



The Role of Tax Incentives in Supporting a Green Economy in Micro, Small, And Medium Enterprises in Kendari City

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ABSTRACT

The effects of decreasing natural carrying capacity and increasingly losing biodiversity systems encourage us to think about policy concepts that are not only oriented toward output growth but also about the sustainability of increasingly limited natural resources. One relevant concept is providing incentives to MSMEs as a driver for implementing a green economy by utilizing resources sustainably and minimizing pollution and other environmental impacts. As one of the most significant contributors to GDP, MSMEs must transform by introducing green management processes in business activities. The existence of tax incentives is intended to encourage MSMEs to support the green economy with indicators of green attitude, green strategy, green governance, green monitoring, and green modelling. Based on this, this research aims to describe the perceptions of MSME business actors towards tax incentives and analyse the relationship between tax incentives and green economy indicator variables. This research uses a sign test to see whether there are fundamental differences without paying attention to these differences and Spearman rho to test the relationship between variables. Based on the results of the sign test show that only the green strategy has no effect, even though there are tax incentives with a value of $0.05 < 0.8282$. In other words, if there is no difference between before and after the existence of tax incentives, the probability of getting at most 6 out of 10 respondents who report no role of tax incentives is 82 percent. Meanwhile, other indicators show the role of incentives in supporting the implementation of a green economy. Meanwhile, the Spearman Rho results show that the green strategy and green modelling indicators have no or weak relationship with tax incentives.

Keywords: Green Economy, MSMEs, Perception, Tax Incentives,

I. INTRODUCTION

The Intergovernmental Panel on Climate Change (IPCC) has issued a report regarding climate change. In its report, the IPCC states that greenhouse gas emissions have reached the highest level in human history [1]. This phenomenon emphasizes balancing economic, social, and environmental performance. Financial performance is no longer seen as an increase in output but is also required to contribute to overcoming social and environmental problems.

As part of the Indonesian economy, Micro, Small, and Medium Enterprises (MSMEs) play an essential role in economic formation. In the ASEAN Investment Report (AIR) released in September 2022, the population of MSMEs in Indonesia in 2021 reached 65.4 million business units, and the workforce absorbed reached 97 percent of the Indonesian workforce [2]. Unfortunately, MSMEs are often considered the most significant contributors to environmental destruction [3]. Ineffective waste and waste management, as well as production processes that are not environmentally friendly, need to be fully understood by MSMEs when running their businesses [4].

On a global scale, MSMEs in the European Union contribute to pollution levels of 56.4 percent by producing more than half of greenhouse gas emissions [5]. This condition indicates that MSME business activities are still focused on output, which makes environmental issues less of a concern [6]. Environmental issues must remain a concern when running a company's business and operations. Companies must, therefore, look for solutions that consider environmental factors by ensuring the ecological safety of products and production processes while maintaining economic efficiency. Consequently, companies must be increasingly involved in pro-ecological readiness by including sustainable development in their development strategies [7].

In Indonesia, the concept of sustainable development began in the 1970s. However, in reality, until now, development still tends to be economic development [8]. It even tends to increase output. For example, the benchmark for financial performance is seen from gross domestic product/gross regional domestic product (GDP/GRDP) and the inflation rate. However, this must be followed by information about environmental damage and the decreasing value of

natural resources [8]. The effects of decreasing natural carrying capacity and increasingly losing biodiversity systems encourage us to think about policy concepts that are not only oriented toward output growth but also about the sustainability of increasingly limited natural resources. In the face of further environmental destruction, active government intervention is needed to explore policies to promote new ways of development in which humans and nature can coexist [9]. The public is increasingly concerned about humans and nature, especially after the emergence of the COVID-19 pandemic [10]. One relevant concept is providing incentives to MSMEs as a driver for implementing a green economy by utilizing resources sustainably and minimizing pollution and other environmental impacts. As one of the most significant contributors to GDP, MSMEs must transform by introducing green management processes in business activities.

Therefore, reliable instruments are needed to avoid broader environmental impacts. Tax incentives are a type of expenditure generally not given in the form of money but as a reduction in tax obligations [11]. The tax incentive itself is in the form of providing facilities to reduce the tax base, tax reduction, or tax exemption. Apart from that, the types of incentives that the Government has provided include tax incentives for PPh Article 21 borne by the Government, Final PPh for MSMEs borne by the Government, PPd DTP in specific labour-intensive sectors, exemption from PPh Article 22 on Imports, reduced instalments of PPh Article 25 and preliminary VAT refunds. [12].

