5.980.155.987,05	6.086.829.345,00	98.25%	Quite Effective
2021	6.886.385.112,94	3.880.735.058,00	177.45%	Highly Effective
2022	8.221.429.503,93	5.613.014.998,00	146.47%	Highly Effective
Average	6.315.820.505,80	5.132.518.941,14	128.75%	Highly Effective

Source: [21]

Analysis of the effectiveness of local taxes is an evaluation that describes the ability of local governments to achieve planned local original revenues, compared to targets set based on the real potential of the region. Research findings show that the value of Nias Regency's local tax effectiveness ratio varies during the period 2013-2022, with fluctuations between increases and decreases each year. In 2021, there was a significant increase with the effectiveness ratio value reaching 177.45%, or an increase of 79.2% compared to the previous year. However, in 2020, there was a drastic decrease with an effectiveness ratio value of 98.28%, which was the lowest value during that period Although the value of local tax effectiveness varies, overall the average value of the local tax effectiveness ratio of Nias Regency is still classified as a very effective category.

Tax Efficiency Ratio

Table 14. Tax Efficiency Ratio

Year	Collection Fee	Realization of	Race	Financial
2013	136.392.885,00	4.830.738.787,00	2.82%	Highly Efficient
2014	0,00	3.961.669.273,00	0.00%	Highly Efficient
2015	247.922.380,00	5.275.453.482,00	4.70%	Highly Efficient
2016	288.439.845,00	7.062.252.388,44	4.08%	Highly Efficient
2017	308.744.460,00	7.079.590.530,00	4.36%	Highly Efficient
2018	313.703.495,00	8.383.136.734,42	3.74%	Highly Efficient
2019	400.337.525,00	8.635.779.993,64	4.64%	Highly Efficient
2020	0,00	5.980.155.987,05	0.00%	Highly Efficient
2021	0,00	6.886.385.112,94	0.00%	Highly Efficient
2022	0,00	8.221.429.503,93	0.00%	Highly Efficient
Average	169.554.059,00	6.455.018.032,05	2.43%	Highly

Source: [21]

The efficiency of local government performance in local tax collection is measured by a ratio value smaller than 10%, which indicates a better level of efficiency. Research findings show that the value of the regional tax efficiency ratio of Nias Regency varies during the period 2013-2022, with fluctuations between increases and decreases each year. In 2019, the efficiency ratio value reached 4.64%, which shows the lowest level of efficiency compared to previous years. While the lowest regional tax efficiency ratio value occurred in 2014, 2020,2021,2022 with a value of 0.00%, indicating the highest level of efficiency. As well as the average local tax efficiency ratio is in the Highly Efficient category. The second research objective is the extent of the ratio of regional tax efficiency and regional levy efficiency [6].

BUMD Contribution Degree Ratio

Table 15. BUMD Contribution Degree Ratio

Year	Good BUMD	Realization of PAD	Race
2013	7.843.361.970,00	44.726.140.940,93	17.54%
2014	6.096.676.173,57	65.082.210.841,36	9.37%
2015	9.562.922.460,00	70.892.590.607,92	13.49%
2016	9.501.202.685,00	82.840.434.008,95	11.47%
2017	10.780.869.649,00	95.726.167.744,20	11.26%
2018	11.688.732.720,00	88.754.606.114,77	13.17%
2019	10.052.195.755,00	107.639.139.179,52	9.34%
2020	7.233.684.142,00	103.755.392.881,74	6.97%
2021	10.531.786.799,00	103.944.559.551,26	10.13%
2022	10.466.660.712,00	100.574.354.406,88	10.41%
Average	9.375.809.306,56	86.393.559.627,75	11.31%

Source: [21]

The ratio of the degree of contribution of BUMD is a useful indicator in evaluating the contribution of regional companies to regional revenues. This ratio is calculated by comparing regional revenues from segregated regional wealth management with total Regional Original Revenue receipts. Based on the research findings, there was a general decrease in the value of the ratio of the degree of contribution of BUMD Nias Regency during the period 2013-2022.However, in 2013, the ratio of the degree of contribution of BUMD of 17.54% was the highest ratio. Meanwhile, the value of the BUMD Contribution ratio occurred in 2019 at 9.34%. The ratio of the degree of contribution of BUMD Nias Regency from 2013 to 2022 can be said to contribute well.

Discussion

Based on the calculation of the regional financial ratio of Nias Regency, it was obtained that the PAD level increased every year from 2018-2022 and the ratio was directly proportional to the PAD level. Although PAD has increased from 2018-2022 this has not been able to change the category of the independence ratio to move to a better number, in 2018 the PAD level decreased and increased again in 2019-2022, meaning the low level of financial ability of the Nias Regency government in self-financing, development, government activities, and services to the community as well as the absence of significant community participation in paying taxes and levies This is in line with: research conducted by [18] and [23] which stated that the level of financial independence of the Medan Region studied✓was in the High Category. in line with the research conducted by [24] which stated that the level of regional independence in the TAPUT expansion district was very high. The implication of this result is the need for more intensive efforts from the Nias Regency government to increase self-reliance. regional finance, both through increasing PAD and community participation in paying taxes and levies. This is important to support better development and public services in Nias Regency.

The ratio of Nias Regency's regional autonomy to fund transfers in 2013-2022 is categorized as a very low monetary capacity with an average of 13.16%. This means that the Nias Regency government in funding development in the last 10 years still has to be financed from the results of transfers/central funds. Although recorded in the government's financial statements, PAD has increased. So this study is not in line with [25] and [26] which states that the higher this ratio, the greater the level of dependence of local governments on the central government and/or provincial governments. The implication of this condition is the need for more intensive efforts from the Nias Regency Government to increase regional financial independence, for example through optimizing the potential of PAD, increasing budget efficiency, and developing the local economy. This is important so that Nias Regency can reduce its dependence on fund transfers from the central government and finance development and public services more independently.

The decentralization ratio in Nias Regency is in the low category. Nias Regency in terms of monetary capacity can be said to be low with an average ratio of 10.88%. This shows that Nias Regency has a very low income level when compared to the maximum efforts that have been made. So this study is in line with [27] and [28] who said that the ratio of the level of fiscal decentralization in Jambi City is categorized as very low and with a very weak position. Overall, the low decentralization ratio indicates the need for more systematic and sustainable efforts from the Nias Regency Government to increase regional financial capacity and strengthen fiscal autonomy.

The effectiveness and efficiency of Regional Original Revenue (PAD) which is categorized as very efficient is 108.67%, meaning that the Nias Regency government is quite optimal in managing regional taxes and regional levies, because regional taxes and regional levies are included in the elements involved in PAD, this is in line with research [11] which states that the higher the effectiveness ratio, the better the regional capabilities. and research [29] stated that the management of PAD in South Labuhan District is very efficient, meaning that the cost incurred to obtain PAD is much smaller than the realization of PAD acquisition. Implications overall, the results of the excellent effectiveness and efficiency of PAD in Nias Regency show the potential to increase regional financial independence, so that it can strengthen the ability of the Nias Regency Government to carry out government and development functions.

The contribution of BUMD to the PAD of Nias Regency in 2013-2022 is in the average range per year of 11.31%, so it can be said that the level of contribution of BUMD is low. The contribution of BUMD Nias Regency from 2013-2022 is unstable or changes every year (fluctuating). Optimization of BUMD's contribution to regional economic growth has not been achieved, with BUMD being one of the main contributors to Regional Original Revenue (PAD), but has not been able to support the fiscal independence of a region. In fact, the regional economy still depends on transfer funds from the central government. So this study is not in line with [30] which states that the higher this ratio has an impact on increasing regional income. The main implication that needs to be considered is the need to improve and optimize the role of BUMD in supporting PAD and fiscal independence of Nias district.

4. Conclusion

Based on the calculation of existing ratios, it can be seen that the level of regional financial independence of Nias Regency in 2013-2022 has an average of 83.41%, which shows a high level of independence. Similarly, the level of regional autonomy, which has an average of 13.16% and is included in the very low category. The ratio of degrees of fiscal decentralization is also low, with an average of 10.88%. However, the effectiveness of Nias Regency Local Original Revenue (PAD) is very effective, with an average of 108.46%, while the efficiency is very efficient with an average of 0.21%. The effectiveness of local taxes is also quite high, with an average of 128.75%, while the efficiency rate is quite low with an average of 2.43%. The contribution of Regional Owned Enterprises (BUMD) with an average of 11.31%, it can be said that the contribution of BUMD contributes well. Thus, it can be concluded that the financial capacity of the local government of Nias Regency is still not ideal.

Nias Regency has the potential to increase Local Original Revenue (PAD) by using its resources. In the future, Nias district government needs to improve financial quality and performance, especially in managing local revenue to be more effective. Continuous evaluation of expenses also needs to be done more efficiently. One way the government can optimize revenue is by strengthening the process of collecting regional levies, such as accelerating the preparation of regional regulations and adjusting levy rates in accordance with economic development. The government should also strengthen the role of village heads as leaders and key actors in disseminating development information. The construction of effective communication networks is also important, focusing on discussion materials related to substantial and innovative development information. In increasing tax revenue, the local government of Nias Regency needs to improve data administration by utilizing technology to create an integrated system that can detect non-compliant taxpayers. Tax socialization through online media also needs to be carried out in accordance with the latest trends to increase taxpayer awareness in paying taxes. Nias local governments should also look for other alternatives that are more efficient in tax collection to minimise acquisition costs. In addition, the government needs to regularly evaluate loan interest rates and deposit rates to attract customers and increase profits of Regional Owned Enterprises (BUMD)

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The interplay of self-assessment mechanisms and socialization processes in promoting tax compliance

I Made Dwi Sumba Wirawan[1]✉ , I Wayan Chandra Adyatma[2] & Riza Edwindra[3]

[1,2,3] Fakultas Vokasi, Universitas Warmadewa
✉ Address correspondence: Jalan Terompong 24 Tanjung Bungkak, Denpasar, Bali
E-mail: dwiisumba@gmail.com

ABSTRACT
Taxation plays a crucial role in Indonesia as it serves as a significant revenue source for the country. Small and Medium Enterprises (SMEs) are particularly important in the economic landscape of Indonesia. This study underscores the significance of tax compliance among Small and Medium Enterprises, particularly in light of global economic challenges and the essential need for tax revenues. Tax compliance is a critical determinant in sustaining government functions and fostering economic growth in Indonesia. It is vital for governments to fulfill their financial obligations, including the provision of public goods, national defense, and support for economic development. However, factors such as tax socialization, understanding of tax regulations, and the application of tax knowledge influence the level of compliance among Micro, Small, and Medium Enterprises (MSMEs). The objectives of this research were to examine the impact of the self-assessment system on tax compliance among MSMEs in Indonesia, and to investigate the mediating role of tax socialization in the relationship between the self-assessment system and tax compliance. This study examined micro, small, and medium-sized business taxpayers in Denpasar City, utilizing a sample size of 100 taxpayers selected through simple random sampling. The findings indicate that self-assessment systems have a positive impact on the compliance behavior of these MSME taxpayers. However, the results suggest that tax socialization does not significantly moderate the relationship between the self-assessment system and taxpayer compliance.

Keywords: self-assessment, socialization, tax compliance

1. Introduction

Taxation plays a crucial role in Indonesia as it serves as a significant revenue source for the country. Small and Medium Enterprises (SMEs) are particularly important in the economic landscape of Indonesia [1]. The importance of tax compliance among SMEs is emphasized, especially in the face of global economic challenges and the necessity for tax revenues [2]. Tax compliance is a critical factor in sustaining government functions and fostering economic growth in Indonesia. Tax is the greatest revenue in Indonesia Budget and all countries in the world, however, many Micro, Small and Medium Enterprises (MSMEs) struggle with tax compliance. Tax compliance among Micro, Small, and Medium Enterprises (MSMEs) is a critical issue faced not only in Indonesia but also globally.

Various studies have identified key factors influencing tax compliance among Small and Medium Enterprises (SMEs) in Indonesia. These factors include the implementation of self-assessment systems, tax socialization activities, understanding of taxation, tax rates, tax sanctions, and fiscal services [1][3][4][5][6][7][8]. Tax compliance among Micro, Small, and Medium Enterprises (MSMEs) in developing countries poses a significant challenge despite the crucial role tax revenue plays in funding public services and infrastructure [2]. Tax compliance is essential for governments to meet their financial obligations, including providing public goods, national defense, and supporting economic development [4]. However, factors such as tax socialization, understanding of tax regulations, and the application of tax knowledge influence the level of compliance among MSMEs [9].

The self-assessment system is a fundamental component of the tax administration system in Indonesia, crucial for enhancing tax compliance among taxpayers, including Micro, Small, and Medium Enterprises (MSMEs). This system places the responsibility on taxpayers to accurately calculate, report, and fulfill their tax obligations. Several factors influence the effectiveness of the self-assessment system, such as taxpayers' comprehension of tax regulations, access to tax information, and the extent of tax socialization [5]. Research has demonstrated that the implementation of the self-assessment system significantly impacts tax compliance among SMEs, with the aim of increasing revenue for the Indonesian government [1]. Studies have also explored the digital transformation of the self-assessment system for final income tax in MSMEs, analyzing the challenges faced and efforts made by tax offices to enhance the system [10]. Factors positively influencing SME taxpayer compliance include taxpayer perception, the implementation of SME accounting, income levels, and the self-assessment system [11]. Various studies have investigated the factors affecting SME tax compliance in Indonesia, highlighting the significance of tax knowledge, understanding tax regulations, and tax socialization [12]. Furthermore, models have been developed to comprehend taxpayer compliance moderated by tax socialization among SMEs in Indonesia, emphasizing the intricate relationship between socialization efforts and compliance behavior [13]. Studies have also delved into the impact of tax knowledge on voluntary tax compliance, with trust identified as a mediating variable, particularly among MSMEs [6].

The impact of the self-assessment system on tax compliance among Small and Medium Enterprises (SMEs) has been a topic of research. While the self-assessment system aims to improve tax compliance by requiring taxpayers to accurately calculate, report, and fulfill their tax obligations, studies have shown that its effect on tax compliance may vary [1]. Research has explored various factors, such as money ethics, tax socialization, and understanding of tax regulations, and their influence on tax compliance among SMEs. Some studies suggest that these factors may not significantly affect tax compliance [14]. Additionally, the implementation of the self-assessment system, along with taxpayers' perceptions, SME accounting practices, and income levels, may not always lead to a substantial improvement in tax compliance [11]. Furthermore, investigations into the role of tax knowledge, tax socialization, and the application of accounting standards in influencing taxpayer compliance have indicated that these factors may not always have a significant impact on tax compliance among SMEs [15]. Similarly, the influence of taxation understanding, socialization, and fiscal services on tax compliance may not always result in a notable enhancement in compliance levels [16].

