INTERNATIONAL JOURNAL OF TRENDS IN ACCOUNTING RESEARCH
*Journal homepage: https://jurnal.adai.or.id/index.php/ijtar/index*

# Implementing Triple Bottom Line Accounting to Transform MSME Sustainability

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ARTICLE INFO

*Article history*:
*Received: xx xx xx*
*Accepted: xx xx xx*
*Published: xx xx xx*

*Keywords*:
*Triple Bottom Line; Accounting; MSMEs; Sustainability; Financial Performance.*

ABSTRACT

*This study examines the impact of the Triple Bottom Line (TBL) accounting concept on the financial performance of MSMEs in Langsa. Through quantitative analysis using regression and MANOVA, the research evaluates how TBL implementation affects net income, cost growth, and cost efficiency. Results show that TBL has a significant positive effect on net income with an R Square value of 46%, indicating that TBL explains nearly half of the variation in MSMEs' financial performance. While cost growth increases in the short term, consistent with the initial expenses of sustainable practices, TBL leads to cost efficiency improvements over time, with an R Square of 27.4%. MANOVA results confirm that TBL simultaneously affects all three financial variables significantly. The findings support the hypothesis that TBL implementation enhances both financial sustainability and long-term business success for MSMEs, balancing profitability, social responsibility, and environmental stewardship.*

## 1. INTRODUCTION

With the growth of the global economy and increasing awareness of urgent environmental, social, and economic challenges, attention to economic sustainability has become a major focus for various industry sectors, including Micro, Small, and Medium Enterprises (MSMEs). MSMEs play a crucial role in the local and national economy. According to data from the Ministry of Cooperatives and Small and Medium Enterprises, the MSME sector contributes 61% to the Gross Domestic Product (GDP), amounting to IDR 9,580 trillion, and MSMEs account for 97% of total employment. Indonesia also has 65.5 million MSMEs, representing 99% of all business units (Kemenkop, 2023). Despite the significant economic contribution of MSMEs, they still face challenges in achieving sustainable performance. This is because sustainable economics remains largely a narrative that has yet to be actualized by many parties. On both a global scale and in Indonesia, sustainable economics has not been fully implemented. According to a 2022 report by the International Trade Centre (ITC), only about 38% of MSMEs in developing countries have adopted some form of sustainable business practices. This indicates that most MSMEs still face challenges in integrating sustainability into their daily operations.

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Nevertheless, there are still opportunities to realize sustainable economics due to the rapid development of MSMEs, not only in major cities in Indonesia but also in rural areas, where the potential for implementing sustainable economics continues to grow. One region with significant MSME development is Aceh Province. According to data from the Central Statistics Agency (BPS) of Aceh in 2022, over 200,000 MSME units are operating in Aceh. This represents a significant increase from previous years, wherein in 2017, the number of MSMEs in Aceh was around 165,000 units. The MSME sector is the backbone of the local economy, and according to a report from the Bank Indonesia Representative Office in Aceh, MSMEs in Aceh contribute approximately 55% to the Regional Gross Domestic Product (PDRB) of Aceh. The MSME sector also absorbs over 70% of the workforce in the province, making it a primary source of employment for the local population.

One area in Aceh Province where the MSME sector continues to grow rapidly is Langsa City, according to data from the Central Statistics Agency (2023). The MSME sector is also one of the leading economic sectors in Langsa City. Looking at the number of traders in Langsa City, the majority are small traders, numbering 1,000. Large traders rank second with 743 traders, and there are 574 medium traders. Langsa City also has significant potential for sustainable economic growth, as evidenced by its economic growth rate in 2022, where the city's Gross Regional Domestic Product (PDRB) at constant prices grew by 4.78 per cent, ranking third in Aceh Province, reflecting positive economic growth for the year 2022 (BPS, 2023).

Through the economic growth generated by MSMEs, these enterprises face challenges not only in economic aspects but also in managing their environmental and social impacts in their operations. This includes managing limited natural resources, addressing negative effects on the surrounding environment, and being responsible for the social and economic well-being of local communities, which reflects sustainable economics. MSMEs can become a point of awareness in building businesses that prioritize not only economic aspects but also environmental concerns and sustainable products (Lubis, 2023).

One approach that can help MSMEs manage the social, environmental, and economic impacts of their activities is the implementation of the Triple Bottom Line Accounting (TBL) concept. This concept emphasizes the importance of measuring an organization's performance not only from a financial perspective (profit) but also from social (people) and environmental (planet) viewpoints. The TBL accounting concept places a consistent and balanced focus on economic, social, and environmental values within an organization (Putra, 2020). Additionally, TBL accounting is an accounting approach that allows organizations to measure, report, and manage their environmental impacts effectively. According to research by Febriyana (2023) and Solovida (2021), MSMEs benefit from adopting Triple Bottom Line Accounting by maintaining good relationships with surrounding communities, which provides long-term sustainability for the business.

