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Revitalizing Tax Revenue: Tax Incentive Indonesia and Overcoming Negative Sentiment

Muhamad Taqi[1]*, Aam Slamet Rusydiana[2], Aisyah As-Salafiyah[3], Nawang Kalbuana[1,4], Mamay Mayyizah[1]

[1]Sultan Ageng Tirtayasa University, Indonesia, [2]Sakarya University, Turkey, [3]Sharia Economic Applied Research and Training (SMART), Indonesia, [4]Indonesian Aviation Polytechnic Curug (PPI Curug), Indonesia. *Email: muhamad.taqi@untirta.ac.id

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ABSTRACT

This study aims to test the effectiveness of the Policy implemented by the Indonesian government to increase national tax revenues through tax incentive programs and solutions to negative sentiment and see the progress of research on "*Tax Incentives in Indonesia*" around the world published by journals on that theme. This research uses qualitative methods with bibliometric analysis and sentiment analysis approaches. The data used is secondary data with the theme "*Tax Incentive Indonesia*" from the Dimension database of 80 published journals. Then, the data is processed and analyzed using the VOSviewer application to know the bibliometric map of research development "*Tax Incentive Indonesia*" in this world. Apart from that, the data was also analyzed using the SentiStrength application to find out positive sentiment, negative, and neutral sentiment regarding the tax incentive policy that has been implemented in Indonesia. The results of the research found that the tax incentive program has proven effective in increasing national tax revenues and the solution to negative sentiment is to create activities that can increase taxpayers' awareness of paying taxes, and trust in the government as well as direct benefit programs for taxes that have been paid. Then based on sentiment analysis, neutral sentiment is the highest result with a percentage of 50%, followed by positive and negative sentiment with each having a percentage of 25%. Meanwhile, based on bibliometric keyword mapping, 5 clusters can become research paths.

Keywords: Policy, Tax Incentive, Sentiment Analysis, Indonesia
JEL Classifications: H20, H25, H30 C88

1. INTRODUCTION

Tax revenue in Indonesia fluctuates and tends to increase except for 2020. Data shows that tax revenues in Indonesia (in billions of rupiah) in 2019 amounted to IDR 1,546,141.9; in 2020 amounting to Rp 1.285.136,32; in 2021 amounting to IDR 1,547,841.1; in 2022 amounting to IDR 2,034,552.5; Andin 2023 amounting to Rp 2,118,348; in 2024 amounting to IDR 2,309,859.8 (BPS, 2023). However, from 2009 to 2020 the tax revenue target has never been achieved and was only achieved in 2021 after lowering the tax revenue target compared to previous years (Ministry of Finance, 2021).

Taxes are mandatory payments or fees collected by local, state, and national governments from individuals or businesses (Kalbuana et al., 2022) to cover the costs of services, goods, and general government activities (Uzliawati et al., 2024). Then, tax incentives are defined as aspects of government tax policy designed to provide incentives or encourage certain economic activities by reducing tax payments. The purpose of tax incentives is to increase economic activity by encouraging taxpayers to use the money for desired purposes by reducing tax payments (Tax Foundation, 2023).

Economic theory suggests that tax cuts targeted at businesses will reduce the cost of doing business in a country (Uzliawati et al., 2023), all else being equal. As a rational profit maximizer

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(Uzliawati et al., 2023), businesses will locate and develop in a country (Kalbuana et al., 2022) with lower business taxes (Prillaman and Meier, 2014). However, the impact of implementing tax incentives on the country's economy is a complex issue that needs to be evaluated carefully. Evaluating state tax incentives is critical to determining whether tax incentive programs are successful (Supriatiningsih et al., 2023). The government needs to have an accurate picture of the benefits and costs. The government needs to evaluate and analyze the extent to which tax incentives influence business choices (Taqi et al., 2024), how those decisions affect the country's economy, and what it costs to achieve those results (Pewtrusts, 2014).