The implementation of the self-assessment system alone may not significantly impact tax compliance among Small and Medium Enterprises (SMEs) in Indonesia [1][10]. Research has demonstrated that the implementation of the self-assessment system does not necessarily lead to increased tax compliance among SMEs, as the aim of increasing revenue for the Indonesian government may not always align with the challenges and limitations faced by SMEs in properly understanding and fulfilling their tax obligations. Research has shown that factors such as tax socialization play a crucial role in enhancing tax compliance among SMEs [5][15]. Effective tax socialization efforts, including educational programs, media campaigns, and direct engagement with SMEs, can improve taxpayers' understanding of tax regulations, enhance their perception of tax system fairness, and ultimately increase their willingness to comply [8][17]. In Indonesia, tax socialization has been found to strengthen compliance among MSME taxpayers [7][18]. While the self-assessment system may not directly lead to increased tax compliance among SMEs, integrating effective tax socialization efforts alongside the system can significantly enhance compliance levels. Understanding tax regulations, improving tax knowledge, ensuring tax justice, and providing quality fiscal services are essential components in fostering tax compliance among SMEs in Indonesia.

This research is importance because tax compliance among Micro, Small, and Medium Enterprises is crucial for governments to meet their financial obligations and support economic development. While the self-assessment system is a fundamental component of the tax administration system, its effectiveness in enhancing tax compliance among MSMEs is influenced by various factors, including tax socialization, understanding of tax regulations, and the application of tax knowledge. This research will contribute to the understanding of the interplay between the self-assessment system and socialization in improving tax compliance among MSMEs, providing insights for policymakers and tax authorities to develop more effective strategies for enhancing compliance levels. Theory of Planned Behavior (TPB) has been extensively studied in the context of taxpayer compliance. This theory posits that an individual's behavior is influenced by their intention, which in turn is determined by their attitude, subjective norms, and perceived behavioral control. In the case of tax compliance, the theory suggests that taxpayers' attitudes towards tax obligations, their perception of social pressure to comply, and their perceived ability to fulfill their tax responsibilities are key factors influencing their tax compliance behavior. The Theory of Planned Behavior (TPB) is a significant factor in understanding taxpayer compliance, particularly in relation to self-assessment and tax socialization. Research has shown that the TPB can indeed influence taxpayer compliance behavior, with tax socialization playing a moderating role in this relationship [17]. Taxpayer compliance is influenced by various factors such as taxpayer awareness, understanding of tax regulations, socialization, and self-assessment of the tax system ("Affecting compliant with the willingness to pay tax as an intervening variable factor [19].

Tax compliance theory suggests that taxpayers make rational decisions by weighing the benefits of adhering to tax regulations against the potential costs of non-compliance, such as fines and penalties. Several factors influence tax compliance behavior among small and medium enterprises (SMEs). These factors include tax fairness, isomorphic forces, strategic responses, tax system complexity, tax deterrence sanction, tax noncompliance opportunity, tax information, tax attitude, perception, understanding of tax regulations, tax knowledge, tax socialization, tax rates, tax sanctions, and the quality of fiscal services [3][2][20][8][18][21][22][23][17][24][16]. Research has shown that tax compliance can be influenced by various elements such as tax education, trust in the government, tax justice, understanding of tax accounting, and online taxation socialization [25][6][1][26][27]. Moreover, the level of taxpayer compliance is affected by factors like taxpayer perception, implementation of SME's accounting, self-assessment systems, income level, and peer influence [11][28]. Additionally, the dissemination of taxation information and tax socialization play a crucial role in enhancing taxpayer awareness and compliance [5][7].

The self-assessment system is a fundamental component of the tax administration system. Under this system, taxpayers are responsible for accurately calculating, reporting, and paying their own tax liabilities. The self-assessment system aims to enhance tax compliance by shifting the onus of tax calculation and reporting to the taxpayer, rather than the tax authority. The self-assessment system in tax administration places the responsibility of accurately calculating, reporting, and paying tax liabilities on taxpayers themselves, aiming to improve tax compliance by shifting the burden of tax calculation and reporting from the tax authority to the taxpayer [1]. This system has gained global acceptance and has been implemented in various countries to combat tax evasion and avoidance, promoting voluntary compliance and efficient tax administration [29]. Knowledge of tax laws and regulations is crucial for tax compliance, particularly under the self-assessment system, as it plays a significant role in enhancing taxpayer awareness and ethics to reduce non-compliance [25][6].

Tax socialization is a crucial tool in educating taxpayers about their tax obligations, rights, and responsibilities, which can influence their compliance behavior. Research has shown that efforts in tax socialization, such as providing tax knowledge to the public and disseminating information about tax regulations and procedures, can enhance taxpayers' understanding of the tax system [5][21]. Effective tax socialization has been linked to increased taxpayer compliance by conveying information about taxation, improving tax knowledge, and promoting tax fairness [18][24]. Additionally, tax socialization activities, including online initiatives, can assist taxpayers, particularly Micro, Small, and Medium Enterprises (MSMEs), in understanding their tax rights and obligations, thereby potentially increasing compliance [15][13].

The Theory of Planned Behavior is a well-established psychological theory that has been applied to understand taxpayer compliance behavior among Micro, Small, and Medium Enterprises (MSMEs). Several studies have investigated the impact of various factors on tax compliance within this context. Research has shown that factors such as taxation understanding, socialization, tax knowledge, tax rates, tax sanctions, and the self-assessment system play crucial roles in influencing MSMEs' compliance with tax regulations [23][17][26][24][16]. Studies have highlighted the positive effects of implementing the self-assessment system on tax compliance among SMEs, emphasizing the importance of SMEs' knowledge of tax regulations and the self-assessment system in improving compliance [11]. The self-assessment system has been shown to have a positive influence on tax compliance among Micro, Small, and Medium Enterprises (MSMEs) [1]. Understanding tax regulations and knowledge of the self-assessment system are crucial for improving compliance with tax obligations among SMEs [25]. In the current era of the Self-Assessment System, knowledge plays a vital role in enhancing taxpayer awareness and ethics to reduce tax non-compliance [6]. So, the hypothesis in this study is:

H_1 : The self-assessment system positively influences tax compliance among MSMEs.

The Theory of Planned Behavior (TPB) has been extensively studied in relation to taxpayer compliance among Micro, Small, and Medium Enterprises (MSMEs), with a focus on the moderating role of socialization. Several studies have investigated the impact of factors such as tax knowledge, understanding of tax regulations, self-assessment systems, and tax socialization on tax compliance behavior among MSMEs [23][11][24][7][21]. These studies highlight the importance of factors like tax knowledge and socialization in influencing taxpayer compliance positively. Tax socialization has been identified as a significant moderating variable in the relationship between the TPB and tax compliance [17][5][4]. It has been suggested that effective tax socialization programs can enhance compliance levels among MSME taxpayers. Additionally, the implementation of self-assessment systems has been linked to improved tax compliance among SMEs [1][10]. Furthermore, the literature emphasizes the role of understanding tax regulations, tax rates, and tax sanctions in influencing taxpayer

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compliance [8][9][16]. Studies have shown that these factors, along with services provided by tax authorities, can impact the level of compliance among MSMEs. Overall, the research indicates that a combination of factors such as tax knowledge, socialization, understanding of regulations, and the implementation of self-assessment systems play crucial roles in shaping tax compliance behavior among MSMEs. Effective tax socialization programs, coupled with a clear understanding of tax obligations and regulations, can contribute to higher levels of voluntary compliance among MSME taxpayers. So, the hypothesis in this study is:

H_2 : Tax socialization can strengthen the relationship between the self-assessment system and tax compliance among MSMEs.

The conceptual model underlying the research is grounded in the theoretical basis that has been established. This conceptual model is illustrated in Figure 1.

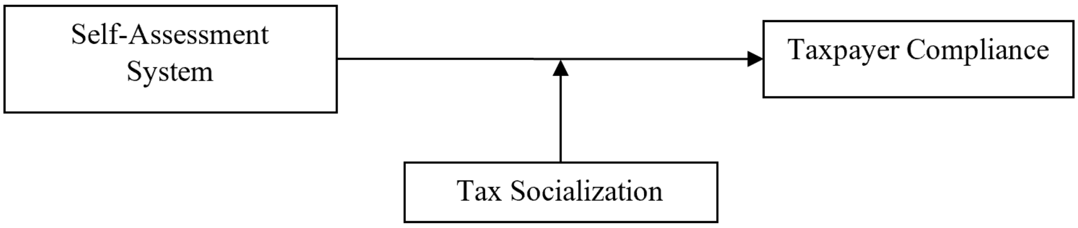

Figure 1. Research Concept

2. Method

This study concentrates on micro, small, and medium enterprise (MSME) taxpayers in Denpasar City. According to data from the Ministry of Cooperatives, Small and Medium Enterprises, Denpasar City hosts approximately 79% of the country's 97,452 MSMEs in 2020. The study employed a simple random sampling method to select a sample of 100 MSME taxpayers. The dependent variable in this study is taxpayer compliance. Compliance refers to the act of adhering to tax policies and fulfilling one's tax obligations, with the aim of instilling a sense of awareness among individual taxpayers regarding the importance of taxes for the nation. Taxpayer compliance involves complying with all applicable regulations in the taxation domain to meet one's tax responsibilities. The indicators used to measure the variable compliance of Micro, Small and Medium Enterprises taxpayers include:

a. Formal compliance encompasses registering as a taxpayer, obtaining a Taxpayer Identification Number, and timely payment and reporting of taxes.
b. Material compliance includes fulfilling tax arrears and accurately depositing and reporting payable taxes.

The independent variable in this study is the self-assessment system, which is a system whereby the burden of calculating, depositing, and reporting taxes rests primarily on the taxpayer. The indicators used to measure the self-assessment system variable include taxpayer's responsibility for registering as a taxpayer, taxpayer's role in calculating tax liabilities, taxpayer's direct involvement in paying taxes, and taxpayer's responsibility for submitting tax returns.

The moderating variable in this study is tax socialization, which refers to the process of providing information, education, counseling, and guidance to taxpayers to increase their understanding and awareness of tax obligations. The variables used to measure tax socialization include provision of tax counseling and guidance to taxpayers, facilitation of discussions and dialogues between tax authorities and taxpayers, direct dissemination of tax information from officials to taxpayers, utilization of billboards and other visual media to convey tax-related messages and leveraging the official website of the Directorate General of Taxes to communicate with taxpayers.

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This study uses Linear Regression and Moderated Regression Analysis (MRA) data analysis methods with the help of the SPSS for Windows statistical application. The regression model in this study is expressed by the following equation:

Equation 1:
$Y = \alpha + \beta_1.X_1 + \varepsilon$

Equation 2:
$Y = \alpha + \beta_1.X_1 + \beta_2.X_2 + \beta_3.\ X_1X_2 + \varepsilon$

Description:
Y = taxpayer compliance
α = constant value
β_1 = regression coefficient of self-assessment system
β_2 = regression coefficient of tax socialization
β_3 = regression coefficient of interaction between tax socialization and self-assessment systems
X_1 = self-assessment system
X_2 = tax socialization
ε = standard error

3. Results and Discussion

Before conducting regression analysis, the feasibility of the data is evaluated through classical assumption tests, such as assessing normality and heteroscedasticity. Once the data has met the classical assumption requirements, the regression analysis is performed, resulting in equations 1 and 2. The regression results for equation 1 are presented in Table 1 below.

Table 1. Linear Regression Test Results

Description	Beta value	Significant value
Constant	6.073	0.000
Self-Assessment Systems	0.658	0.000

Source: Data processed, 2024

The statistical analysis results indicate a significance value of 0.000, which is below the 0.05 significance level. This suggests a high degree of statistical significance, implying a strong relationship between the study variables. Furthermore, the regression coefficient has a value of 0.658, meaning a one-unit increase in the self-assessment system is associated with a 0.658 unit increase in taxpayer compliance among micro, small, and medium enterprises in Denpasar City. Based on these findings, the alternative hypothesis is accepted, indicating that the self-assessment system has a positive and significant effect on MSME taxpayers' compliance behavior. This underscores the crucial role of self-assessment systems in promoting voluntary tax compliance among MSME taxpayers in the region.

The self-assessment system is a crucial factor influencing the compliance behavior of Micro, Small, and Medium Enterprises (MSMEs) taxpayers. Various studies have demonstrated the positive impact of taxpayer perception, accounting knowledge, tax understanding, socialization, and tax knowledge on tax compliance among MSMEs [11][23][6][25][24]. Implementing a self-assessment system has been identified as a strategy to enhance voluntary compliance among MSMEs [1][29]. Additionally, tax education has been shown to significantly enhance tax knowledge, fairness, and compliance among MSMEs [21]. Research has also indicated that tax socialization, tax justice, and understanding tax regulations positively influence taxpayer compliance [18][5][4]. Furthermore, factors such as tax fairness, isomorphic forces, and strategic responses have been recognized as predictors of tax compliance [2]. In promoting compliance behavior among MSME taxpayers, it is crucial to consider the role of tax socialization, understanding tax regulations, tax rates, and tax sanctions [16][9]. Peer influence has also been acknowledged as a factor affecting tax compliance behavior among SMEs [28]. Moreover, the quality of fiscal services, tax authorities' service, and effective communication between tax authorities and taxpayers have been highlighted as significant factors influencing taxpayer compliance [10][7][5].

The second hypothesis was evaluated through Moderated Regression Analysis, and the test results are presented in Table 2.

Table 2. Moderation Regression Test Results

Description	Beta value	Significant value	
Constant	4.432	0.032	
Self-Assessment Systems	0.329	0.058	
Tax Socialization	0.305	0.013	
The interaction of self-assessment systems and tax socialization	0.002	0.801	Not able to moderate

Source: Data processed, 2024

The results of the data analysis reveal that the significant value is 0.801, which is greater than the significance level of 0.05. Additionally, the regression coefficient (β) has a value of 0.002, indicating a very small effect. Based on these findings, the alternative hypothesis (Ha) must be rejected, suggesting that tax socialization is unable to effectively moderate the relationship between the self-assessment system and taxpayer compliance among Micro, Small, and Medium Enterprises (MSMEs).

The findings suggest that tax socialization alone may not be sufficient to significantly enhance the relationship between the self-assessment system and taxpayer compliance among micro, small, and medium enterprises (MSMEs). While tax socialization, which involves providing information, education, counseling, and guidance to taxpayers, is an important factor, its impact in strengthening the effect of the self-assessment system on overall taxpayer compliance appears to be limited. Previous research has indicated that factors such as accounting knowledge, fiscal service quality, tax authority service, understanding of tax regulations, tax rates, and tax sanctions can collectively influence the level of compliance among MSME taxpayers, with tax socialization playing a role in this relationship. Additionally, tax education and socialization programs have been identified as effective tools to improve taxpayer compliance by enhancing understanding and awareness of tax obligations. However, there have been instances where tax socialization did not significantly impact taxpayers' compliance behavior, suggesting that a more comprehensive approach may be needed to promote voluntary compliance among MSME taxpayers. This suggests that tax socialization alone is not sufficient to meaningfully enhance the compliance behavior of MSME taxpayers. While tax socialization, which involves the provision of information, education, counseling, and guidance to taxpayers, is an important factor, it appears to have limited impact in strengthening the effect of the self-assessment system on overall taxpayer compliance.