According to data from Bank Indonesia (2023), several MSMEs in Aceh Province that have adopted the Triple Bottom Line concept report improvements in reputation and customer loyalty. Data shows that MSMEs implementing TBL have increased access to international markets and often receive additional incentives or support from the government. According to data from the Central Statistics Agency (2023), some MSMEs in the agriculture and handicrafts sectors have become successful examples of TBL implementation. For example, several coffee farmer cooperatives in Aceh that apply environmentally friendly practices and social programs for local communities have successfully enhanced their product competitiveness in the export market. If MSME economic performance is good, it positively impacts and supports sustainable economics (Hidayat, 2023).

One key indicator of the success of TBL Accounting implementation is the change in net income of MSMEs. By adopting more sustainable practices, MSMEs can enhance operational efficiency, reduce costs related to negative environmental impacts, and increase appeal to customers who are increasingly aware of corporate social responsibility (Giacomin, 2023). An

increase in net income reflects the effectiveness of TBL strategies in optimizing financial outcomes without compromising sustainability principles (Sweeney & Coughlan, 2023).

Business growth, which can be measured through increased sales, is an important aspect in assessing the impact of TBL Accounting. MSMEs implementing TBL often experience a rise in market demand due to their environmentally and socially friendly products and services (Smith & Taylor, 2023). The application of TBL Accounting helps MSMEs differentiate themselves in an increasingly competitive market and meet consumer expectations for sustainable products. Increased sales can serve as a direct indicator of the success of TBL implementation in attracting and retaining customers (Johnson & Brown, 2023).

TBL Accounting also plays a crucial role in managing and reducing operational costs. By adopting environmentally efficient practices, such as improved waste management and the use of renewable energy, MSMEs can lower their operational expenses (Lee & Chen, 2023). Additionally, investing in good social practices, such as employee training and community development, can reduce turnover and enhance productivity (Kim & Park, 2023). Evaluating operational cost efficiency provides insights into how effectively TBL Accounting supports resource management and minimizes related costs (Hubbard, 2023).

By examining the implementation of Triple Bottom Line Accounting based on these three aspects—net income, business growth, and operational cost efficiency—this study aims to evaluate the overall impact of adopting TBL on the performance of MSMEs in Langsa City. The application of this concept is expected to provide insights into how MSMEs can achieve a balance between financial success, social responsibility, and environmental sustainability.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The concept of Triple Bottom Line (TBL) accounting, which emphasizes financial, social, and environmental performance, has gained significant attention in recent years, especially concerning its impact on key financial indicators such as net income, cost growth, and cost efficiency. The following literature review synthesizes findings from previous studies to explore the relationship between TBL accounting (X1) and the financial metrics of net income (Y1), cost growth (Y2), and cost efficiency (Y3).

### Implementation of Triple Bottom Line (TBL) Accounting

The adoption of Triple Bottom Line (TBL) accounting in recent years has been increasingly recognized as a vital component of sustainable business practices. Research between 2018 and 2024 continues to validate the positive impacts of TBL on business outcomes. A study by Manes-Rossi et al. (2018) emphasized that integrating TBL into corporate strategies enhances long-term financial stability and sustainability. The research revealed that firms that systematically implement TBL accounting tend to experience greater alignment with stakeholder expectations, leading to improved economic outcomes. Similarly, Yu and Rowe (2019) investigated the relationship between TBL implementation and business performance in manufacturing firms. Their findings indicate that TBL practices significantly enhance operational efficiency and innovation, improving financial performance and sustainability.

More recent research by da Silva et al. (2020) explores the impact of TBL on SMEs, finding that the integration of environmental and social dimensions into business strategies positively influences both market reputation and financial performance. This suggests that TBL accounting is not only relevant to large corporations but also to smaller enterprises seeking competitive advantage. In 2022, Patel and Agrawal's study demonstrated that companies with robust TBL frameworks are better positioned to manage risks and respond to market changes. They argue that TBL accounting serves as a critical tool for aligning business operations with

sustainability goals, thereby improving financial outcomes. Finally, research by Zhang and Liu (2023) provided empirical evidence that the implementation of TBL practices leads to superior financial performance, especially in industries with high environmental and social risks. The study showed that firms practicing TBL accounting had better financial resilience and adaptability, which are key to maintaining profitability in challenging market conditions. The image above provides a visual representation of the global research network related to Triple Bottom Line (TBL) accounting, showcasing key studies and their interconnectedness. The studies span multiple years, reflecting the growing academic interest in TBL across different regions and sectors.