Indonesia also offers tax incentives to attract investment, create jobs, acquire knowledge, skills, and technology, and encourage economic growth (Deloitte, 2022; United States Government, 2023; OECD, 2023). However, the implementation of tax incentive policies in Indonesia faces several challenges, including (1) complexity: Related to the broader tax incentive scheme in Indonesia it is complicated due to multiple and overlapping incentives and the current dense legal framework, (2) consolidation of tax incentive regulations can increasing transparency and reducing policy overlap, (3) loss of revenue: Tax incentives result in a loss of revenue, which can affect the government's ability to fund public services and infrastructure, (4) neutrality: Tax incentives can distort the allocation of resources in the economy, favoring certain industries or companies over others, (5) compliance: Ensuring compliance towards tax incentive policies can be a challenge, especially for small and medium enterprises, (6) monitoring and evaluation: Monitoring and evaluating the effectiveness of tax incentive policies can be difficult, and there is a lack of empirical evidence regarding their impact, and (7) Global tax reform: Indonesia's competitive advantage for attracting multinational investment could be influenced by global tax reform efforts, such as anti-global base erosion measures of the OECD inclusive framework (OECD, 2023; Prastuti, 2023; Megersa, 2019).

Policy and implementation of tax incentives in Indonesia continues to develop depending on the situation and conditions of the national economy. In December 2019, the Indonesian government issued Government Regulation 78 of 2019, which establishes various tax incentives for businesses that invest in certain industries and provinces. These incentives include a 30% deduction for investments in certain industries and provinces, a 10% withholding tax on dividends paid to non-resident taxpayers, and an extended loss carry-forward period of up to 5 years. Then, in responding to the COVID-19 pandemic, the Indonesian government issued Regulation No. 29 of 2020 which provides income tax facilities for parties who meet the requirements who help in dealing with the pandemic. Public companies also receive tax relief based on PP No. 30 of 2020 (UNCTAD, 2019). Although tax incentives in Indonesia are among the most generous in the region, there are concerns about the complexity of the tax system and the potential for tax incentives to reduce government revenues (OECD, 2023).

Considering the importance of tax incentive policies as one of the Policies to increase tax revenues in Indonesia and the existence of negative sentiment and the need for solutions to handle it (Kalbuana et al., 2023), then it is important to do research on this topic as a way to measure the effectiveness of the Policy chosen by the government and see how far the research has progressed Tax Incentives in Indonesia. Several studies that are relevant to this discussion include Irwanto and Meilani (2022) explaining the comparison of tax incentives in Indonesia, Malaysia, and the United States; Siregar and Patunru (2021) examine the impact of tax incentives on foreign investment in Indonesia; Ernie (2021) explain tax incentives in Indonesia during the COVID-19 pandemic; Dwianika et al. (2021) explain a review of tax compliance in Indonesia during the COVID-19 pandemic; Safitri and Widarjo (2023) explain research developments related to tax avoidance; and Novita and Fahmy (2022) explain tax planning in multinational companies that occurs as a result of business transactions in Indonesia.

Originality of research this study uses a combination of bibliometric analysis and sentiment analysis in analyzing research data related to tax incentive policies in Indonesia. Bibliometric analysis with the help of the VOSviewer application can solve crucial problems in scientific publications, such as how to measure the distribution of articles, article authors, article publishing organizations or institutions, and keywords along with their development trends which are discussed by the research theme raised. Therefore, specifically, this research aims to conduct a comprehensive literature review by identifying gaps in research and helping academics and practitioners to further explore research regarding "*Tax Incentive Indonesia*" in the future. As for sentiment analysis with the help of the application SentiStrength used to see neutral sentiment, especially positive and negative sentiment regarding tax incentive policies to find a solution.

2. LITERATURE REVIEW

Akanbi (2020) defines tax as a mandatory levy levied on the income and property of individuals, companies, and institutions by the government. Another definition explains that taxes are mandatory payments or fees collected by local, state, and national governments from individuals or businesses to cover the costs of general government services, goods, and activities (Tax Foundation, 2023). According to Law no. 16 of 2009 concerning the establishment of government regulations instead of Law no. 5 of 2008 concerning the fourth amendment to Law no. 6 of 1983 concerning General Provisions and Procedures for Taxation in Article 1 paragraph 1 states that tax is a mandatory state contribution made by individuals or bodies that is coercive based on the law, without receiving direct compensation and is used for state needs for the greatest prosperity people.

Furthermore, tax incentives are tax reductions or exemptions provided by the government to encourage investment, economic growth, job creation, and so on. Tax incentives are often used as a fiscal policy instrument to encourage economic growth and investment, both at the national and local levels (Ernie, 2021). Akanbi (2020) also defines tax incentives as a deliberate reduction in tax debt provided by the government to encourage certain economic units to act in a desired way. According to Barry (2002) tax incentives are a form of tax facility provided by the government to certain taxpayers in the form of reducing tax rates to reduce the amount of tax burden that must be paid.