Although several studies have examined MSMEs, few have examined the role of tax incentives in implementing a green economy in MSMEs. Therefore, researchers try to research tax incentives for MSMEs. Thus, this research aims to describe the perceptions of MSME business actors toward tax incentives and analyse the relationship between tax incentives and green economy indicators.

II. LITERATURE REVIEW

By implementing green economic practices, companies can take a process-oriented approach to corporate environmental sustainability rather than only considering the sustainability of their end products and services (Rozman et al., 2015). An environmental sustainability approach or ecological innovation is considered an ideal solution that can enable business entities to achieve company goals economically and environmentally (Wysocki, 2021)

Research by Hejri et al. (2022) entitled Factors Affecting Green Business Management Readiness in the Iranian Banking Industry concluded that the green awareness factor is the factor that most influences the readiness to implement green BPM in the banking industry in Iran. Maximum (2016) researched the role of the Ministry of Finance in the green economy. By using the literature exploration method, researchers concluded that fiscal policy for a green economy is still limited to developing fiscal and economic policy options to implement climate change mitigation, which focuses on the energy and land use sectors. In line with the green economy concept, the Ministry of Finance is also required to develop fiscal policies oriented towards green budgeting.

Hutagaol et al. (2022), in their research entitled Strategies for Strengthening State Finances in Facing the Threat of a Global Recession in 2023 through a Green Economy revealed that to face the threat of a global recession by implementing a strategy for state finances, namely a green economy.

III. RESEARCH METHODS

The data collection method used in this research is a survey. Data was collected through a questionnaire regarding business actors' perceptions of the green economy. For each variable, respondents were asked to rank the variable according to the conditions of MSMEs. The scale used is between 1 and 10. The number 1 means that the perception of business actors regarding tax incentives that can support the green economy in MSMEs is shallow, while the number 10 means that the perception of business actors regarding tax incentives supporting the green economy in MSMEs is very high.

This survey was carried out by circulating a questionnaire containing several questions related to business actors' perceptions of the role of tax incentives in supporting the green economy, and respondents were invited to provide assessments on these questions. Next, the respondents' answers were analysed statistically using the sign test and Spearman rank correlation. This sign test can be used if the effect of a variable or experimental treatment cannot be measured; it can only be assessed using a jury system in the form of good or bad performance, superior or inferior, and so on. Furthermore, this sign test procedure is based on the negative or positive sign of the difference between pairs of ordinal data by only paying attention to the difference's direction and not the difference's magnitude [13].

The location of this research was determined deliberately, namely Kendari City. Respondents in this research are active cooperative and SME business actors registered with the Kendari City Cooperative and UMKM Service. In developing this research model, the six green BPM factors in Opitz, Krup, and Kolbe (2014b), namely green attitude, strategy, governance, modelling, and monitoring, were used as indicators of a green economy.

A green attitude is related to the company's philosophy of implementing green BPM in the long term. In this philosophy, the company is committed to comprehensively reducing negative impacts in every business process. The existence of tax incentives will support the implementation of a green economy through "green" behaviour or in the sense that companies carry out business practices that focus on sustainability and nature protection. From this explanation, the following hypothesis can be drawn:

H1: Tax incentives play a role in supporting the green economy through a green attitude.

Green strategy involves planning, processing, and controlling business processes to achieve sustainability goals. All employees are directed to work based on this strategy to achieve this goal. Providing tax incentives to MSMEs that

implement environmentally friendly business practices will encourage more MSMEs to implement a green economy so that the following hypothesis can be drawn:

H2: Tax incentives play a role in supporting the green economy through green strategies.

Furthermore, green governance is a governance model created based on a predetermined strategy. Governance is a management structure that contains each employee's primary duties and functions in carrying out business processes. To support green governance, tax incentives are essential. Green governance is a type of governance that focuses on the wise management of natural resources, nature protection, and environmental sustainability. Tax incentives can encourage businesses, governments, and individuals to adopt environmentally friendly governance. From this explanation, the following hypothesis can be drawn:

H3: Tax incentives play a role in supporting the green economy through green governance.

Green modelling is related to company workflows that consider environmental impacts in every process. Efficient use of resources, reduced greenhouse gas emissions, and waste management are examples of business processes in the workflow. In planning and management, green modelling considers sustainability and environmental impacts in decision-making. Tax incentives can play an essential role in supporting the green economy by encouraging environmentally friendly practices, such as incentives for environmentally friendly technologies, tax cuts for using renewable energy, and others. From this explanation, a hypothesis can be drawn:

H4: Tax incentives play a role in supporting the green economy through green modelling.

Green monitoring is monitoring each business process to determine whether an environmental impact is produced in each company's business process. Tax incentives can be essential in encouraging green monitoring through incentives for success in reducing environmental impacts, incentives for MSMEs that innovate green monitoring technology, and so on. From this explanation, a hypothesis can be drawn:

H5: Tax incentives play a role in supporting the green economy through green monitoring.