To enhance voluntary tax compliance among MSME taxpayers, a more holistic approach may be required that extends beyond merely tax socialization. Similarly, the finding that the "Utilization of billboards and other visual media to convey tax-related messages" indicator received the lowest mean score of 4.31 suggests that the use of billboards is perceived as less effective. In this regard, tax authorities may need to consider employing a wider range of communication channels and methods to reach and engage MSME taxpayers more effectively. Utilizing billboards and other visual media to convey tax-related messages may not necessarily lead to increased taxpayer compliance. While effective communication between tax authorities and taxpayers is crucial to prevent misunderstandings and enhance compliance, relying solely on one-way channels like billboards may be limited in promoting genuine voluntary compliance. Tax socialization has been highlighted as a key element in conveying information about taxation to taxpayers and positively impacting compliance [18][5]. However, it is essential to note that moral obligation and trust in the government may not significantly influence taxpayer compliance, while tax awareness has been shown to have a significant effect [17].

Additionally, tax authorities should explore a wider range of communication channels and methods to reach and engage MSME taxpayers more effectively. Relying solely on one-way channels like billboards may have limited impact on promoting genuine voluntary compliance. Instead, tax authorities should consider utilizing a diverse set of communication tools, including interactive workshops, digital platforms, and personalized outreach, to foster a stronger connection with MSME taxpayers and enhance their understanding of tax obligations. Furthermore, it is crucial to recognize that factors such as moral obligation and trust in the government may not significantly influence taxpayer compliance. In contrast, tax awareness has been shown to have a significant effect on compliance behavior. Therefore, tax authorities should prioritize improving MSME taxpayers' understanding of their tax responsibilities and the importance of compliance, as this is likely to have a more substantial impact on promoting voluntary compliance.

4. Conclusion

Self-assessment systems have positive effect on taxpayer compliance due to their ability to enhance taxpayers' understanding of tax obligations and simplify the tax filing process. However, the findings of this study suggest that tax socialization alone may not be sufficient to significantly enhance the relationship between the self-assessment system and taxpayer compliance among micro, small, and medium enterprises. The findings of this study suggest that while tax socialization is an important factor in enhancing tax compliance among Micro, Small, and Medium Enterprises (MSMEs), it may not be sufficient to significantly strengthen the relationship between the self-assessment system and taxpayer compliance. Next further research can explore a more comprehensive approach that considers additional factors such as improving accounting knowledge, enhancing fiscal service quality, providing better tax authority service, and ensuring a clear understanding of tax regulations, tax rates, and tax sanctions.

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Professional skepticism and audit judgment: The moderating effect of audit experience

Ni Putu Budiadnyani[1]✉, Putu Pande R. Aprilyani Dewi[2]

[1] Fakultas Ekonomi dan Bisnis, Universitas Pendidikan Nasional, Indonesia
✉Jalan Bedugul No.39, Sidakarya, Denpasar Selatan, Kota Denpasar
E-mail: putubudiadnyani@undiknas.ac.id

ABSTRACT
An entity's financial performance, position, and cash flows are structurally represented in financial statements, which also capture management's accountability for financial resources. To safeguard the credibility of financial information and bolster public trust, the public accounting profession is instrumental in rendering opinions on the reliability of these financial statements. To validate these financial statements and form views about the fairness of the financial information given, independent auditors conduct an audit procedure. The assessment of financial statements is greatly impacted by the audit judgment, which is an essential part of the auditing process. The impact of professional skepticism on audit judgment is investigated in this study. This study also investigates auditor experience's potential to function as a moderating variable. A total of 76 auditors from public accounting companies registered in Bali Province were the samples evaluated. Purposive sampling was used in this study to choose the sample, and auditors with at least a year of experience were required. Both linear regression and moderated regression analysis (MRA) are the analysis methods employed. The analysis's findings demonstrate that professional skepticism improves audit judgment. The association between audit judgment and professional skepticism cannot be mitigated by audit expertise. The results imply that the relationship between professional skepticism and the caliber of audit judgment is not always strengthened by auditor experience. It appears that both seasoned and inexperienced auditors are capable of exhibiting professional skepticism and rendering sound audit decisions.

Keywords: skepticism, audit judgement, experience

1. Introduction

An organization's financial performance, status, and cash flows may all be effectively communicated with the use of financial statements. They show how accountable management is for financial resources. By offering assessments on the accuracy of financial accounts, the public accounting profession contributes significantly to the public's confidence and the legitimacy of financial information [1]. Validating financial accounts through an audit procedure, reviewing the data, and providing a judgment on the fairness of the information are the responsibilities of the independent auditor. A company's financial reports are seen as more reliable and credible when public accountants are involved because of the professional skepticism that is used throughout the audit [2]. The outcome effect and professional scepticism are key factors influencing auditors' judgments and the identification of misstatements in financial reports [3].

Audit judgment is a critical process in auditing that involves evaluating evidence, designing procedures, and determining the audit opinion. This judgment significantly impacts the assessment of financial statements. Factors such as experience, scepticism, professionalism, and ethics influence auditors' judgment. Research indicates that experienced auditors generally make more accurate judgments during the audit process [4]. Studies have highlighted the importance of factors such as professionalism, experience, independence, and task complexity in shaping audit judgment [5]. There has been research on the influence of auditor experience on judgment, and the results indicate that experience has a beneficial effect on audit judgment [6]. Furthermore, research has been done on the use of irrelevant evidence in auditor judgment, the impact of professional skepticism, information technology use, and auditor skill on the quality of remote audits [7]. Research indicates that seasoned auditors typically reach more accurate conclusions while conducting an audit. Another topic of interest is how audit decisions are affected by professional skepticism [3].

A key idea in auditing is professional skepticism, which calls on auditors to have an open mind, analyze the data critically, and determine if management's statements can be trusted. Because it helps auditors to spot and correct any financial statement misstatements, this skepticism is vital to the audit process. Due to its role in improving the quality of audits, auditing standards place a strong emphasis on the value of professional skepticism throughout the audit engagement. Because regulatory agencies are concerned that auditors are not being sufficiently skeptical, they have emphasized the importance of professional skepticism as a core component of auditing [2]. It entails continuing to ask questions and assess the facts critically. Studies show that skepticism is linked to improved audit quality [1], improved fraud detection [8], and better judgment performance [9]. Various factors such as experience, education, and technology impact the application of scepticism [10][11]. Auditors' judgments are indeed influenced by their level of scepticism, with more seasoned auditors typically demonstrating higher levels of scepticism. Research by [2] auditors who exhibit greater levels of professional skepticism are more likely to spot fraud, underscoring the significance of skepticism in audit procedures. Because they take a careful approach, auditors who exhibit high levels of skepticism are more likely to spot fraudulent activity [8].

The Wanaarta Life fraud case is a complex issue that requires auditors to exercise professional scepticism, adhere to ethical standards, and consider various factors such as experience, task complexity, and independence in their judgment. We can blame inadequate auditor experience and skill for the audit's inability to find fraud at Wanartha Life. According to research, when it comes to difficult audit activities, the judgment quality of auditors might be troublesome [12]. Fraud detection is influenced by a number of factors, including audit expertise, professional skepticism, and time constraints [8]. The impact of expertise on auditors' judgments has been extensively researched, with studies consistently showing that work experience significantly enhances audit judgment [6][4][13]. Experienced auditors demonstrate better judgment performance due to their accumulated practical knowledge and skills [14]. Additionally, the impact of work complexity, auditor experience, and audit tenure on audit judgment has been investigated [5]. These results emphasize how crucial auditor skepticism, expertise, and experience are to achieving high-quality audits and successful fraud detection.

Professional scepticism positively affects audit judgment as it influences important work attitudes and outcomes, including judgments in auditing [10]. Sceptical auditors conduct more thorough evidence reviews, consider various explanations, identify contradictory evidence, and critically assess information sources, leading to better judgments [15]. Increased evidence searching and better audit quality are examples of good auditor traits that result from this heightened skepticism [1]. Professional skepticism also improves fraud detection when combined with audit expertise, demonstrating the beneficial effects of skepticism on audit judgment [8]. In order to improve audit judgments, professional skepticism is essential because it motivates auditors to be meticulous, exercise critical thought, and adopt a questioning mindset. Research findings suggest that professional skepticism may not always have a major impact on audit judgment [13]. Certain research indicate that trait skepticism may not have as much of an impact on audit judgment as previous experiences with clients [10]. Moreover, auditor experience and knowledge were found to significantly impact audit judgment, while professional commitment did not show a significant effect [13]. These results imply that, although professional skepticism is important in auditing, audit judgment may also be shaped by other factors, such as experience and information relevant to a client.

The experience level of the auditor is one element that has been recognized as a possible moderator of the link between audit judgment and professional skepticism. Research has demonstrated that seasoned auditors demonstrate greater degrees of professional skepticism and render more precise assessments in contrast to their less experienced counterparts [10]. Research showing that auditor experience favorably improves audit judgment [4] lends credence to this. Additionally, research indicates that seasoned auditors have greater levels of professional skepticism, which helps them identify fraud [8]. Numerous research has examined the moderating role that experience plays in the link between audit judgment and professional skepticism [10][11].

Experienced auditors are more likely to retain professional skepticism and spot possible management bias, according to studies, which results in better audit conclusions. Additionally, the link between audit judgment and professional skepticism is influenced by the audit task's complexity. Experienced auditors do better when making judgment calls because they can handle challenging audit scenarios and use skepticism more skillfully. Expert auditors use their skepticism and adeptly navigate challenging audit assignments to exhibit excellent judgment performance in challenging audit settings. Their proficiency allows them to differentiate pertinent data from extraneous information in audits, resulting in audit conclusions that are more precise. Studies show that with experience, auditors improve their professional problem-solving, issue-prediction, and issue-detecting skills, leading to higher-quality audit conclusions [6]. Additionally, studies highlight that more experienced auditors generally provide higher audit quality compared to less experienced auditors [16]. Furthermore, the ability of auditors to face and complete complex tasks, coupled with a deep understanding of the audited entity, results in more precise and accurate judgments [5]. Their ability to exercise professional scepticism is crucial for ensuring high-quality audits, as scepticism aids in detecting intentional misstatements and improving audit quality [2]. Moreover, the experience of auditors positively influences their audit judgment, with more experienced auditors generally providing higher-quality audits compared to less experienced ones [16][6]. Additionally, experienced auditors are better equipped to handle task complexity, utilize effective audit evidence, and make sound judgments, ultimately contributing to improved audit quality [17][4]. In summary, professional skepticism is a critical component of audit judgment, and the experience level of the auditor moderates the link between the two. Experienced auditors are more adept at using skepticism, which improves their judgment performance—especially in intricate audit scenarios.

The link between an auditor's expertise, professional skepticism, and audit judgment is examined in this article. According to research, professional skepticism is essential for making sound audit judgments because sceptical auditors examine the data in greater detail, take into account other theories, and critically assess their sources of information. Professional skepticism may, however, not necessarily have a substantial effect on audit judgment because judgment can also be influenced by other elements, such as the auditor's expertise, past experience with the client, and work complexity. According to earlier research, seasoned auditors tend to be more professional sceptical and make more correct decisions than their less experienced counterparts. However, other studies have shown that there may be more going on here, and that the experience level of the auditor may not always be a moderator of the link between audit judgment and professional skepticism. In particular, research has shown that an auditor's natural skepticism may not have as much of an impact on audit judgment as previous experience with the client. Furthermore, an auditor's audit judgment may be more heavily influenced by their knowledge and experience than by their degree of professional skepticism. These results imply that experience may not have the same or as much of a moderating influence on the link between skepticism and judgment as previously thought. The ramifications of these results underscore the necessity of encouraging and upholding professional skepticism in auditors as well as the significance of ongoing training and professional development to improve auditor experience and competency.

There is ample evidence in the literature that the correctness of audit judgment and professional skepticism are positively correlated. In order to safeguard stakeholder interests, auditors function as unbiased parties that assess financial statements to make sure they are truthful and equitable. This is crucial because management within organizations may have biases or incentives to manipulate financial reporting [17]. Professional scepticism is a crucial trait that empowers auditors to remain vigilant against potential misrepresentations stemming from these conflicting interests [9]. Experienced auditors not only perform audit procedures but also interpret the results, informing further testing and potential adjustments. This emphasizes the importance of seasoned professionals who can provide insightful analysis beyond just executing routine tasks. Additionally, firms' reinforcement of ethical codes has been found to significantly influence auditor judgments, highlighting the impact of organizational values on the decision-making process [18]. Auditors' judgments can be influenced by various factors such as their experience, professional scepticism, and the complexity of tasks at hand [4]. Research indicates that auditors' perceptions of ethical codes can moderate the effects of audit experience and risk on their judgments, illustrating the multifaceted nature of decision-making in auditing [13]. Furthermore, factors like gender, experience, attitudes towards rules, and critical thinking disposition have been identified as elements that can affect materiality judgments, demonstrating the diverse array of factors shaping audit outcomes [16].

In the agency theory framework, auditors play a crucial role as neutral third parties to help reduce information asymmetry between management (agent) and owners (principal). Auditors, armed with professional scepticism and adequate experience, are better equipped to detect, and disclose relevant information for the benefit of the principal. Professional skepticism is crucial because it enables auditors to evaluate the evidence carefully, pose insightful queries, and spot discrepancies [7]. Moreover, auditor professionalism and experience are key factors influencing audit judgment, especially when dealing with task complexity [4]. In order to make an informed decision when faced with complicated tasks, auditors must be knowledgeable, understand when analytical processing is required, and have the mental ability to finish the analysis [12]. Experience plays a significant role in auditors' ability to solve problems, predict issues, and make better audit judgments [6].

Making decisions is essential to the auditing process since auditors have to decide on a number of things in order to guarantee the dependability and correctness of financial data. Professional scepticism is a critical component of this decision-making, allowing auditors to avoid complacency and diligently evaluate evidence to substantiate their findings [2]. The Rational Decision Model puts a strong emphasis on the value of skepticism in helping auditors get pertinent information prior to making audit conclusions. Since regulators have voiced concerns about what they see as auditors' apparent lack of professional skepticism, professional skepticism is practically required in the audit profession and plays a critical role in preserving audit quality. This scepticism is particularly important in navigating the less structured aspects of audit decision-making, which scholars have likened to a diagnostic process [9]. By maintaining a sceptical mindset, auditors can thoroughly examine the information provided by clients, ensuring they do not overlook critical details that could impact audit outcomes. Additionally, the complexity of audit judgments requires a multifaceted approach that considers various factors. According to a framework based on dual-process theory, auditors must have the required knowledge, use analytical processing rather than heuristics, and have enough cognitive capacity to perform in-depth analysis in order to make effective judgments in complex tasks [12]. This emphasizes the mental difficulties auditors encounter and the necessity of a methodical approach to decision-making that incorporates both analytical and intuitive components.

An essential component of the auditing process is audit judgment, which informs the choices auditors make after weighing the available data and their own conclusions [6]. The knowledge bases of auditors have an impact on their capacity to explain audit results, and variations have been seen amongst experts with varying levels of experience [9]. Studies demonstrating how auditors' knowledge and skill affect their performance attest to the importance of experience in developing audit judgment [4]. Additionally, research has examined the effects of job complexity, obedience pressure, and work experience on audit judgment, emphasizing the cognitive processes involved in decision-making within the auditing profession [19].