Tax incentives can be an effective tool for governments to encourage economic growth and development, but it is important to carefully evaluate their costs and benefits and ensure that they are used efficiently and effectively (Akanbi, 2020). Apart from that, the main benefit of tax incentives is that they can attract investment to certain countries or regions that implement tax incentive policies. This is because investors are often more willing to invest in areas that offer tax incentives. After all, these incentives can reduce operational costs and increase their profits. Another advantage of tax incentives is that they can create jobs. Tax incentives can encourage companies to invest in new projects or expand their existing operations, which can create jobs.

Research related to literature studies tax incentive Indonesia is still very limited, especially in Indonesia, among the relevant research, namely Irwanto and Meilani (2022) explaining the comparison of tax incentives in Indonesia, Malaysia and the United States. The results of this research conclude that Indonesia must issue a definition of R&D for tax purposes, determine which industries are eligible for super deduction facilities, and use Malaysia as an example of implementing R&D tax incentives. This research recommends that Malaysia reduce tax incentives that reduce potential income, and provide win-win solution tax incentives for the government and taxpayers.

Siregar and Patunru (2021) examines the impact of tax incentives on foreign investment in Indonesia. The main findings of this study show that when tax incentives increase, FDI flows decrease significantly. However, corporate income tax (CIT) which is used as a proxy for investment costs shows that with tax incentives the decline in FDI flows will increase. Ernie (2021) explain tax incentives in Indonesia during the COVID-19 pandemic. The research results show that Indonesia's tax incentives during the COVID-19 pandemic, seen from the realization of the state revenue and expenditure budget, which includes business incentives, are indeed very effective and have a very real impact on the business world, including incentives for PPh Article 21 borne by the government, exemption from PPh Article 22, reduction of PPh Article 25, acceleration of the VAT refund process, and final PPh for MSMEs borne by the government.

Other relevant research includes Dwianika et al. (2021) explaining an overview of tax compliance in Indonesia during the COVID-19 pandemic; Safitri and Widarjo (2023) explain research developments related to tax avoidance; Ibrahim et al. (2018) explain tax policy in Indonesia in the energy sector; Sari et al. (2023) reviewed the mapping of tax compliance research in Indonesia; and Novita and Fahmy (2022) explain tax planning in multinational companies that occurs as a result of business transactions in Indonesia.

3. RESEARCH METHODOLOGY

This research uses a descriptive qualitative approach with meta-analysis and descriptive statistical literature studies based on 80 journal publications discussing the theme "*Tax Incentive Indonesia.*" Meta-analysis is a method that integrates previous research related to a particular topic to evaluate the results of existing studies. Furthermore, the qualitative method used in this research is also referred to as a constructive method, where the data collected in the research process will be constructed into themes that are easier to understand and meaningful.

In this research, various scientific journal publications related to the theme "*Tax Incentive Indonesia*" around the world is used as a data source. Data was collected by searching for journal publications indexed in the Dimension database using the keyword "*Tax Incentive Indonesia.*" After that, scientific articles or journals that are relevant to the research theme will be selected based on the publication data that has been collected. Journals equipped with DOIs are criteria in the process of filtering and processing data using software. There are 80 journal articles published within the research theme "*Tax Incentive Indonesia.*" The development of publication trends related to the research topic was analyzed using VOSviewer software, which can display bibliometric maps and enable more detailed analysis.

To build a map, VOSviewer uses the abbreviation VOS which refers to Visualizing Similarity. In previous studies, VOS mapping techniques have been used to obtain bibliometric visualizations which are then analyzed. Furthermore, VOSviewer can create and display author journal maps based on co-citation data or keyword maps based on co-incidence data. Therefore, in this research an analysis of journal maps related to "*Tax Incentive Indonesia*," including a map author, organization, and keywords.

Apart from that, applications are used SentiStrength to see various sentiments, both neutral, positive sentiment, and negative sentiment regarding the tax incentive policy that has been implemented in Indonesia and then find a solution. SentiStrength is an algorithm for opinion mining that uses a dictionary or lexicon-based approach which works by detecting each word or phrase from an abstract text by checking terms that contain sentiments and then output What is produced is the weight of the words or phrases that were successfully detected. By utilizing a lexical system dual scale, SentiStrength wants to show that humans can feel positive emotion and negative emotions simultaneously, to some extent independently (Sianipar and Setiawan, 2015). The sampling technique used in this research is method purposive non-probability sampling, which aims to provide certain information by the desired research objectives.