IV. RESULTS AND DISCUSSION

4.1 Results

4.1.1 Description of Respondents' Perceptions

Green attitude

Green attitude influences shaping business actors' perceptions of services to MSMEs. The research results are shown in the table below.

Nilai Green Attitude			
Businessmen	Before there were tax incentives (X)	After the existence of tax incentives (Y)	Approach Sign (Y – X)
UMKM I	3	9	+
UMKM II	4	8	+
UMKM III	2	6	+
UMKM IV	5	5	0
UMKM V	8	4	-
UMKM VI	6	7	+
UMKM VII	5	5	0
UMKM VIII	7	4	-
UMKM IX	2	7	+
UMKM X	3	6	+
UMKM XI	4	5	+
UMKM XII	5	6	+
UMKM XIII	6	7	+
UMKM XIV	5	5	0
UMKM XV	3	4	+
UMKM XVI	2	5	+
UMKM XVII	6	3	-
UMKM XVIII	4	5	+
UMKM XIX	3	8	+
UMKM XX	7	9	+
UMKM XXI	5	5	0

The table above shows that there are 14 positive signs, 3 negative signs, and four zeros, which means that 14 respondents think that tax incentives can play a role in implementing a green economy through changes in behavior, there is an improvement in services to MSMEs, three people believe that services have decreased and four people think the same. From these results, the probability of getting at most 3 out of 14 respondents reporting negative changes is 0.0288. In other words, if there is no difference in service between before and after the tax incentives, the probability of getting at most 3 out of 14 respondents who report that tax incentives do not support the green economy through a green attitude is only 2.9 percent. In Supranto (2001), it is explained that the decision-making rules that must be followed in carrying out sign tests with small samples to make statistical decisions are:

Accept H_0 if $\alpha \leq$ sample outcome probability or Reject H_0 and accept H_1 if $\alpha >$ sample outcome probability.

Because from the analysis results, $0.05 > 0.0288$, the null hypothesis is rejected: tax incentives play a role in supporting the green economy through implementing a green attitude.

Green Strategy

Green strategy focuses on sustainability and environmental friendliness in business and everyday life. Implementing a green strategy changes the way companies think, shop, work, and manage business by considering the environmental impact of each of our actions. The research results show that the probability of getting 6 out of 10 respondents reporting negative changes is 0.8282. In other words, if there is no difference between before and after the existence of tax incentives, the probability of getting at most 6 out of 10 respondents who report no role of tax incentives is 82 percent. Thus, because the analysis results are $0.05 < 0.8282$, the null hypothesis is accepted, or tax incentives do not play a role in supporting the green economy through green strategies.

Green Governance

Green governance is one factor or variable related to respondents' perceptions of the role of tax incentives. The results of research on this variable show that the probability of getting 2 out of 12 business actors who have a negative opinion is 0.0192, or the likelihood of business actors who think that tax incentives do not play a role is 19 percent if there is no difference between before and after the existence of tax incentives.

Referring to these results, because $0.05 > 0.0192$, we can reject the null hypothesis; in other words, the existence of tax incentives plays a role in supporting the green economy through green governance.

Green Monitoring

Green monitoring, also known as green supervision or environmental monitoring, ensures that sustainable principles run business activities or other projects. Green monitoring collects data and information about natural resource use, emissions, waste, and other sustainable practices. Supervision is one of the classic problems in the development of MSMEs. It could be related to respondents' perceptions about MSME services. Field data shows the probability of getting 3 out of 15 respondents is 0.0176. In other words, if there is no difference between before and after the existence of tax incentives, then the probability of getting at most 3 out of 15 respondents who think that tax incentives do not play a role is 17.6 percent. Thus, because the analysis results are $0.05 > 0.0176$, the null hypothesis is rejected, or tax incentives play a role in supporting the green economy through green supervision.

Green Modelling

Another factor closely related to the views or perceptions of business actors regarding the existence of tax incentives is green modeling. Green modeling is a planning and analysis approach that combines sustainability and environmentally friendly elements in the modeling process. Green modeling is used to understand and identify the impact of policies, projects, or business decisions on the environment. This model helps optimize sustainable and environmentally friendly solutions.

From the research results, the probability of getting 4 out of 14 respondents who think there is no role of incentives is 0.0899. In other words, if there is no difference between before and after the tax incentives, the probability of getting at most 4 out of 14 respondents is only 8.9 percent. Thus, because the analysis results are $0.05 > 0.0899$, the null hypothesis is rejected, or the existence of tax incentives plays a role in supporting a green economy through green modelling.