A key idea in auditing, professional skepticism emphasizes auditors' intents and behaviors toward being suitably critical and inquisitive in their assessments [17]. It comprises both an attitude and a mentality. The accounting profession and authorities have placed a strong focus on professional skepticism, yet auditors' inadequate use of skepticism remains a global problem [3]. In order to improve the quality of their decisions, auditors are required to retain a critical mindset and presumptive skepticism while evaluating fraud risk [20]. The decisions taken by auditors and the caliber of their judgments are influenced by their experience as auditors, which has a substantial impact on audit judgment [9]. Experienced auditors have different knowledge bases than less experienced experts, which affects how well they make judgment calls. Skilled auditors are better able to evaluate the evidence, justify their conclusions, and explain audit results. Additionally, auditors' professional skepticism is influenced by experience, and this in turn impacts their audit judgment [21].

The development of auditors' critical thinking, evidence appraisal, and fraud detection skills is made possible by professional skepticism, which is an essential component of audit judgment. When auditors maintain a sceptical mindset, they are more likely to question information presented to them, leading to a more thorough examination of evidence and financial statements [3]. This increased scrutiny is vital for identifying potential misstatements or irregularities that may indicate fraud or errors in financial reporting. Furthermore, professional scepticism serves as a defense against cognitive biases that can impact decision-making processes. By upholding a sceptical attitude, auditors are better able to combat confirmation bias, where they may unconsciously seek out information that aligns with their preconceived notions, and anchoring bias, where they overly rely on initial information when making judgments [1]. Professional scepticism encourages auditors to remain objective and impartial, focusing on facts and evidence rather than external influences. Furthermore, the overall efficacy of the audit process and the quality of the audit are directly correlated with professional skepticism. Higher skepticism among auditors increases the likelihood of comprehensive audits, which produces more reliable financial statements and boosts investor trust [8]. This commitment to skepticism strengthens the integrity and legitimacy of the auditing profession in addition to improving the correctness of audit decisions. Furthermore, professional skepticism is crucial for detecting fraud since sceptical auditors are more likely to

look into dubious transactions or behaviours that could point to fraud [22]. By approaching audit procedures with a sceptical mindset, auditors are better positioned to uncover red flags and irregularities that might be overlooked by less sceptical individuals. This proactive stance on fraud detection is critical for upholding the trust and reliability of financial reporting systems. In conclusion, professional scepticisms are a cornerstone of audit judgment, promoting critical thinking, mitigating cognitive biases, enhancing audit quality, and facilitating fraud detection. Adopting skepticism as a fundamental tenet in their work demonstrates an auditor's commitment to objectivity, thoroughness, and honesty, all of which enhance the audit process's efficacy and credibility. Thus, the following is the hypothesis:
H_1 : Professional scepticisms have positive effect on audit judgment.

The development of an auditor's professional skepticism and audit judgment are greatly aided by experience. Professional scepticisms are widely acknowledged as essential for conducting high-quality audits [2]. Despite this recognition, concerns persist regarding the level of scepticisms demonstrated by auditors, as noted by various regulatory and professional bodies. Experienced auditors are known to exhibit a higher level of expertise in decision-making compared to less experienced auditors, which significantly influences audit judgment formation [4]. In order to make decisions and do actions that represent professional skepticisms, auditors' knowledge, attributes, motivations, experience, and training must be combined with evidentiary inputs, such as audit evidence [10]. Studies reveal that seasoned auditors exhibit higher degrees of professional scepticism and conservative decision-making inclinations, highlighting the beneficial influence of experience on auditors' scepticism levels [23]. Additionally, it has been discovered that audit judgment is favourably impacted by auditor experience, locus of control, and mistake detection expertise [13].

Experienced auditors are more capable of seeing mistakes, foreseeing problems, and reaching well-informed conclusions, which eventually improves the quality of audit judgment [6]. Skilled auditors are essential in improving the results of audit judgments because they can solve problems and anticipate problems before they arise. Research has shown that auditor experience positively impacts judgment quality and influences the handling of irrelevant information during audit processes. Experienced auditors demonstrate a greater ability to navigate through problems, predict issues, and maintain a high level of professionalism in their decision-making [24][12]. Research has examined the relationship between professional skepticism, audit experience, time constraints, and fraud detection. The findings show that these factors have a beneficial impact on fraud detection [8]. Experienced auditors are more adept at handling deadline pressure and using professional skepticism as necessary, which improves their ability to spot fraud. Furthermore, emphasis has been placed on the value of professional skepticism in fraud detection, underscoring the critical role that skepticism plays in identifying fraudulent activity [22]. Experienced auditors are more likely to make informed and accurate judgments compared to less experienced auditors. Additionally, the level of professionalism and professional commitment of auditors also plays a role in shaping their judgment [14]. Throughout the auditing process, these variables interact to affect how auditors see the world and make judgments. For instance, auditors with greater audit expertise and a strong tendency toward critical thought are probably going to make more correct materiality determinations [16]. The formulation of audit judgment is positively influenced by auditor experience [4][6]. Experienced auditors are more likely than less experienced auditors to deliver correct materiality determinations [16]. These findings are consistent with [24], which highlights the importance of experience, communication skills, and the ability to discern relevant elements in enhancing audit judgment. In conclusion, auditor experience substantially enhances auditor professional scepticism and improves audit judgment by enabling auditors to make informed decisions, detect errors effectively, manage time constraints, and apply scepticism proficiently. The combination of experience, ethical guidelines, and expertise contributes to higher-quality audit judgments, underscoring the importance of experience in shaping auditors' decision-making processes and overall audit performance. Based on the aforementioned reasoning, the study's second hypothesis is:

H_2 : Auditor experience strengthen the effect of auditor professional scepticism on audit judgement, such that the positive effect of professional scepticism on audit judgment is stronger for auditors with more experience.

The conceptual framework for the research is derived from the theoretical foundation that has been outlined. This conceptual framework is depicted in Figure 1.

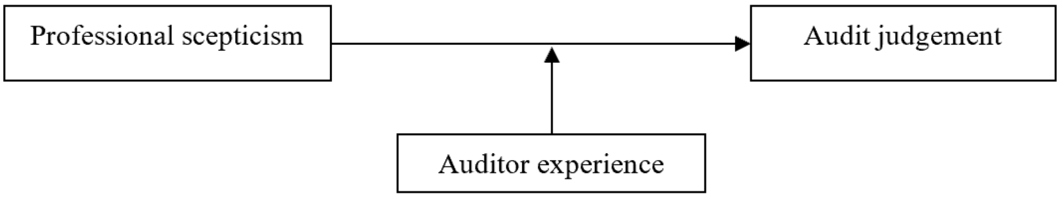

Figure 1. Research Concept

2. Method

This study will be carried out at 19 public accounting firms in the Bali Province, which are included in the 2023 edition of the Institut Akuntan Publik Indonesia (IAPI) Directory and have offices in Kabupaten Gianyar and Kota Denpasar. All auditors employed by 19 public accounting companies in the Denpasar and Gianyar areas made up the study's population. Purposive sampling will be used as a research sample strategy in this investigation. Auditors who have worked for the public accounting firm for at least a year will be the criterion utilized in choosing this sample.

Audit judgment is the dependent variable in this investigation. An auditor's audit judgment on the financial accounts of a firm or organization is based on their own perspective and response to information that may have an impact on the documentation or proof. This judgment's quality will demonstrate how successfully an auditor carries out his responsibilities. Based on this, the indicators that will be used in the study are determination of the level of materiality, audit risk level, and survival of the entity (going concern).

The professional skepticism of an auditor—that is, his or her attitude toward performing audit duties, particularly when it involves asking questions and critically analyzing audit material—is the independent variable in this study. Professional scepticism consists of four indicators, namely: prudence, not easily believing audit evidence, and collecting detailed and sufficient evidence.

The study's moderating variable is auditor experience. The capacity to identify and comprehend mistakes or inconsistencies in the financial statements in light of the auditor's knowledge and abilities is known as auditor experience. Every choice made during an audit is influenced by experience as well, therefore it is ideal that each and every choice is the proper one. This is based on the idea that repeated tasks provide an opportunity to learn how to do things best. Based on several studies on auditor competence, several indicators can be found that will be used in research: training received, length of service of the auditor, and number of audit engagements received.

With the aid of the statistical program SPSS for Windows, this study employs the data analysis techniques of linear regression and moderated regression analysis (MRA). The following equation represents the study's linear regression model:

Equation 1:
$Y = \alpha + \beta 1.X1 + \varepsilon$

Equation 2:
$Y = \alpha + \beta 1.X1 + \beta 2.X2 + \beta 3.\ X1\ X2 + \varepsilon$

Description:
Y = audit judgement
α = constant value
β1 = professional scepticism regression coefficient
β2 = auditor experience regression coefficient
β3 = regression coefficient of interaction between professional scepticism and auditor experience
X1 = professional scepticism
X2 = auditor experience
ε = standard error

3. Results and Discussion

Prior to regression, the traditional assumption test is used to determine whether the data are feasible. Heteroscedasticity and normalcy tests are two of the traditional assumption tests that are performed. Regression analysis is done once the data pass the test of classical assumptions. Equations 1 and 2 were created by doing regression twice. The regression results for equation 1 are displayed in Table 1 below:

Table 1. Linear Regression Test Results

Description	Beta Value	Significant Value
Constant	11.471	0.001
Professional Scepticism	0.565	0.000

According to the data analysis results, the significant value is less than the significance threshold of 0.05, at 0.000. Furthermore, the regression coefficient (β1) is 0.565. These results support the hypothesis, which holds that professional skepticism influences audit judgment positively and significantly in public accounting companies in Bali Province. This suggests that in the local context, higher levels of professional skepticism among auditors are linked to better audit judgment quality. The study's findings are consistent with the agency theory, which holds that professional skepticism is necessary in order to resolve conflicts of interest that may arise between owners (principals) and management (agents). Auditors serve as unbiased third parties who assess financial statements in order to resolve these conflicts. A key skill for auditors to successfully spot and resolve any misstatements brought on by conflicts of interest is professional skepticism. The auditing industry places a strong emphasis on the value of professional skepticism in guaranteeing the production of high-caliber audits [2]. Throughout the audit process, auditors are required to exercise skepticism, challenging the veracity of the evidence and cross-referencing it with other data that they gather and assess [16].

Sustaining the integrity and caliber of audit engagements requires a high level of professional skepticism. Auditors that approach their work with impartiality, critical appraisal, and a questioning mentality are better able to spot abnormalities, recognize possible dangers, and reach well-informed decisions that serve the public good. Auditors can improve the legitimacy and dependability of the financial data they examine by maintaining a professional skepticism throughout the audit process. This will strengthen the audit judgments' overall quality. Enhancing professional skepticism has been found to have a good effect on audit judgment, particularly for industry professionals [17]. Research has further indicated that enhanced fraud detection might result from the combination of audit expertise and professional skepticism [8]. Furthermore, there is a correlation between greater audit quality and professional skepticism [1]. Thus, it may be said that a major factor in raising the caliber of audit judgment at public accounting companies is professional skepticism.

Moderated Regression Analysis was used to test the second hypothesis. The test results are displayed as follows in Table 2.

Table 2. Moderation Regression Test Results

Description	Beta Value	Significant Value	
Constant	42.979	0.352	
Professional Scepticism	-0.814	0.621	
Auditor experience	-1.118	0.529	
The interaction of professional scepticism and auditor experience	0.049	0.435	Not able to moderate

Source: Processed secondary data, 2024

The hypothesis is rejected because auditor experience is unable to moderate the effect of professional skepticism on audit judgment, as evidenced by the data analysis results, which show a significant value of 0.435> 0.05 and a regression coefficient interaction of professional skepticism and auditor experience of 0.049. This result implies that the degree of auditor experience has no bearing on the beneficial impact of professional skepticism on audit judgment. Since both seasoned and inexperienced auditors are capable of exhibiting professional skepticism and rendering accurate judgments, the link between auditor experience and audit judgment may not always be strengthened. For a variety of reasons, auditor expertise might not be able to immediately mitigate the impact of professional skepticism on audit judgment. Although audit judgment is significantly shaped by experience, research indicates that auditors' individual experiences may have different effects on skepticism and audit results. Furthermore, rather than being only influenced by experience level, the impact of professional skepticism on audit judgment can also be influenced by other factors as obedience pressure, professional ethics, and auditor independence. Furthermore, the intricacy of the audit tasks may have an effect on the link between skepticism, experience, and judgment performance, and experience is not necessarily a substantial moderating element in this dynamic. Consequently, even while auditor expertise is crucial to the audit process, professional skepticism's negative impact on the caliber of audit judgments may not always be immediately mitigated by it.

Experience is a significant factor in shaping audit judgment, with studies showing that the impact of experience on scepticism and audit findings can vary among auditors. More experienced auditors are generally better equipped to predict and detect problems professionally, leading to improved audit judgment [6]. Auditor experience influences the formation of audit judgment, as experienced auditors tend to make better decisions compared to less experienced ones [4]. Furthermore, rather than being only influenced by experience level, the impact of professional skepticism on audit judgment can also be influenced by other factors as obedience pressure, professional ethics, and auditor independence [2][21]. Furthermore, the intricacy of the audit tasks may have an effect on the link between skepticism, experience, and judgment performance, and experience is not necessarily a substantial moderating element in this dynamic [4][5]. Therefore, rather than being purely based on experience, the influence of professional skepticism on audit judgment can also be impacted by variables including obedience pressure, professional ethics, and auditor independence [21]. Furthermore, the level of scepticism and judgment performance can be affected by the complexity of tasks, with experience not always being a significant factor in this relationship [4][5]. Therefore, while experience plays a role in audit judgment, it may not always directly moderate the effect of professional scepticism. In summary, experience plays a significant role in shaping audit judgment and professional skepticism. Experienced auditors tend to be more skeptical, which results in more cautious assessments and improved decision-making skills. But the interplay of professional skepticism, experience, and other elements like technology and ethics emphasizes how complex audit judgment processes are.

4. Conclusion

According to the study's findings, public accounting companies in the Bali Province's audit judgments are more highly valued when professional skepticism is present. High levels of professional skepticism, which are typified by impartiality, critical analysis, and a questioning mentality, make auditors more capable of seeing possible hazards, spotting abnormalities, and reaching well-informed decisions that serve the public good. The study does, however, also show that the impact of professional skepticism on the caliber of audit judgment is not immediately mitigated by auditor experience. This suggests that professional skepticism can have a beneficial impact on audit judgment regardless of auditor experience level since both seasoned and inexperienced auditors are capable of using professional skepticism to good effect and producing excellent audit judgments. Although auditor experience plays a significant role in the audit process, factors other than experience level, such as professional ethics, obedience pressure, and auditor independence, may also have an impact on the link between audit judgment performance and professional skepticism.