4. RESULTS AND DISCUSSION

This research discusses "*Tax Incentive Indonesia*" by utilizing 80 journal article publications indexed in Dimension. Bibliometrics is a method used to measure and evaluate scientific performance by taking into account factors such as citations, patents, publications, and other more complex indicators. Bibliometric analysis is performed to evaluate research activities, laboratories, and scientists, as well as the performance of countries and scientific specialties. Several stages in bibliometric analysis include identifying the research background, collecting the database that will be used, and determining the main indicators that will be used in the research.

This section will deepen the results of the meta-analysis by showing a visual mapping graph depicting 80 journals related to Tax Incentive Indonesia. In this research, mapping was carried out by analyzing keywords and important or unique terms contained in journal articles. Mapping is a process for identifying knowledge elements, configurations, dynamics, dependencies, and interactions between these elements. Network visualization results from 80 journals with themes of Tax Incentive Indonesia will be explained in more detail in the next section.

4.1. Bibliometric Author Mapping

By using bibliometric analysis using VOSviewer software, a mapping of authors who contributed to the field was obtained Incentive Indonesia. The resulting image provides a visual representation of the mapping, the larger and brighter the points marked in yellow, the greater the number of journal publications related to the theme "*Tax Incentive Indonesia*" which has been published by the author.

In figure 1 above, it is explained that the cluster density in the bibliometric map depends on the intensity of the yellow color shown. And the yellow color on the map depends on how many items are related to other items. For this reason, this section is a very important part of getting an overview of the general structure of bibliometric maps which is considered important for analysis. From this, the authors who publish the most work can be identified.

In general, each writer or researcher has different tendencies in each publication of their work. On some occasions, an author appears as the sole author, but on other occasions, the author may write together with other authors or researchers, so this will affect the cluster density, and some clusters show different densities. However, authors who have a fairly large cluster density identify that these authors publish the most themed research Tax Incentive Indonesia when compared with authors whose cluster density is lower so that the results found can be a reference for other researchers in the future. From the results of the analysis, it was found that the authors had made the most publications related to Tax Incentive Indonesia is Halimatussadiah, Alin; Furqan, Andi Chairil; Rosdiana, Haula; Hidayatno, Ahmad; Nurfatriani, Fitri; Sutantio, Aditya; and Sarker, Tapan.

4.2. Bibliometric Keyword Mapping

This section explains the graphical visual mapping of the most widely used keywords based on the results of analysis using VOSViewer. The results of this analysis are the basis for mapping important terms that are often used in publications "*Tax Incentive Indonesia.*" The image below describes that the keywords in the larger form are the words most frequently used in journal publications with the theme "*Tax Incentive Indonesia.*"

As for the mapping, the keywords that appear most often in publications "*Tax Incentive Indonesia*" are divided into 5 clusters (Table 1).

Table 1: Research path map

Cluster	Keywords
Cluster 1 (5 items)	Public company, public ownership, public share ownership, tax avoidance, taxpayer
Cluster 2 (5 items)	Carbon tax, coal, deforestation, emission, tax
Cluster 3 (3 items)	Development, economy, sustainable construction
Cluster 4 (3 items)	Indonesia stock exchange, profitability, transfer pricing decision
Cluster 5 (2 items)	Farmer, sustainable agricultural

Based on 5 cluster keyword mapping on the publication Tax Incentive Indonesia, then the following is the research map obtained and the word most used is Tax. The following is research map based on 5cluster keyword mapping:

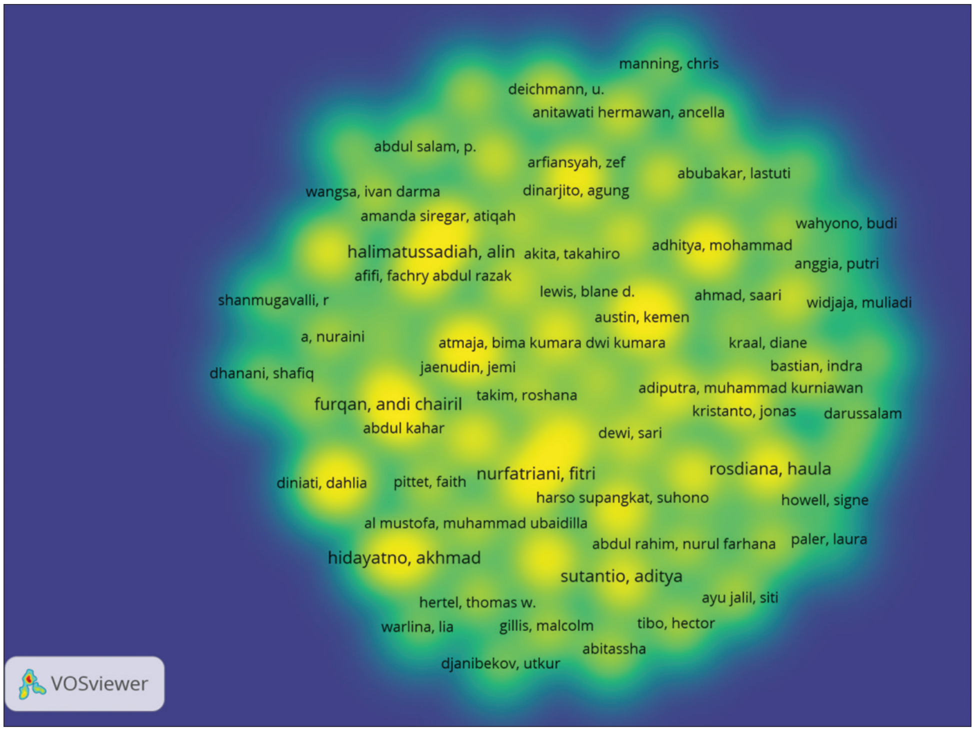
4.2.1. Cluster 1: Company and tax issues

Research related to this theme is quite common in Indonesia. Issues related to tax are still a hot topic of discussion in several Indonesian studies, among research that is relevant to this topic is Novita and Fahmy (2022) explaining tax planning in multinational companies which occurs as a result of business transactions in Indonesia. The research results prove that every country avoids taxes using 2 (two) measurements, namely effective tax rate (ETR) and book tax differences (BTD). This research explains the reasons why business people carry out tax planning with tax avoidance, namely: (1) Tax laws that companies cannot comply with and incur high costs in fulfilling them. (2) The value of the tax owed becomes large due to errors in the calculation and deposit and tax reporting processes. (3) Companies feel the need to carry out tax planning in order to carry out tax obligations and fulfill the tax provisions that have been determined, so as not to attract suspicion from tax inspectors. (4) Good public morals in tax reporting.

Novita (2016) investigated the influence of executive characteristics and gender on tax avoidance of manufacturing companies in Indonesia. The research results show that executive character has a negative effect on tax avoidance. Meanwhile, male executives in this study were proven to be braver in taking tax avoidance risks, when compared to female executives. Although the character of executives in companies is basically a risk taker, when it comes to tax avoidance, they tend to be more careful because of the Tax Law. This can be explained by the fact that the damage to reputation resulting from violations of tax regulations is not comparable to the profits from tax avoidance.

Iqbal et al. (2020) analyzed the majority shareholder composition of public ownership and tax avoidance practices in Public Companies. The research results show that this regulation is not empirically proven to have a significant effect in increasing the proportion of public share ownership in the capital market, and is more likely to create a trade-off with government efforts to increase tax revenues and reduce tax practices avoided by the company. Therefore, it is necessary to review the tax incentive schemes that can be given to companies going public so that they are effective in increasing public share ownership in Indonesia and do not trade off with corporate tax avoidance practices.

Figure 1: Author mapping



Rakayana et al. (2021) explains the influence of ownership structure (family, government, institutional, foreign, managerial, public) on tax avoidance in Indonesia. The results of this research show that government ownership structure and foreign ownership structure have a positive effect on tax avoidance in Indonesia. Company size emphasizes the influence of the independent variable on the dependent variable. Family structure, institutional, managerial, and public ownership do not affect tax avoidance. This research shows that a company's ownership structure can influence company policies on tax avoidance.

Other relevant research is Waluyo (2017) analyzing the influence of Good Corporate Governance on tax avoidance; Saudi et al. (2018) explain the role of tax education in supply chain management companies in Indonesia; Pratama (2017) explains company characteristics, corporate governance and aggressive tax avoidance practices in companies in Indonesia; Prabowo (2020) explains the capital structure, profitability, company size, and corporate tax avoidance of Indonesian Palm Oil Companies; and Setyaningrum and Suryarini (2016) analyzed income tax reductions in manufacturing companies in Indonesia in 2008-2014. It can be concluded from several studies that the dominant discussion on tax issues in Indonesia is related to tax avoidance.