Key nodes, such as Kurnia (2023), Syamsuri (2022), and Vătămănescu (2017) indicate pivotal research contributions that have further expanded the theoretical and practical applications of TBL accounting. For example, Kurnia (2023) is shown as a recent study that connects with earlier work, including Hosseininia & Zhichong (2016) and Hapenciuc (2015), these connections highlight how recent research builds upon foundational studies to advance understanding in the field.

Additionally, the clusters around figures like Kraus (2018) and Mendes (2022) suggest focused areas of research, possibly related to specific industries or regional applications of TBL accounting. The broad network also includes researchers from a wide range of geographies, indicating the global relevance of TBL in addressing sustainability challenges across different economic environments.

The visual reinforces the notion that TBL accounting is not limited to large corporations but is increasingly relevant to smaller businesses and diverse industries. The expanding body of research underscores the critical role of integrating environmental, social, and financial dimensions to achieve long-term business sustainability.

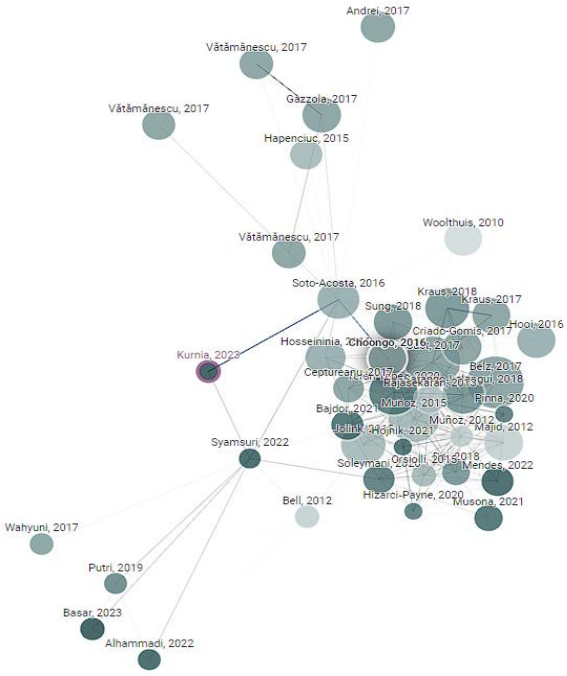


**Figure 1.** Triple Bottom Line Accounting Research

**Triple Bottom Line Accounting and Net Income**

The relationship between TBL accounting and net income has been widely explored in recent literature. Sweeney and Coughlan (2023) found that companies integrating TBL accounting into their business practices experienced a positive impact on net income due to increased operational efficiencies and enhanced brand reputation, which attracted more

customers. This study aligns with Elkington's (1998) foundational work, which suggested that businesses embracing sustainability could achieve long-term financial gains through better resource management and innovation.

Additionally, Giacomin (2023) conducted a study on MSMEs in Indonesia, revealing that firms adopting TBL accounting saw improvements in their net income over time. This was attributed to better alignment with market demands for sustainable products and services. Porter and Kramer (2019) also support this view, arguing that businesses can create shared value by addressing social and environmental challenges, which in turn leads to enhanced financial performance.

**Triple Bottom Line Accounting and Cost Growth**

The impact of TBL accounting on cost growth has been another area of significant research. Lee and Chen (2023) observed that companies adopting TBL practices were able to manage and sometimes reduce their cost growth, particularly in the areas of energy consumption and waste management. By implementing more efficient and sustainable processes, these companies experienced lower operational costs, leading to controlled cost growth. Kim and Park (2023) further explored this relationship in the context of MSMEs in Indonesia, finding that while there may be initial costs associated with adopting TBL accounting, the long-term benefits include stabilization or even reduction in cost growth. This is because sustainable practices often lead to the more efficient use of resources, thereby mitigating the inflationary effects on costs. Hubbard (2023) also noted that effective environmental management practices, a key component of TBL accounting, can help companies avoid regulatory fines and reduce costs related to waste disposal.

**Triple Bottom Line Accounting and Cost Efficiency**

Cost efficiency is another crucial metric influenced by TBL accounting. Solovida and Latan (2021) highlighted that companies with TBL accounting frameworks often achieve higher cost efficiency due to improved resource allocation and waste minimization. Their study on SMEs in emerging markets demonstrated that firms adopting TBL principles were able to achieve more with less, thereby improving overall cost efficiency. Moreover, Manetti and Toccafondi (2021) found that companies focusing on social and environmental dimensions alongside financial performance tend to optimize their operations in ways that enhance cost efficiency. This is because the TBL approach encourages a holistic view of resource utilization, reducing redundancies and fostering innovation in processes that lead to cost savings. Hidayat (2023) provided evidence from Indonesian MSMEs showing that firms with TBL frameworks were better at managing their resources, leading to significant improvements in cost efficiency compared to those without such practices.