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Implementation of accounting record using accurate software at CV. Tresna

Ni Komang Urip Krisna Dewi[1]✉ & Ni Luh Putu Uttari Premananda[2]

[1] Accounting Department, Politeknik Negeri Bali, Indonesia
[2] Enterpreneurship Department, Universitas Hindu Negeri I Gusti Bagus Sugriwa
✉ Address correspondence: Jalan Kampus Bukit Jimbaran, Badung, Bali
E-mail: uripkrisna@pnb.ac.id

ABSTRACT

Along with the development of this CV, it has experienced very rapid improvements, and this includes financial management. The results of interviews with accounting CV Tresna stated that currently CV still uses manual recording using Microsoft Excel. This starts from recording receipts from customers, payments to suppliers to financial reports. Technology is needed to make it easier to record and prepare accurate financial reports. Therefore, an accounting information system is needed. An Accounting Information System (AIS) is a collection of resources, such as people and tools designed to convert financial and other data into information. In this research, system accounting information applied is Accurate Accounting Software. Accurate is a program accounting and finance designed to meet company needs in terms of accounting and financial records. This type of research uses qualitative research which is descriptive qualitative. The author implemented Accurate in CV Tresna through several series stages. Starting from a preliminary study, conducting analysis with interview, implementation, testing using the black-box method, to results evaluation and improvement. The results show that Accurate system makes it easier to carry out bookkeeping for creating invoices to customers, paying bills to suppliers, automatic COGS calculations, and financial reports on CV X has been successfully carried out as proof of financial statements to the owner of CV Tresna.

Keywords: bookkeeping, financial statements, software accurate

1. Introduction

At this time, along with the development of the times, then digital technology increasingly experiencing progress, progress and the development is not only in the field of machine technology but also in the field of information technology systems, such as the development of information technology systems in Micro, small and medium enterprises (MSME) which is currently becoming a concern in several areas [1]. Business micro, small and medium (MSME) is a business with huge potential facing an economic crisis, this business is usually in run by individuals or Entities, in Indonesia's MSMEs are growing very rapidly [2].

In the era of globalization, technology is developing rapidly. MSMEs are also required to keep up with technological developments. This technology is important in the overall direction operational activities of a business [3]. One thing that has developed with the help of technology is accounting records. Accounting is a process that includes recording, classifying, processing, and financial reporting so that the results are used as information that can be used by all parties who need it. In general, accounting can is defined as an information system that provides reports to users of accounting information or to parties who have an interest (stakeholders) in performance results and financial condition of the company [4].

Accounting is an activity related to the recognition, measurement, and financial reports of a company to parties who need it. In carrying out the activities of recognizing, measuring and reporting financial information, accounting often requires designing a form to record transactions so that the information written in the form can be used for decision-making. However, most companies still use cycles of manual accounting, namely accounting procedures from journals to preparing reports finance in an environment that does not yet have a computerized accounting system. So, all information in the journal is classified manually so the value accumulation process can be wrong due to an error in calculating [5].

In the globalization era, computerized accounting systems are developed, especially in the field of accounting and finance in the form of software such as MYOB, Zahir, and Accurate. In general, this accounting program or software is a program that helps accountants record transactions and create financial reports. Accurate is one of the accounting software most widely used by various companies in Indonesia. Accurate is an accounting system or program that produces output in the form of reports finance. Accurate enables automation, accurate data analysis, and real-time monitoring, which can significantly improve work processes and resource management [6]. There are two types of Accurate, namely Accurate desktop in the form of an application and Accurate online in the form of a web that can be operated anytime and anywhere. Accurate Software has advantages starting from its features and ease of operation is one solution to improve accuracy, increase function, and shorten preparation and presentation time for financial reports [7].

MSMEs need an accounting system to record accounting transactions accurately. Accurate software is made in Indonesia so that MSMEs can choose the Indonesian language to use this software. Accurate software also updates with the Indonesian tax regulator. Accuracy can be integrated with other systems, such as inventory sales or bank accounts, to provide a more complete overview of a company's performance.

Accurate is one of the accounting software used in Indonesia. One business that uses accuracy is CV Tresna. CV Tresna is a CV that operates in the food sector, selling bread and small snacks. Initially, the CV was recorded manually, then switched to using an accurate desktop. The transition from manual to computerized accounting records is an interesting thing to explore. Therefore, this research attempts to analyze the implementation of accounting records using accurate accounting in CV Tresna.

2. Method

This research uses a qualitative descriptive method. Qualitative descriptive research or what is usually called naturalistic research methods is research that is used to examine natural conditions, where the researcher is the key instrument, and the results of qualitative research emphasize meaning rather than generalizations [8].

Primary data is data obtained directly from research subjects. The primary data used are the results of interviews with business owners, assistant managers, and accounting. Secondary data is usually in the form of documentation, the data obtained does not experience any changes to the information because the data obtained is based on previously existing data. In this research, the secondary data used is a financial report of CV Tresna.

The method is described through the process: 1) Interview, Conducting direct Q&A and discussions with Accounting and Owner of CV. Tresna to find out the financial recording problems that occur in the CV. 2) Observation, Conducting direct observations, and work activities carried out by the Accounting and Owner of CV Tresna, aims to find out the business flow in CV Tresna. From the results of the observation, a business flow can be created that is by the needs of CV Tresna. 3) Analysis Documentation The results of the observation in the form of new business flow analysis data are then discussed with the Accounting and Owner of CV Tresna to implement a business process system that follows needs and can be implemented optimally using the Accurate Accounting System.

The Testing Method used in this study is the User Acceptance Testing (UAT) method with the black box testing type. Black-box testing is one of the methods used in testing an application or system. Testing is done by running or executing features or modules and then observing whether the results of the features are in accordance with the desired business process.

The implementation carried out in the study was the use of the Accurate system directly to Accounting, Assistant Manager and Owner by using one laptop unit for the implementation of Accurate which had been adjusted to the needs of CV Tresna. To obtain the results obtained, it began after the trial was carried out by accounting. By conducting this trial, it is expected to be able to find out the shortcomings of the system that has been created by direct interviews after implementing it.

3. Results and Discussion

Accurate Accounting Software is accounting software created by PT Cipta Piranti Sejahtera (CPSSoft) Indonesia in 1999 which was first launched at the largest computer exhibition Indocomtech 1999 at the Jakarta Hall Convention Center (JHCC). This accuracy can be used by various companies ranging from service companies, trades, contractors and manufacturers. Accurate adopts PSAK and tax regulations in Indonesia, so it is very suitable for use by various companies in Indonesia. The first version released was version 1.0 with the name Accurate 2000 Accounting Software. As technology develops, Accurate always develops the best version for its users. Accurate attracts businesspeople in Indonesia which can be proven by the increase in Accurate users from year to year [9].

Accurate consists of two types, namely desktop Accurate and online Accurate. Accurate can be installed using Linux or Windows OS computers. Accurate consists of 3 editions, namely Standard, Deluxe, and Enterprises which can be used according to company needs. The latest version of Accurate Desktop is Accurate Version 5.0 in 2020. In 2016, CPSSoft launched Accurate Online as a form of development of today's technology. Accurate online is web-based accounting software where the database is stored in the cloud [10].

CV Tresna used Accurate Desktop. Application of Accurate on the CV. Tresna there are no significant obstacles yet. The output of financial transaction input in Accurate, making it easier for employees to check the input that has been made and then assist management. Of CV Tresna in monitoring company finances, inventory and other output to make decisions.

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The output results of financial reports from Accurate can be used by management to monitor the finances of CV Tresna. CV Tresna can look up financial position reports or balance sheets, profit/loss reports, and cash flow reports.

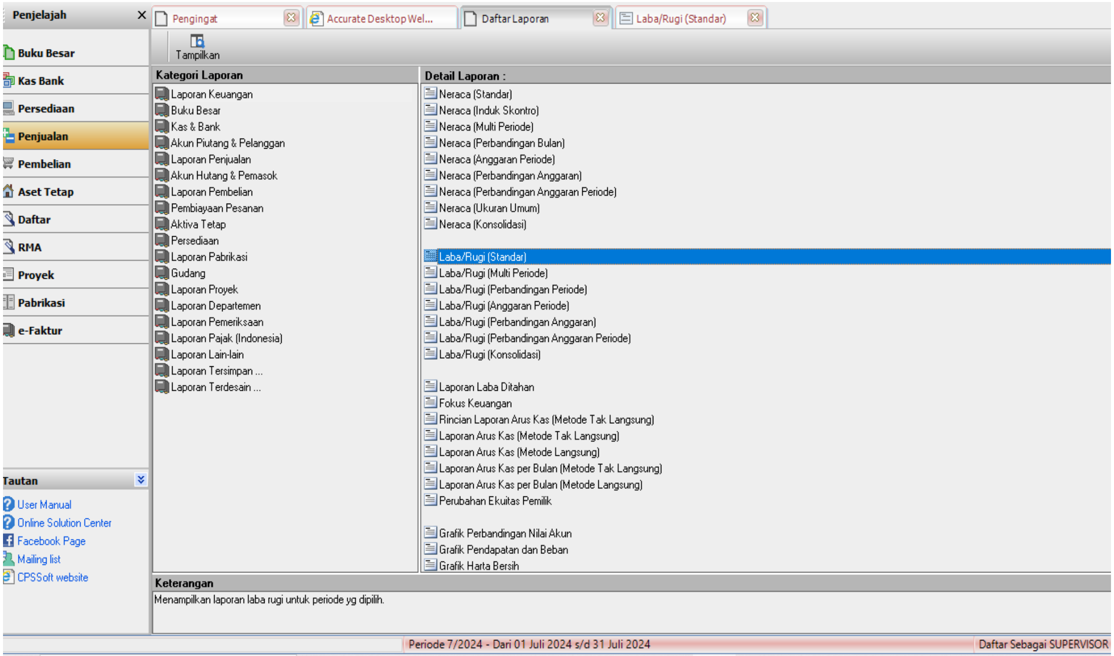

Figure 1. Output Financial Report from Accurate desktop of CV. Tresna (in Indonesia language)

In Accurate software, there are many modules. One of them is the sales module. This module consists of a Sales Quotation Form, Sales Order Form, Sales Invoice Form, Sales Return Form and Sales Receipt Form [11]. Revenue transactions are defined as part of the Customer. Then choose the stage that is done is to enter into the Sales menu and then click the Sales Invoice.

Sub menu. Sales report output results from the accurate desktop which can be used by sales employees to double-check invoices/sales notes that have been input. For management, it will help the business decision-making process in determining prices, sales methods and marketing methods.

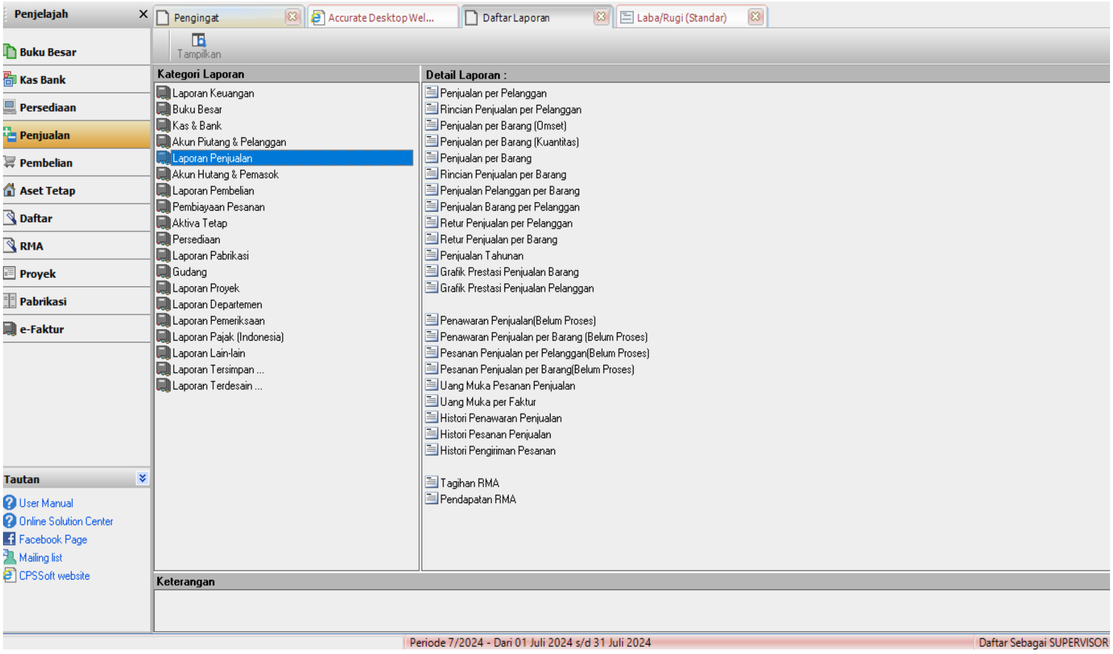

Figure 2. Output Sales Report from Accurate desktop of CV. Tresna (in Indonesia language)

The output of the purchase report from Accurate contains a list and details of the purchase of CV Tresna in the field of product distribution.

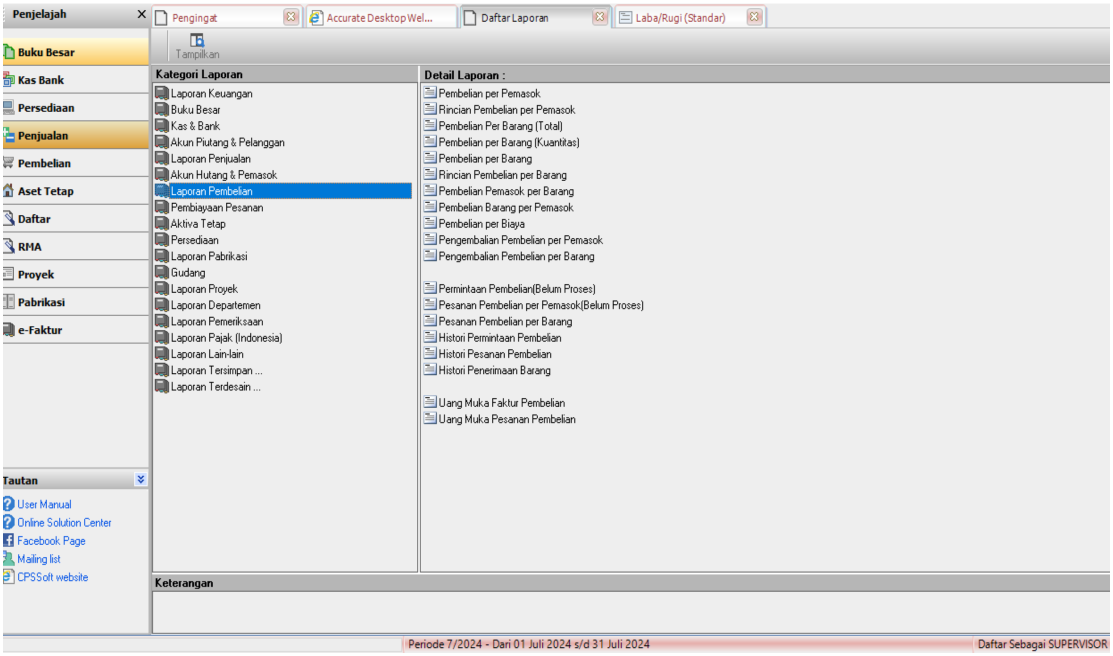

Figure 3. Output Purchase Report from Accurate desktop of CV. Tresna (in Indonesia language)

The output of the accounts receivable report from Accurate contains a summary of customer receivables as well as payments for sales invoices. The output of the accounts payable report from Accurate Desktop contains a summary of the supplier's debt as well as payment details for purchase invoices.