4.2.2. Cluster 2: Environmental issues and tax policy

The next theme discussed based on the research map in this study is related to environmental issues and tax policy in Indonesia. This theme is still rarely researched in Indonesia, this is proven by the small number of studies found that discuss this matter. Several studies that are quite relevant to this topic include research from Dyarto and Setyawan (2021) which investigates the political challenges of introducing a carbon tax as a climate policy option in Indonesia, considering that Indonesia is the 6th largest producer of carbon emissions in the world and is one of the countries vulnerable to climate change. The research finds that, while political elites appear open in principle to the idea of a carbon tax, they are also aware of the impact of corruption challenges in the Indonesian context. Meanwhile, the business community opposes carbon taxes and is concerned that additional costs could impact productivity and competitiveness. Non-governmental organizations, however, support the immediate introduction of a carbon tax.

Long before this research, Yusuf (2008) had discussed carbon taxes. It is aimed at better understanding the social and environmental dimensions of sustainable development focusing on the impact of environmental reforms, such as pollution reduction and energy pricing policies, on inequality and poverty for the case of Indonesia. The main findings from the carbon tax study show that in contrast to most studies from developed countries, the implementation of carbon tax in Indonesia is not necessarily regressive. This proved to be highly progressive in rural areas, and neutral or slightly progressive in urban areas, with an overall progressive distributional effect nationally. Industries experiencing the largest contractions are generally more energy-intensive. Owners of production factors in this industry are mostly concentrated among high-income households and people living in cities.

Other research that is relevant to this topic includes Arieftiara et al. (2019) analysis of contingent fit between business Policy and environmental uncertainty as the impact of corporate tax avoidance in Indonesia; Rakhmindyarto (2020) examines climate policy in Indonesia's Development agenda regarding why Carbon Tax is marginalized; Ramadhani and Koo (2022) analyzed the comparison of border carbon tax adjustments and domestic carbon taxes under a general equilibrium model in Indonesia; and research from Safitra and Hanifah (2021) explains the advantages and challenges of implementing environmental taxes in Indonesia, as well as reviewing regulations that can encourage the implementation of environmental taxes in Indonesia.

4.2.3. Cluster 3: Sustainable development construction and tax incentive

The next cluster discusses sustainable development construction and tax incentives in Indonesia. There has not been much discussion related to this theme, so there is still very little research that discusses it. One research that is relevant to this topic is research from Sutantio et al. (2022) which examines a dynamic model to improve the social, environmental, and economic performance of sustainable construction for high-rise housing projects in developing countries. The simulation results according to this research reveal that current construction regulations and practices are not enough to reduce negative environmental impacts. To formulate better policies, three scenarios were carried out consisting of the implementation of building energy regulations, tax incentive policies, and policy mix. The results show that the scenarios can improve construction sustainability performance in several respects. So it can be concluded that the combination of building regulations and tax incentive policies is effective in achieving environmental, social, and economic aspects of sustainable construction that are suitable for investors. Based on the research results, it is also concluded that this model can be used to formulate various policies in the future to increase the sustainable development of high-rise housing projects in developing countries.

4.2.4. Cluster 4: Business profitability and tax incentive

Next, the discussion is related to the topic of business profitability and tax incentives in Indonesia. There is also little research related to this topic in Indonesia, some relevant research includes Aryatama and Raharja (2021) explaining the relationship between the variables capital intensity, corporate social responsibility and profitability on tax avoidance by food and beverage subsector manufacturing companies registered in Indonesian Stock Exchange 2015-2020. The results of this research show that several capital intensity variables have a positive effect on tax avoidance. Corporate social responsibility hurts tax avoidance. Then, Return on Assets as a proxy for measuring profitability has no significant effect on tax avoidance.

Ernawati et al. (2021) analyzed the influence of profitability, leverage and company size on tax avoidance through earnings management practices in manufacturing companies that went public in Indonesia. The results of his research prove that profitability, leverage and company size directly have a significant effect on management practices and tax avoidance. Earnings management practices have a significant effect on tax avoidance. Profitability Leverage and company size have a significant effect on tax avoidance through earnings management practices.

Azzura and Pratama (2019) explain the influence of taxes, exchange rates, profitability, and tunneling incentives on company decisions to carry out transfer pricing in manufacturing companies. The results of the research analysis conclude that taxes and tunneling incentives influence transfer pricing decisions. Exchange rates and profitability do not affect transfer pricing decisions.