Spearman Correlation Test

Spearman's rank correlation coefficient is a measure of the closeness of the relationship between two ordinal variables, meaning is a measure of the level/degree of relationship between data that has been arranged according to rank (ranked data) (Supranto, 2001) The relationship between green attitude and business actors' perceptions of the role of tax incentives.

"Green attitude" is a term that refers to a point of view or way of thinking that supports sustainable practices and policies and cares for the environment. In contrast, how businesses view tax incentives relates to how they view tax reduction policies or other government incentives to encourage more environmentally friendly companies.

In this research, the green attitude factor is thought to be strongly related to business actors' perceptions of the existence of tax incentives, where it is believed that the more, they understand the value of the environment, the closer their perception of the role of tax incentives will be. Based on test results with Spearman correlation, it is known that green attitude is closely related to perceptions of the role of tax incentives. With a Spearman correlation coefficient value of 0.928, it can be concluded that there is a strong correlation between green attitude and perceptions of the role of tax incentives.

The relationship between green strategy and respondents' perceptions of the role of tax incentives.

In this research, green strategy is closely related to perceptions of the role of tax incentives, where it is suspected that the more role tax incentives play in green strategy, the more positive the perception of the green economy will be. However, based on the analysis results using the Spearman rank correlation test, a coefficient value of 0.350 was obtained, meaning the two variables are not closely related.

The relationship between green governance and respondents' perceptions of the role of tax incentives.

How respondents view tax incentives about green governance can indicate how fiscal policy influences business and individual decisions about sustainable business practices. Respondents with high environmental and sustainability values will feel supported and motivated to adopt green business practices if tax incentives support green governance principles.

Based on the results of the analysis, the Spearman rank correlation coefficient value is 0.500, which means a reasonably close relationship exists between green governance and perceptions of tax incentives.

The relationship between green monitoring and business actors' perceptions of the role of tax incentives.

How businesses view tax incentives in the context of green monitoring can indicate the extent to which tax policies encourage businesses to adopt and follow sustainable practices. Businesses can use green monitoring to measure their environmental impact objectively. If tax incentives allow for increased sustainability impact assessment, companies may be more motivated to change and improve their green business practices.

In this research, the monitoring process that develops among business actors is thought to have a close relationship with their perception of the role of tax incentives, where it is believed that if tax incentives provide food rewards, the more positive their perception of tax incentives will be. From the analysis results, the Spearman rank correlation coefficient value is 0.880, which means a close relationship exists between green monitoring and tax incentives.

The relationship between green modeling and business actors' perceptions of the role of tax incentives

Business actors' perceptions of the role of tax incentives illustrate how these incentives can influence management decisions to adopt sustainable business practices through green modelling.

In this research, green modelling is closely related to perceptions of tax incentives. However, based on the results of the analysis, the Spearman rank correlation coefficient value is 0.267, which means that green modelling has a weak relationship with perceptions of the role of tax incentives.

4.2 Discussion

Today, businesses face significant challenges in aligning ecological and economic factors. Consumers are starting to consider sustainability when making final purchases. Due to the abovementioned complexities, companies need help assessing whether their operations are environmentally friendly. The results of our research have many management consequences for SMEs wishing to implement Green BPM practices. SMEs' eco-friendly mindset allows them to develop strategies that suit their eco-friendly business plans.

In this research, researchers classified "green attitude," "green strategy," "green governance," "green monitoring," and "green modelling" to incorporate "green" elements into MSME business activities. According to interviews, managers need outside incentives, ideas, knowledge, and skills to take their companies to higher levels of Green BPM.

This research aims to get a preliminary picture of the level of Green BPM in SMEs, not to generalize the findings. This is because no previous report has combined research on sustainability in SMEs and Green BPM. Another weakness is that SMEs are not randomly selected for interviews. Instead, SMEs are chosen based on their responsibility to the environment. Nevertheless, the author took necessary action and noted that the sample of SMEs adequately reflects the distribution of SMEs in Kendari City. In the future, samples of SMEs should be drawn based on their type of work.

V. CONCLUSION

Based on the research results described above, several conclusions can be drawn regarding the research objectives, namely:

1. Tax incentives encourage MSME business actors to support implementing a green economy through five indicators: green attitude, strategy, governance, monitoring, and modelling. Of these five variables, business actors view or have the perception that the green strategy factor is considered to have no change even after the tax incentives are introduced.
2. Based on the Spearman correlation, it was found that of the five green economy indicators, the green strategy and green modelling indicators have no correlation or have a weak correlation with tax incentives. In terms of whether there are tax incentives, MSME players still need a positive perception of green strategy and modelling.

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