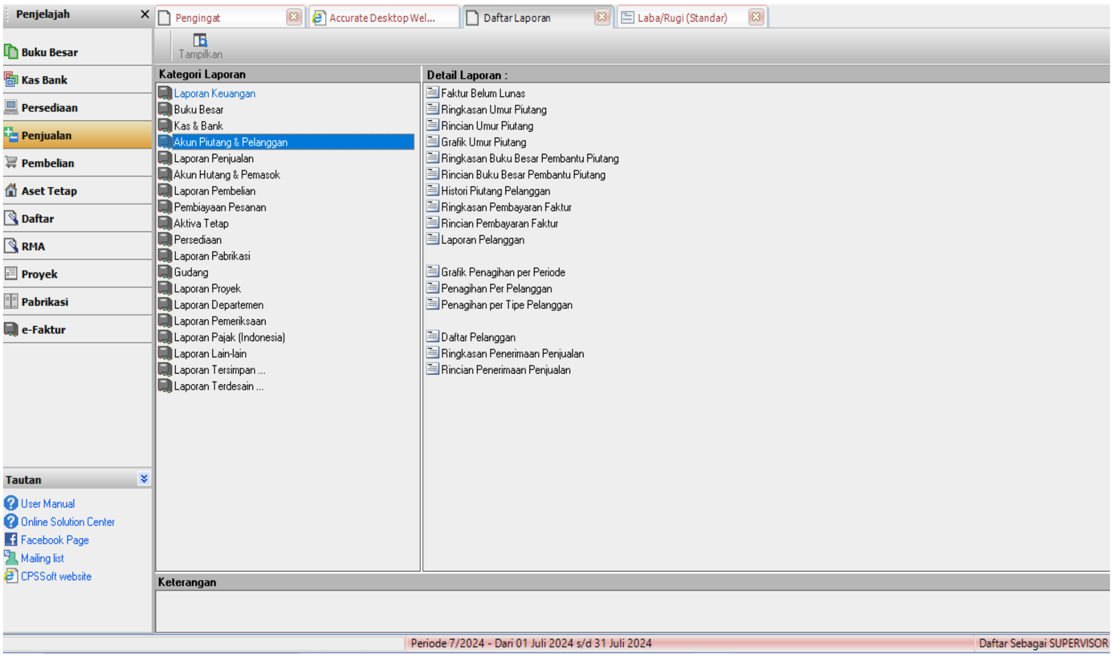

Figure 4. Output Account Receivable Report from Accurate of CV. Tresna (in Indonesia language)

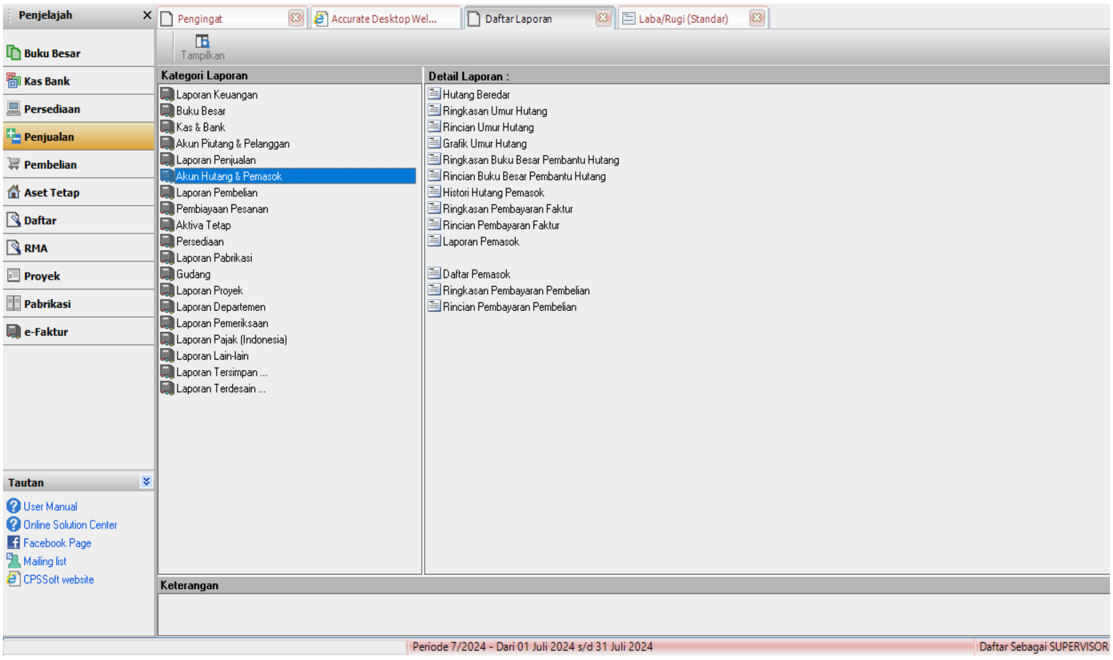

Figure 5. Output Account Payable Report from Accurate of CV. Tresna (in Indonesia language)

The inventory report output results from Accurate which contains stock or inventory values per item category and per warehouse. Inventory reports are very important for CV Tresna to control inventory and do stock opname.

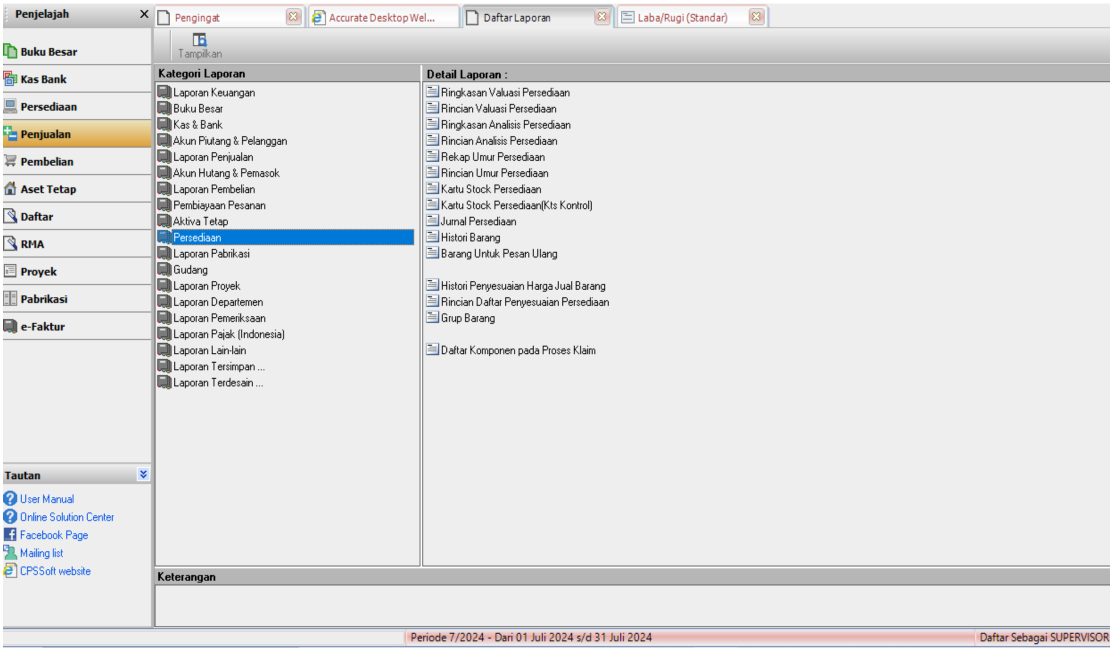

Figure 6. Output Inventory Report from Accurate desktop of CV. Tresna (in Indonesia language)

Accurate software gives a good advantage for CV Tresna to record transactions CV Tresna also can check financial reports automatically by clicking report and financial report. The profit and loss statement and financial position statement of CV Tresna by using Accurate desktop can be shown in Figures 7 and 8.

Description	1-31 Jan 2021
Pendapatan	
Sales	22.525.000,00
Sales	22.950.000,00
Sales Return	-425.000,00
Jumlah Pendapatan	22.525.000,00
Harga Pokok Penjualan	
COGS	9.750.000,00
Jumlah Harga Pokok Penjualan	9.750.000,00
LABA KOTOR	12.775.000,00
Beban Operasi	
Marketing, General & Adm. Expenses	6.465.000,00
Marketing Expenses	600.000,00
Advertising Expense	600.000,00
General & Administration Expense	865.000,00
Utility & Administration Expense	865.000,00
Utility (Electric, water, etc) Expense	865.000,00
Depreciation Expense	5.000.000,00
Depreciation Expense of Building	5.000.000,00
Jumlah Beban Operasi	6.465.000,00
PENDAPATAN OPERASI	6.310.000,00
Pendapatan dan Beban Lain	
Pendapatan lain	
Jumlah Pendapatan lain	0,00
Beban lain-lain	
Jumlah Beban lain-lain	0,00
Jumlah Pendapatan dan Beban Lain	0,00
LABA(RUGI) BERSIH (Before Tax)	6.310.000,00
LABA(RUGI) BERSIH (After Tax)	6.310.000,00

Figure 7. Profit and Loss Statement from Accurate desktop of CV. Tresna (in Indonesia language)

Description	Balance
Aktiva	
Aktiva Lancar	
Kas dan Bank	
Cash & Bank	46.355.000,00
Jumlah Kas dan Bank	46.355.000,00
Piutang Dagang	
Account Receivable IDR	44.457.500,00
Advance Purchase IDR	2.272.728,00
Jumlah Piutang Dagang	46.730.228,00
Persediaan	
Merchandise Inventory	9.650.000,00
Jumlah Persediaan	9.650.000,00
Aktiva lancar lainnya	
Jumlah Aktiva lancar lainnya	0,00
Jumlah Aktiva Lancar	102.735.228,00
Aktiva Tetap	
Nilai histori	
Fixed Assets	1.200.000.000,00
Jumlah Nilai histori	1.200.000.000,00
Akumulasi Penyusutan	
Accumulated Depreciation	-420.000.000,00
Jumlah Akumulasi Penyusutan	-420.000.000,00
Jumlah Aktiva Tetap	780.000.000,00
OTHER ASSETS	
Jumlah OTHER ASSETS	0,00
Jumlah Aktiva	882.735.228,00

Description	Balance
Kewajiban dan Ekuitas	
Kewajiban	
Kewajiban lancar	
Hutang Dagang	
Account Payable IDR	50.000.000,00
Jumlah Hutang Dagang	50.000.000,00
Kewajiban lancar lain	
Unbilled Goods	6.400.000,00
PPN Kurang Bayar	2.025.228,00
Jumlah Kewajiban lancar lain	8.425.228,00
Jumlah Kewajiban lancar	58.425.228,00
Kewajiban jangka panjang	
Jumlah Kewajiban jangka panjang	0,00
Jumlah Kewajiban	58.425.228,00
Ekuitas	
RETAINED EARNING	818.000.000,00
Laba tahun ini	6.310.000,00
Jumlah Ekuitas	824.310.000,00
Jumlah Kewajiban dan Ekuitas	882.735.228,00

Figure 8. Financial Position Statement from Accurate desktop of CV. Tresna (in Indonesia language)

In implementing or implementing Accurate software at CV. Tresna has not encountered any problems or obstacles in its application because this software is easy to use (user-friendly). Apart from that, the features provided are also complete so that from this we can see the usefulness of implementing the Accurate software, one of which is that the Accurate software is by tax regulations in Indonesia. Accurate also makes it easier for companies to automatically accumulate depreciation and check Indonesian tax reports. According to the owner and accounting of CV Tresna said that:

"Accurate make our company easier to record data and check financial report automatically" O10

"Accurate is good software, record data transaction is very simple and can check all repost easily" A11

Accurate is also very helpful in carrying out inventory stock checks. Usually when using Excel there are still errors in recording in the company. With Accurate, the company can more easily carry out inventory control.

"With accurate we can get inventory reports quickly and easily, we can find out the amount of inventory available" O27

"Accurate is very helpful in controlling inventory stock, which inventory we need to buy and which is still available for sale" A30

With the report output from Accurate, it is very easy and also helps the owner in monitoring and evaluating cash & bank flows as well as sales and purchasing activities at CV. Reports produced by accurate software can be modified according to the needs, for example in the sales report, all cash and credit transactions will be presented and can be presented in daily, weekly, monthly and even annual periods. The report presentation can also be modified per date, per receipt number (SI), or per customer and per salesperson. Then, for accounts payable and receivable reports, complete information can be presented regarding the balance owed to suppliers on what note number and also what date the debt is due and also appears in the report, the same as with receivables where the accounts receivable report presented can display complete information regarding the balance of receivables from customers and the maturity of

these receivables. The inventory report presents information regarding incoming and outgoing goods along with the value of the goods, as well as displaying stock from each warehouse in CV. Tresna because there are several warehouses to store inventory. According to owner and assistant manager of CV Tresna said that:
"Accurate make our company easier to look up for purchase, sales, inventory report automatically" O21.
"Accurate is easy to use, as manager we can use it to check report automatically such as sales, purchase, inventory and financial report" AM23.

CV Tresna use accurate for many option. Accurate can give report automatically so that owner and assistant manager can make decision for financial situation in company quickly.

4. Conclusion

The implementation of the payment system for financial reports at the CV Tresna has been successfully carried out to the invoice stage for customers which functions as proof of payment of and as proof of financial reports. The implementation of the payment system was proven by the results of the Blackbox Testing test on the accounting and owner. In addition, the financial reports produced are more structured and make it easier for the treasurer to prepare financial reports every month.

From the results of interviews and implementation of Accurate at the CV Tresna, it was found that the Accurate application can increase the effectiveness of the process of inputting payment transaction data to preparing financial reports and the information produced can be accounted for because it helps the accounting, manager and owner in making decisions. It is said to be effective because Accurate can store transaction data in large quantities and data processing produces accurate and detailed information or reports.

Acknowledgment

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Performance analysis of the Village Credit Institution (LPD) of Tanjung Bungkak Traditional Village using the balanced scorecard approach

Putu Yuni Trisna Dewi[1✉], I Made Sudana[2] & I Made Suarta[3]

[1,2,3] Accounting Department, Bali State Polytechnic
✉ Address correspondence: Jalan Kampus Bukit Jimbaran, Badung Bali
E-mail: yuni.trisnadewi@gmail.com

ABSTRACT
The balanced scorecard is a tool for measuring company performance from financial and non-financial aspects through four perspectives including the financial perspective, customer perspective, internal business process perspective, and learning and growth perspective. This research uses a quantitative descriptive approach carried out at the Tanjung Bungkak Traditional Village LPD located in Denpasar with the aim of knowing the performance of the Tanjung Bungkak Traditional Village LPD seen from the four perspectives in the balanced scorecard. Data collection techniques used include documentation, observation, interviews and surveys. The results of the analysis show that the performance of the Tanjung Bungkak Traditional Village LPD, when viewed from a financial perspective, is not good with the calculation of Cash Ratio (CR) and Loan to Deposit Ratio (LDR) categorized as quite good, Debt to Equity Ratio (DER) categorized as good, but Operations Cost to Operating Income (BOPO), Non-Performing Loans (NPL), Return on Assets (ROA) and Return on Equity (ROE) are categorized as poor. From a customer perspective, LPD's performance is assessed as good from the results of customer retention and customer satisfaction calculations with a percentage of positive statements reaching 93%. From an internal business process perspective, LPD performance is in fairly good criteria from the results of calculations of the innovation process and operational processes using service cycle effectiveness. The learning and growth perspective shows good LPD performance from calculating employee retention, employee productivity and employee satisfaction with the percentage of positive statements reaching 83%.