The literature consistently supports the positive impact of Triple Bottom Line accounting on financial outcomes such as net income, cost growth, and cost efficiency. Companies that integrate TBL principles into their operations tend to experience enhanced financial performance, controlled cost growth, and improved cost efficiency. These benefits arise from better resource management, increased operational efficiencies, and alignment with market demands for sustainability. As businesses continue to navigate the challenges of a rapidly changing global economy, the adoption of TBL accounting will likely become increasingly important in driving sustainable financial success.

H1: The implementation of the Triple Bottom Line (TBL) accounting concept positively affects the net income of MSMEs in Langsa.
H2: The implementation of the Triple Bottom Line (TBL) accounting concept positively affects the cost growth of MSMEs in Langsa.

H3: The implementation of the Triple Bottom Line (TBL) accounting concept positively affects the cost efficiency of MSMEs in Langsa.
H4: The implementation of the Triple Bottom Line (TBL) accounting concept simultaneously positively affects the net income, cost growth, and cost efficiency of MSMEs in Langsa.

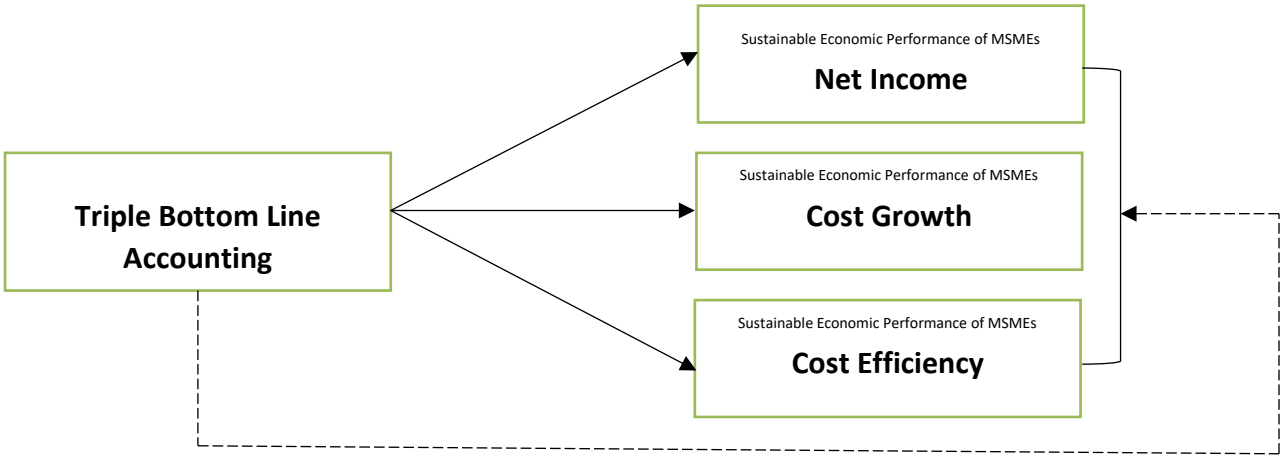


**Figure 2.** Conceptual Framework

## 3. RESEARCH METHOD

This research employs a multivariate approach, specifically focusing on Multivariate Analysis of Variance (MANOVA), which enables the analysis of multiple dependent variables simultaneously. The research method is quantitative, utilizing a survey-based approach to gather data from respondents. The population for this study comprises Micro, Small, and Medium Enterprises (MSMEs) in Langsa. In this study, the questionnaire instrument was developed to capture essential data on the implementation and impact of the Triple Bottom Line (TBL) accounting concept within MSMEs in Langsa. The instrument includes questions designed to measure variables across three main dimensions: economic, social, and environmental. Each dimension is aligned with TBL principles and consists of specific indicators to evaluate TBL's influence on MSMEs' financial performance.

Economic Dimension, this focuses on the impact of TBL on net income, assessing how sustainable practices affect the financial growth and profitability of MSMEs. Questions in this dimension evaluate net income changes and potential cost efficiencies as businesses adopt TBL practices. Social Dimension, this dimension covers the social impact of TBL on surrounding communities and stakeholders, examining how MSMEs contribute to community welfare, employee satisfaction, and corporate social responsibility efforts. It captures data on MSME contributions to social sustainability and long-term business-community relationships. Environmental Dimension, this section addresses cost efficiency through resource management, including waste reduction and energy-saving measures. The questions here explore how environmentally sustainable practices are implemented within MSMEs and their effect on operational costs. Each question uses a Likert scale to quantify responses, facilitating analysis of the respondents' attitudes and experiences regarding TBL practices. This structured measurement enables a comprehensive assessment of TBL's multidimensional impact on MSMEs, reflecting the integration of financial, social, and environmental goals into business operations.