4.2.5. Cluster 5: Sustainable agricultural and tax incentive

The final topic is related to sustainable agriculture and tax incentives in Indonesia. This topic is still rarely discussed in research in Indonesia. One of the studies that is relevant to this topic is Warlina and Pradana (2021) which specifically analyzes the distribution of sustainable agricultural land use determines changes in agricultural land use from 2016 to 2019 and determines farmers' understanding of sustainable agricultural land control in the strategic area of Garut Regency. The results of the research explain that there is no land conversion in areas of sustainable agricultural land in the Garut Regency. The total area of rice fields is 6,081 hectares, with around 24% being sustainable agricultural land. From 2016 to 2019, the area of rice fields decreased by 12 hectares. Farmers' awareness of SAL tend to be more aware of the area of sustainable agricultural land, as many as 39% of farmers are aware of sustainable agricultural land. The incentives given to farmers who control sustainable agricultural land are tax reduction, provision of agricultural infrastructure, subsidies for agricultural production facilities, and land certification facilities. Most respondents were aware of the existence of this incentive. It can be concluded that no sustainable agricultural land has been converted, even though changes have occurred on unsustainable agricultural land.

4.3. Sentiment Analysis

Sentiment analysis in this research is used to measure the accuracy of government policies regarding tax incentives and sentiment. Positive results are an illustration of the accuracy of government policy regarding taxes and negative results are the inaccuracy of government policy which can be said to be a negative sentiment that in the future must be given attention and a solution to this problem must be sought.

Based on the Figure 2, neutral sentiment is the highest result with a percentage of 50%, followed by positive and negative sentiment with each having a percentage of 25%.

Based on the Figure 3, it can be seen that the development of research related to Indonesian tax incentives has experienced fluctuations in the number of sentiments during the 1987-2023 period. As can be seen in the graph, 2020 was the year with the highest number of sentiments, reaching 18 scientific publications. Meanwhile, the highest number of positive sentiments occurred in 2020, 2021 and 2022 with each sentiment amounting to 5 documents. Meanwhile, the highest negative sentiment in 2020 was 8 publications. The highest number of neutral sentiments occurred in the 2022 period with a total of 8 scientific publications.

The results of the research are the basis for measuring the success of the program to increase national tax revenues through tax incentives (Table 2). Tax revenues when implementing the tax incentive program in the form of the tax amnesty program volume 1 in 2016-2017, tax revenues increased compared to previous years, and tax amnesty program volume 2 years 2022 will also

Figure 2: Sentiment analysis above tax incentive

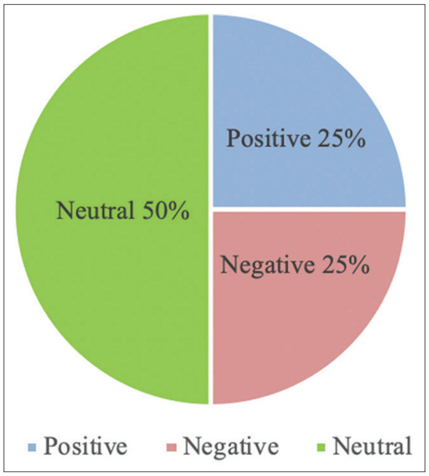


Figure 3: Intertemporal analysis of top tax incentive

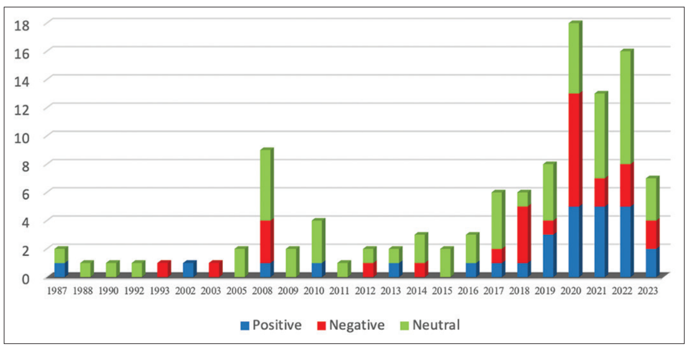


Table 2: Pros and cons of tax incentives

	Positive	Negative
1	Increasing people's purchasing power	Reducing government tax revenues
2	Helps business liquidity (cash flow).	Increase government debt
3	Potential to increase investment from foreign countries	Reducing national savings
4	Encouraging an increase in household consumption which causes an increase in labor absorption	Tax incentives only transfer the tax 'burden' to subsequent generations

contribute to an increase in tax revenues in Indonesia. Apart from that, when compensation for income tax (PPh) article 21 was implemented in 2021, tax revenues also increased and the target was even achieved after almost 12 years of the national tax revenue target having never been achieved (2009-2020). It can be said that there was an increase in tax revenues during the implementation of the tax incentive program has proven to be effective for use by the Indonesian government to increase tax revenues. This success is the basis for using the tax incentive program as a tool to increase national tax revenues in the future.