Keywords: balanced scorecard, customer perspective, performance, financial perspective, internal business process perspective, learning and growth perspective

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1. Introduction

Performance is a picture that reflects the level of success of a person or company as a whole in achieving the expected goals [1]. Performance measurement is very useful as material for company evaluation by comparing performance in the previous period with the current period so that it can be seen to what extent the company has achieved its goals [2]. Apart from that, performance measurement is also useful in making appropriate decisions and actions in the future.

Based on Bali Provincial Regulation Number 3 of 2017, Village Credit Institutions (LPD) are microfinance institutions (non-banks) which are savings and loan business entities whose establishment plays a very important role in rural economic development [3]. Until now, there are 35 LPD in Denpasar City spread across every sub-district. LPD Tanjung Bungkak Traditional Village which is located at Pandu Tanjung Bungkak Street No. 40, Sumerta Kelod, is one of the LPD in East Denpasar District.

Table 1. Profit and Loss for the Current Year LPD Tanjung Bungkak Traditional Village

Year	Operating income	Operating costs	Profit/loss for the year
2021	6,470,235,000	6,246,213,000	224,022,000
2022	7,458,437,000	7,104,178,000	354,259,000
2023	7,216,320,000	6,934,272,000	282,048,000

Source: LPLPD Denpasar City, 2024

Based on data from the Denpasar City Village Credit Institution Empowerment Institute (LPLPD) as in the table above, it can be seen that the current year's profit obtained grew by 58% in 2022. However, the current year's profit decreased by 20% in 2023. The current year's profit is inconsistent over the last three years, it has been shown that the Tanjung Bungkak Traditional Village LPD has not been able to develop as efficiently as it should. This requires the Tanjung Bungkak Traditional Village LPD to be more professional and continue to evaluate its performance in order to improve the quality of service and the trust of the community as the main service users of the LPD. This trust is very important considering that the LPD itself was formed to help with the economic and social problems of the surrounding community [4]. Therefore, non-financial aspects also really need to be considered, in order to obtain a balanced performance that can comprehensively provide an overview for conducting evaluations.

In assessing performance, the Tanjung Bungkak Traditional Village LPD still uses traditional performance measurements which focus on the financial side and refer to the CAMEL (Capital, Asset quality, Management, Earnings, and Liquidity) method. The CAMEL method is a method for assessing bank health qualitatively and quantitatively by considering five main factors. Even though in the CAMEL method there are also management aspects which are not included in the financial aspect, the indicators used to measure the management aspect are still considered inadequate and cannot provide a real picture of the company's condition because there are other aspects such as customers and employees which also need to be considered where these aspects play a role. Key role in driving the company's operational activities [5]. Therefore, Balance scordcard analysis is needed which is able to measure performance from various perspectives, both financial, customer, internal processes, and learning and growth. This helps organisations see the big picture and not just focus on one aspect.

Thus, we need a performance measurement that takes into account financial and non-financial factors in order to evaluate performance more thoroughly and precisely. One of these methods is the use of evaluation based on the balanced scorecard which was first introduced by Professor Robert S. Kaplan and Doctor David P. Norton in 1992. The management system called the Balanced Scorecard is used as a measurement and control tool to provide managers with a comprehensive understanding of company performance [6]. This understanding is not limited to a financial perspective, it also takes into account customer perspectives, internal business processes, learning and growth. The application of the Balanced Scorecard can be adapted to reflect changes in organizational strategy so that it can become a dynamic tool that can help organizations remain relevant and responsive to the changing business environment [7]. The results of performance measurement through the balanced scorecard can be used as a comprehensive evaluation tool to help businesses improve performance in achieving their goals [8]. These results can also provide a general picture of the success, failure and ineffectiveness of strategies and work programs in the organization.

This is confirmed research by [9], by combining important elements that are sometimes ignored in conventional performance assessments, the balanced scorecard is a very effective technique for measuring performance. The goal of this strategy is to achieve balance when assessing nonfinancial and financial factors. The Balanced Scorecard was also used to evaluate LPD performance in Kerambitan Tabanan District by [4] in her research.

2. Method

This research is qualitative research with a quantitative descriptive approach using primary data and secondary data. Data collection techniques include documentation, observation, interviews and surveys. The data collection method is as follows.

a. Financial Perspective

(1) Cash Ratio (CR)

Cash Ratio (CR) is a ratio used to assess how much cash is available to pay debts. The cash ratio calculation formula is as follows [10].

$$\text{CR} = \frac{\text{Cash + Cash Bank}}{\text{Current Liabilities}}$$

(2) Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR) is the ratio between loans or credit given to deposits or funds received by the bank. The LDR calculation formula is as follows [4].

$$\text{LDR} = \frac{\text{Total Credit Granted}}{\text{Total Funds Received + 50\% Core Capital}} \times 100\%$$

(3) Debt to Equity Ratio (DER)

Debt to Equity Ratio (DER) is a ratio used to measure the relationship between the amount of debt and a company's equity. The DER calculation formula is as follows [11] .

$$\text{DER} = \frac{\text{Total Debt}}{\text{Total Capital}}$$

(4) Operational Costs to Operational Income (BOPO)

BOPO is a ratio used to assess company efficiency by comparing operational cost with operating income. The BOPO formula is as follows [4].

$$\text{BOPO} = \frac{\text{Operational Costs}}{\text{Operational Income}} \times 100\%$$

(5) Non-Performing Loan (NPL)

Non-Performing Loans (NPL) are loans where payment problems occur, including loans classified as substandard, doubtful and bad. The NPL calculation formula is as follows [12].

$$\text{NPL} = \frac{\text{Substandard Credit + Doubtful + Loss}}{\text{Total Credit}} \times 100\%$$

(6) Return on Asset (ROA)
Return on Assets (ROA) is a ratio used to evaluate a company's ability to generate profits by considering all the assets owned by the company. According to [13] how to calculate ROA can use the following formula.

$$\text{ROA} = \frac{\text{Net Profit Before Tax}}{\text{Total Assets}} \times 100\%$$

(7) Return on Equity (ROE)
Return on Equity (ROE) is a ratio used to assess a company's ability to generate profits or profits by considering the own capital used. According to [13] how to calculate ROE can use the following formula.

$$\text{ROE} = \frac{\text{Net Profit After Tax}}{\text{Own Capital}} \times 100\%$$

Table 2. Description of Financial Ratio Assessment Indicators

Indicators	**Good**	**Enough**	**Not good**
CR	> 1	0.5 - 1	< 0.5
LDR	<= 94.75%	> 94.75% - 98.5%	> 98.5%
DER	> 2	1 - 2	< 1
BOPO	<= 79.75%	> 79.75% - 83.5%	> 83.5%
NPL	< 5%	5%	> 5%
ROA	>= 2.025%	1.65% - < 2.025%	< 1.65%
ROE	>= 15%	>5% - <15%	< 5%

Source: LPLPD Denpasar City

b. Customer Perspective
(1) Customer Retention
Customer retention is a company's ability to convert first-time customers into repeat customers and prevent them from switching to competitors. If the results of customer retention calculations increase, this indicates that the LPD's performance is good, meaning that the LPD can maintain good relationships with customers and provide the best service so that customers want to continue using the services provided by the LPD with the following calculation formula [13].

$$\text{Customer Retention} = \frac{\text{Current Year's Total Customers}}{\text{Last Year's Total Customers}} \times 100\%$$

(2) Customer Satisfaction
Customer satisfaction is the level of satisfaction a person feels after comparing product performance with their expectations. The sampling technique used is incidental, that is, the sampling technique is based on chance, anyone who meets the researcher by chance can be used as a sample [14]. The sample obtained was 45 respondents. Customer satisfaction is measured using a questionnaire through several indicators such as completeness of LPD facilities, LPD employee service, employee alertness, security guarantees, and LPD employee concern [4]. Statements in the LPD customer questionnaire are assessed using a Likert scale with four options, namely as follows:

a. Strongly agree score 4
b. Agree score 3

c. Disagree score 2
d. Strongly disagree score 1

Answers to these four categories will be classified into 2 positive statements (yes) including answers strongly agree and agree, while for negative statements (no), namely answers disagree and strongly disagree. If >=60 percent of respondents answers are positive (yes) then the LPD's performance can be said to be good, and vice versa [4] .

c. Internal Business Process Perspective

(1) Innovation Process

The innovation process will be assessed based on the level of product and service development of the Tanjung Bungkak Traditional Village LPD. If the innovation implemented increases every year, it shows that the company has good performance and is able to meet customer needs through product and service development.

(2) Operations Process

The operational process that will be implemented is through measuring Service Cycle Effectiveness (SCE) to measure service time to customers who borrow or save money at the Tanjung Bungkak Traditional Village LPD. The calculation results will show whether or not the LPD is efficient in providing services [15] . If the SCE calculation results are <1 then it can be said that their performance is not good. However, on the contrary, if the result is >=1 then the performance is good and efficient in providing services, using the SCE calculation formula.

$$\text{SCE Saving/Loan} = \frac{\text{Standard Time}}{\text{Average Completion Time}} \times 100\%$$

d. Learning and Growth Perspective

(1) Employee Retention

Employee retention is a measurement used to determine a company’s ability to retain its employees. If the results of employee retention calculations increase, this indicates good LPD performance, meaning that LPD can maintain good relations with employees and employ employees well so that employees feel comfortable and satisfied with their work at LPD using the employee retention calculation formula [13] .

$$\text{Employee Retention} = \frac{\text{Current Year's Total Customers}}{\text{Last Year's Total Customers}} \times 100\%$$

(2) Employee Productivity

Employee Productivity is the ability of employees to produce goods and services compared to the input used. An employee can be said to be productive if he can produce output according to expectations in an efficient and timely manner. The higher the level of employee productivity, the higher the service provided by employees which provides positive value [16]. Employee productivity can be measured using the following formula [15] .

$$\text{Empoyee Productivity} = \frac{\text{Revenue}}{\text{Total Employee}} \times 100\%$$

(3) Employee Satisfaction

Employee satisfaction is the level of feelings and emotional states of employees towards their work, whether pleasant or unpleasant. The sampling technique used was saturated sampling where all members of the population were included as samples, so that the sample obtained was 19 respondents [14]. The level of employee satisfaction is measured by giving a questionnaire to employees with the statement indicators in the questionnaire consisting of awards given by LPD, employee commitment, relationships with co-workers, and facilities provided by LPD [4]. Statements in the LPD customer questionnaire are assessed using a Likert scale with four options, namely as follows:

a. Strongly agree score 4
b. Agree score 3
c. Disagree score 2
d. Strongly disagree score 1

Answers to these four categories will be classified into 2 positive statements (yes) including answers strongly agree and agree, while for negative statements (no), namely answers disagree and strongly disagree. If >=60 percent of respondents answers are positive (yes) then the LPD's performance can be said to be good, and vice versa [4].

After analyzing performance from four perspectives, the results are measured by assigning a score to each perspective using an assessment scale or rating scale and calculating the total average of the scores and determining the category [17].

Table 3. Rating Scale for Each Perspective Balance Scorecard

No.	Score	Descriptions
1.	1	Good
2.	0	Enough
3.	-1	Not Good

Source: Putri and Wirasedana (2023)

Table 4. Average Category Total Score

No.	Score	Descriptions
1.	> 0.5 -1	Good
2.	> 0 - 0.5	Enough
3.	(-1) - 0	Not Good

Source: Putri and Wirasedana (2023)

3. Results and Discussion

a. Financial Perspective

The financial perspective measurement is based on the Tanjung Bungkak Traditional Village LPD financial report for 2021-2023 as shown in the following table.

Table 5. Calculation of Financial Ratios

Financial Ratios	**Years** 2021	2022	2023	**Average**	**Criteria**	**Score**
CR	0.44	0.50	0.56	0.50	Enough	0
LDR	50.89%	45.09%	39.47%	45.15%	Good	1
DER	6.29	6.79	8.42	7.16	Good	1
BOPO	96.54%	95,25%	96.09%	95.96%	Not Good	-1
ROA	0.30%	0.45%	0.33%	0.36%	Not Good	-1
ROE	2.17%	3.55%	3.11%	2.94%	Not Good	-1
NPL	48.29%	37.74%	37.60%	41.21%	Not Good	-1
Total Score						-2
Average Score					Not Good	-0.29

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

(1) Cash Ratio (CR)
The calculation of the cash ratio of the Tanjung Bungkak Traditional Village LPD for 2021-2023 shows an increase. In 2021 the cash ratio calculation is 0.4. Then there was an increase of 12.46% to 0.50 and increased again in 2023 to 0.56. Based on the financial ratio assessment indicator table, the CR calculation results for 2021-2023 obtained an average of 0.50, which indicates that LPD performance is quite good. The results of this calculation show that the Tanjung Bungkak Traditional Village LPD over the last 3 years has succeeded in increasing its cash ratio and is able to manage its cash and bank cash well so that its performance can improve.

(2) Loan to Deposit Ratio (LDR)
The results of the LDR calculation show a decrease in 2021-2023. The results of the LDR calculation in 2021 were 50.89% and there was a decrease in the following years, namely in 2022 to 45.09% and 2023 to 39.47%. Based on the financial ratio assessment indicator table, the LDR calculation results for 2021-2023 obtained an average of 4.15%, which indicates that the LDR from the Tanjung Bungkak Traditional Village LPD during the research year was said to be good because the percentage was less than 94.75%. This indicates that the Tanjung Bungkak Traditional Village LPD can streamline the credit given for the funds received plus 50% of core capital (profit and loss for the current year), so it is said to have good liquidity and is able to maintain its profitability.

(3) Debt to Equity Ratio (DER)
The results of the DER calculation show an increase in the research period. In 2021, the DER LPD of the Tanjung Bungkak Traditional Village was 6.29, which then increased in 2022 to 6.79 and increased again in 2023 to 8.42. Based on the financial ratio assessment indicator table, the DER calculation results for 2021-2023 are said to be good with the average obtained being 7.16. The results of this calculation indicate that the Tanjung Bungkak Traditional Village LPD has a higher level of debt, indicating an increase in the interest income earned by the company.

(4) Operational Costs to Operational Income (BOPO)
The results of BOPO calculations in the Tanjung Bungkak Traditional Village LPD show that there were fluctuations during the research period. In 2021, BOPO reached 96.54%, there was a decrease in 2022 to 95.25%, and an increase in 2023 to 96.09%. The BOPO calculation results for 2021-2023 obtained an average of 95.96%, which means that for every IDR 1,00 of income obtained by the Tanjung Bungkak Traditional Village LPD, it is IDR 0,96 worth of expenses that must be borne. Based on the financial ratio assessment indicator table, the BOPO calculation results for 2021-2023 are said to be less good because the average percentage obtained exceeds 83.5%. This shows that the Tanjung Bungkak Traditional Village LPD is not efficient in managing its operational costs and results in a decrease in profits due to the high operational expenses that must be borne.