Furthermore, the negative sentiment from this tax incentive program has become material for further study regarding: (1) a decrease in tax revenues which in reality has not been proven. Tax revenues experienced an increase in 2016-2017 and 2022 during the implementation of the tax amnesty program; (2) increasing government debt actually reduces government debt, because funds are available from the tax sector so the government does not need to increase debt; (3) reducing national savings actually increases national savings due to an increase in state revenues from the tax sector; (4) transferring the tax burden to the next generation is in fact not entirely a problem but there are other benefits to be gained. Even if a tax burden arises after participating in the tax amnesty program, on the other hand there is an increase in assets on the balance sheet. Solution From this negative sentiment is to provide education and socialize the positive benefits of the tax incentive program and rationalization for long-term assessment of the tax incentive program being implemented. Apart from that, another effort that the government can make is to reduce the level of taxpayer non-compliance (negative tax compliance sentiment) which has also been proven to be the cause of taxpayers' reluctance to pay taxes by increasing: (1) taxpayers' awareness of paying taxes, and (2) trust in the government and (3) direct benefit programs for taxes that have been paid (Taqi et al., 2023). Finally, taxes can be defined as payments collected by the government which are enforceable (mandatory) and will benefit directly or indirectly from the taxes that have been paid and/or reported.

5. CONCLUSION

The Policy to increase national tax revenues through the tax incentive program has proven to be effective in increasing tax revenues in the year the tax incentive program was implemented. Tax revenue experienced an increase when the Tax Amnesty Program Volume 1 was implemented in 2016-2017 and the Tax Amnesty Program Volume 2 in 2022. Likewise, when the PPh compensation article 21 was implemented in 2021 there was also an increase in taxes, even though the target was achieved after almost 12 years the target had never been achieved (2009-2020). Negative sentiment from this tax incentive program has become the subject of a study by the government regarding the decline in tax revenue which has increased; increasing government debt decrease; reducing national savings increased national savings; Transferring the tax burden to the next generation turns out to have other benefits, namely an increase in assets on the balance sheet. Solution From this negative sentiment is to provide education and socialize the positive benefits of the tax incentive program and rationalization for long-term assessment of the tax incentive program being implemented. Apart from that, the results of the research show that the number of research publications is related to "*Tax Incentive Indonesia*" There are 80 journal articles indexed by Dimension. Furthermore, based on the results of bibliometric author mapping analysis, it shows that Halimatussadiah, Alin; Furqan, Andi Chairil; Rosdiana, Haula; Hidayatno, Akhmad; Nurfatriani, Fitri; Sutantio, Aditya; and Sarker, Tapan are the authors who have published the most on the theme "*Tax Incentive Indonesia.*" Furthermore, on the development of related research "*Tax Incentive Indonesia*" based on bibliometric keyword mapping, divided into 5 clusters with the most frequently used words being Tax. The conclusion from this research is that the Policy to increase national tax revenues through tax incentive programs in Indonesia can be said to be effective. This success is proven by the increase in tax revenues during the implementation of the tax incentive program so that in the future this program will be effective again.

5.1. Research Implications

The practical implications of the results of this research are that it can become an additional reference for the government in Indonesia regarding the formulation of policies in the field of taxation and Policies for achieving targets and increasing national tax revenues. The theoretical and academic implications are to become reference material for further research related to the topic of tax incentives, Policies for increasing tax revenue, and the use of a combination of the VOSviewer application to see the bibliometric map of the development of "Indonesian Tax Incentive" research in the world and SentiStrength to see positive and negative sentiments which are then looked for a solution to negative sentiment.

5.2. Future Research

The future research topic related to policies for increasing tax revenues in Indonesia is to examine the effectiveness of publishing programs (letters requesting explanations of data and/or information (SP2DK) in 2023-2024 which leads to an Underpayment Tax Assessment Letter (SKPKB) for taxpayers in Indonesia. In addition, research related to carbon emission tax in Indonesia has been enacted but has not yet been implemented.

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