(5) Non-Performing Loan (NPL)
The NPL calculation result in 2021 was 48.29% and decreased to 37.74% in 2022. This indicates that the Tanjung Bungkak Traditional Village LPD succeeded in reducing non-performing loans by 21.85% from the previous year. And in 2023 the NPL will decrease again to 37.60%. Based on the financial ratio assessment indicator table, the results of the Tanjung Bungkak Traditional Village LPD NPL calculation for 2021-2023 are said to be poor with an average percentage obtained of 41.21%.

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Even though the calculation results each year show a decrease, the percentage still exceeds 5%. This shows that the Tanjung Bungkak Traditional Village LPD has not been successful in managing the loans they provide.

(6) Return on Asset (ROA)
The ROA calculation result in 2021 was 0.30%, which then increased by 52.99% to 0.45% in 2022. However, in 2023, the ROA of the Tanjung Bungkak Traditional Village LPD decreased by 27.53% to 0.33 %. This means that every IDR 1,00 of asset use can generate a profit of only IDR 0,0033. Based on the financial ratio assessment indicator table, the results of the ROA calculation of the Tanjung Bungkak Traditional Village LPD for 2021-2023 are said to be not good with the average ROA calculation result being 0.36%. This indicates that the Tanjung Bungkak Traditional Village LPD does not yet have adequate capabilities in managing its assets to optimize profit achievement.

(7) Return on Equity (ROE)
The results of the ROE calculation in 2021 were 2.17%, which then increased to 3.55% in 2022. However, in 2023, the ROE of the Tanjung Bungkak Traditional Village LPD decreased to 3.11%. This means that for every IDR 1,00 of equity owned, you can generate a profit of only IDR 0,03. Based on the financial ratio assessment indicator table, the results of the LPD Tanjung Bungkak Traditional Village ROE calculation for 2021-2023 are said to be less good with the average ROE calculation result being 2.94%. This indicates that LPD has not been able to manage its equity well in order to generate profits.

Based on the results of the financial ratio calculations that have been explained, a total score of -2 was obtained, with an average score of -0.29 from the 7 indicators used in measuring the financial perspective. Based on these results, the financial performance of the Tanjung Bungkak Traditional Village LPD is considered to be poor because it is between the interval -1 to 0.

b. Customer Perspective

(1) Customers Retention
The results of LPD customer retention calculations for the Tanjung Bungkak Traditional Village from 2021 to 2023 have changed towards an increase.

Table 6. Customer Retention Calculation

Years	Current year total customers	Last year total customers	Customer retention
2021	7735	8312	93.06%
2022	7721	7735	99.82%
2023	7983	7721	103.39%

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

Customer retention in 2021 was 93.06%, which then increased in subsequent years. In 2022 customer retention will be 99.82% and in 2023 it will be 103.39%. This change in the number of customers shows LPD's good performance because it has succeeded in attracting more people to become their clients and customers, as well as building trust in using the services and products offered by LPD.

(2) Customer satisfaction
Validity tests are carried out to assess whether the answers to the questionnaire that have been distributed can be considered valid or not. Validity testing was carried out to test 45 samples of Tanjung Bungkak Traditional Village LPD customers, so the

minimum value was determined to meet the validity criteria for a significant correlation at the 0.05 level, namely 0.294 with the formula, namely df=N-2.

Table 7. Customer Satisfaction Validity Testing

Variable	Code	R-table	Pearson Correlation	Description
Completeness of Facilities	X1.1	0.294	0.315	Valid
	X1.2	0.294	0586	Valid
	X1.3	0.294	0.684	Valid
	X1.4	0.294	0.579	Valid
Employee Services	X2.1	0.294	0.692	Valid
	X2.2	0.294	0.769	Valid
	X2.3	0.294	0.681	Valid
	X2.4	0.294	0.635	Valid
Employee Alertness	X3.1	0.294	0.345	Valid
	X3.2	0.294	0.713	Valid
	X3.3	0.294	0.806	Valid
	X3.4	0.294	0.756	Valid
Security Guarantee	X4.1	0.294	0.805	Valid
	X4.2	0.294	0.834	Valid
	X4.3	0.294	0.859	Valid
	X4.4	0.294	0.817	Valid
Concern	X5.1	0.294	0.728	Valid
	X5.2	0.294	0.624	Valid
	X5.3	0.294	0.781	Valid
	X5.4	0.294	0.336	Valid

Source: SPSS Data Processor Version 29 (Processed Data)

Based on the table above, it can be seen that the results of testing the validity of customer satisfaction at the Tanjung Bungkak Traditional Village LPD for all statements in the questionnaire are declared valid with Pearson correlation > r-table.

Reliability testing was also carried out to assess whether the data from the questionnaire that had been distributed could be said to be reliable or trustworthy. The minimum value determined to meet the reliability criteria is 0.60.

Table 8. Customer Satisfaction Reliability Testing

Variable	Cronbach Alpha	Description
Customer satisfaction	0.931	Reliable

Source: SPSS Data Processor Version 29 (Processed Data)

Based on the table above, it is stated that customer satisfaction is considered reliable or trusted with a Cronbach alpha test value of 0.931.

Table 9. Average Customer Satisfaction Respondent

No	Variable	Respondent Statement	
		Positive	Negative
1	Completeness of Facilities	99%	1%
2	Employee Services	96%	4%
3	Employee Alertness	89%	11%
4	Security Guarantee	100%	0%
5	Concern	80%	20%
Total		464%	36%
Average		93%	7%

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

Based on Table 9, 93% of the 45 respondents gave positive statements, while 7% gave negative statements. This condition shows that the performance of the Tanjung Bungkak Traditional Village LPD from a customer perspective is considered good and shows that customers are satisfied with the services provided by the Tanjung Bungkak Traditional Village LPD. However, there are still several things that need to be improved in order to provide maximum service, for example in providing forms at the LPD and employees must be more alert and able to answer all transaction-related questions that customers need so that customers will not feel confused. Apart from that, employees also have to be more agile so that customers don't have to wait long to get service. And the most important thing is providing a special place for customer complaints to make it easier for customers to express their complaints and input to the LPD.

Based on the calculation results of the two indicators above, it can be said that the performance of the Tanjung Bungkak Traditional Village LPD seen from a customer perspective is good with customer retention and satisfaction said to be good so it gets a score of 2 and the average is 1.

c. Internal Business Processes Perspective

(1) Innovation Process

Assessment of the innovation process is carried out by looking at the development of products and services available at the Tanjung Bungkak Traditional Village LPD.

Table 11. Tanjung Bungkak Traditional Village LPD Products and Services

Year	Product	Service
2021	1. Term Savings/Deposits 2. Mandatory Savings 3. Voluntary Savings 4. Monthly Loans	1. Electricity Bill Payment 2. Telephone Bill Payment 3. Water Bill Payment
2022	1. Term Savings/Deposits 2. Mandatory Savings 3. Voluntary Savings 4. Monthly Loans	1. Electricity Bill Payment 2. Telephone Bill Payment 3. Water Bill Payment 4. Vehicles One-stop Administration Services Payments
2023	1. Term Savings/Deposits 2. Mandatory Savings 3. Voluntary Savings 4. Monthly Loans	1. Electricity Bill Payment 2. Telephone Bill Payment 3. Water Bill Payment 4. Vehicles One-stop Administration Services Payments

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

Based on Table 11, product and service development will only be carried out once, namely in 2022, the LPD of the Tanjung Bungkak Traditional Village will add a service in the form of a vehicle one-stop administration services payments. The products available at the Tanjung Bungkak Traditional Village LPD include three types, namely savings, deposits and credit. Judging from the innovation process, the performance of the Tanjung Bungkak Traditional Village LPD is said to be quite good. This is because innovation and development of products and services provided by LPD have not fully met customer needs.

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(2) Operations Process

Table 10. Service Cycle Effectiveness Tanjung Bungkak Traditional Village LPD

Product	Standard Time (minutes/day)	Average Service Time (minutes/day)	SCE (minutes/day)
Saving	00:08:00	00:06:08	1.31
Loans	2	2	1

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

The results of the Service Cycle Effectiveness (SCE) calculation are 1.31 (in minutes) for saving and 1 (in days) for borrowing as shown in Table 4.10. Based on the previously determined indicators, it can be concluded that the performance of the Tanjung Bungkak Traditional Village LPD seen from the operational process through SCE calculations can be said to be good in providing services because the calculation results show a number more than equal to 1.

Based on the calculation results of the indicators above, the total score obtained is 1, with an average score of 0.50 so that the performance of the Tanjung Bungkak Traditional Village LPD seen from the perspective of internal business processes is considered quite good because it is in the interval > 0 to 0.5.

d. Learning and Growth Perspective

(1) Employee Retention

Table 12. Retention of Tanjung Bungkak Traditional Village LPD Employees

Year	Current year total employees	Last year total employees	Employees retention
2021	20	20	100%
2022	19	20	95%
2023	19	19	100%

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

From the table above, it can be seen that there has been a change in the number of employees in the Tanjung Bungkak Traditional Village LPD. This change will occur in 2022 due to 1 employee leaving work. Based on interviews with LPD management, the person concerned stopped working due to age and health factors which required him to rest. The results of employee retention calculations show that the Tanjung Bungkak Traditional Village LPD is good at maintaining good relationships with employees and retaining them to remain in the company.

(2) Employee Productivity

Table 13. Productivity of Tanjung Bungkak Traditional Village LPD Employees

Year	Revenue	Total employee	Employee productivity
2021	6,470,235,000	20	323,511,750
2022	7,458,437,000	19	392,549,316
2023	7,216,320,000	19	379,806,316

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

There will be fluctuations in the income earned by LPD from 2021 to 2023, which causes the results of employee productivity calculations to fluctuate as shown in table above. In 2021, the results of employee productivity calculations are IDR 323,511,750 with 20 employees. In the following year employee productivity managed to increase 21.34% to IDR 392,549,316 with the number of employees decreasing to 19 people. And in 2023 employee productivity will decrease by 3.25%

to IDR 379,806,316 with the number of employees remaining 19 people. This decline occurred because the amount of income earned also decreased. Overall, the calculation of employee productivity is said to be quite good, although there was a decline, the decline was not too high only 3.25%.

(3) Employee Satisfaction

Validity tests are carried out to assess whether the answers to the questionnaire that have been distributed can be considered valid or not. Validity testing was carried out to test 19 samples of Tanjung Bungkak Traditional Village LPD employees, so the minimum value was determined to meet the validity criteria for a significant correlation at the 0.05 level, namely 0.456 with the formula, namely df=N-2.

Table 14. Employees Satisfaction Validity Testing

Variable	Code	R-table	Pearson Correlation	Description
Awards Given	X1.1	0.456	0.562	Valid
	X1.2	0.456	0.874	Valid
	X1.3	0.456	0.672	Valid
	X1.4	0.456	0.752	Valid
	X1.5	0.456	0.790	Valid
Employee Commitment	X2.1	0.456	0.581	Valid
	X2.2	0.456	0.623	Valid
	X2.3	0.456	0.594	Valid
	X2.4	0.456	0.632	Valid
	X2.5	0.456	0.590	Valid
Relationships With Coworkers	X3.1	0.456	0.623	Valid
	X3.2	0.456	0.657	Valid
	X3.3	0.456	0.623	Valid
	X3.4	0.456	0.914	Valid
	X3.5	0.456	0.623	Valid
Facilities Provided	X4.1	0.456	0.623	Valid
	X4.2	0.456	0.893	Valid
	X4.3	0.456	0.657	Valid
	X4.4	0.456	0.876	Valid
	X4.5	0.456	0.896	Valid

Source: SPSS Data Processor Version 29 (Processed Data)

Based on the table above, it can be seen that the results of testing the validity of employee satisfaction at the Tanjung Bungkak Traditional Village LPD for all statements in the questionnaire are declared valid with Pearson correlation > r-table.

Reliability testing was also carried out to assess whether the data from the questionnaire that had been distributed could be said to be reliable or trustworthy. The minimum value determined to meet the reliability criteria is 0.60.

Table 15. Employee Satisfaction Reliability Testing

Variable	Cronbach Alpha	Description
Employee Satisfaction	0.938	Reliable

Source: SPSS Data Processor Version 29 (Processed Data)

Based on the table above, it is stated that employee satisfaction is considered reliable or trusted with a Cronbach alpha test value of 0.938.

Table 16. Average Employee Satisfaction Respondent

No	Variable	Respondent Statements	
		Positive	**Negative**
1	Awards Given	82%	18%
2	Employee Commitment	66%	34%
3	Relationships With Coworkers	96%	4%
4	Facilities Provided	88%	12%
Total		333%	67%
Average		83%	17%

Source: Tanjung Bungkak Traditional Village LPD (Data Processed)

Based on the above, 83% of the 19 respondents gave positive statements, while 17% gave negative statements. This indicates that employees feel comfortable and satisfied while working at the Tanjung Bungkak Traditional Village LPD. Although on the employee commitment indicator there were quite high negative responses to 2 statements, namely the desire to change jobs and quit work, each of which received a negative response of 84.21%. This is because some employees feel that there is still a lack of appreciation from the leadership, career development, providing salaries and bonuses according to job demands, equal treatment in the workplace, providing facilities and office cleanliness so that employees can work comfortably. So some employees want to change jobs which is also due to the limited scope of work. Apart from that, some employees who want to stop working are also due to advanced age.

Based on the results of calculating the three indicators above, it can be said that the performance of the Tanjung Bungkak Traditional Village LPD seen from an employee perspective is good with employee retention and satisfaction said to be good and productivity said to be sufficient so that it gets a score of 2 and the average is 0.67 and is between the interval > 0.5 to 1.

4. Conclusion

Based on the discussion previously described, it can be concluded that the performance of the Tanjung Bungkak Traditional Village LPD is assessed from 4 balance scorecard perspectives as follows.

a. Assessment from a financial perspective shows poor performance due to the results of calculating the Cash Ratio (CR) which is quite good, Loan to Deposit Ratio (LDR) and Debt to Equity Ratio (DER) which are good but Operational Cost to Operating Income (BOPO), Return on Assets (ROA), Return on Equity (ROE), and Non-Performing Loans (NPL) are not good. This is due to a decrease in profits obtained because the burden borne is quite high and the company does not have adequate capabilities in managing its loans, assets or equity in order to optimize profit achievement.

b. From a customer perspective, LPD's performance is considered good with the results of customer retention calculations showing an increase every year and customer satisfaction results showing that customers are satisfied with the percentage of positive statements reaching 93%.

c. Assessment from an internal business process perspective indicates that LPD performance is at fairly good criteria with the results of the Service Cycle Effectiveness (SCE) calculation already at <=1. However, it is necessary to develop innovations in the products and services provided in order to expand the reach of users of the Tanjung Bungkak Traditional Village LPD services.

d. And from a learning and growth perspective, it shows good LPD performance. The results of employee retention calculations only experienced a one-time decrease and employee productivity fluctuated. In measuring the level of employee satisfaction, it was stated that employees were satisfied with the percentage of positive statements reaching 83%

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POLITEKNIK NEGERI BALI

9 772655 259003

JASAFINT

P3M – Politeknik Negeri Bali

Kampus Bukit Jimbaran, PO. Box 1064 Tuban, Badung, Bali

Phone : +62361-701981, Mobile/WA : +628237911567

Email : jasafint@pnb.ac.id

https://ojs2.pnb.ac.id/index.php/JASAFINT