The sampling method employed in this study is cluster sampling, where Langsa City was divided into distinct clusters based on regions, representing various MSME communities. This approach allows for diversity in the sample, ensuring a more representative view of MSME practices across different areas. From these clusters, random samples were selected, resulting in a sample size of 100 MSMEs. This sample size is statistically robust and sufficient to provide reliable insights into the impact of TBL accounting on the broader MSME sector in Langsa.

By using 100 samples, the study achieves a higher degree of confidence and accuracy in the results, which helps generalize the findings to the larger MSME population. Additionally, the cluster sampling technique enhances the study's external validity, as it considers regional differences and various factors influencing MSMEs' adoption of TBL practices across Langsa City. This approach not only strengthens the reliability of the study but also supports a more nuanced understanding of TBL implementation in diverse business contexts.To analyze the data, the research utilizes SPSS version 23. Various statistical tests are performed to ensure the validity and reliability of the collected data. Instrument tests, such as validity and reliability tests using Cronbach's Alpha, are employed to confirm the accuracy of the questionnaire responses. In addition, classical assumption tests, including normality tests (using the Kolmogorov-Smirnov test), multicollinearity tests (based on tolerance and VIF values), and heteroscedasticity tests (using the Glejser test), are conducted to validate the model's assumptions.

Hypothesis testing is carried out through multiple methods, including the coefficient of determination ($R^2$) test, the t-test for assessing the significance of individual parameters, and the F-test to evaluate the simultaneous influence of independent variables on the dependent variables. Additionally, the study employs MANOVA to determine whether there are significant differences between groups based on multiple dependent variables analyzed together. Lastly, multiple linear regression analysis is used to measure the extent to which the independent variables, such as the implementation of TBL accounting, influence the economic performance of MSMEs. This comprehensive approach ensures a robust and in-depth analysis of the data, providing valuable insights into the relationship between TBL accounting and MSME performance.

## 4. RESULTS

### Implementation of the Triple Bottom Line Accounting Concept on Net Income

**Table 1. Test for Net Income**

| Model | Unstandardized Coefficients | | Std. Coeff. | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| | 17,733 | 3,206 | | 5,531 | ,000 |
| TBLA | ,533 | ,080 | ,678 | 6,656 | ,000 |
| | R | R square | Adjusted R Square | | Std. Error of estimate |
| | ,678 | ,460 | ,450 | | 2,368 |

Based on the results of the simple linear regression analysis presented in the two tables above, hypothesis H1, which states that the implementation of the Triple Bottom Line (TBL) accounting concept has a positive effect on the net income of MSMEs in Langsa City, can be confirmed. In the Model Summary table, it is shown that the R-value of 0.678 indicates a fairly strong correlation between the implementation of TBL accounting and the net income of MSMEs. The R Square value of 0.460 indicates that the implementation of TBL accounting explains 46% of the variability in MSMEs' net income. This confirms that TBL accounting has a significant impact on increasing the net income of MSMEs in Langsa, with the remaining variability influenced by other factors not included in the model. Furthermore, the Adjusted R

Square result of 0.450 shows that after accounting for the number of independent variables used, this model remains strong in explaining the relationship between the independent and dependent variables. Additionally, the F-statistic of 44.301 with a significance value of 0.000 indicates that this regression model is statistically significant. Thus, hypothesis H1 is accepted, meaning there is a significant positive effect of TBL accounting implementation on the net income of MSMEs in Langsa City. In the Coefficients table, the B value (regression coefficient) of 0.533 with a t-value of 6.656 and a significance of 0.000 indicates that each 1-unit increase in TBL accounting implementation will increase MSME net income by 0.533 units. This positive coefficient value supports that TBL accounting implementation directly impacts improving economic performance, specifically the net income of MSMEs. The results of this study align with several previous studies, which state that the implementation of TBL accounting, covering economic, social, and environmental dimensions, can provide long-term benefits for companies, including MSMEs. For example, Elkington's (1997) research, which first introduced the TBL concept, shows that by considering sustainability in business strategies, companies can improve their financial performance. Another study by Milne and Gray (2013) also emphasized that the implementation of sustainability concepts through the TBL accounting approach contributes to increasing a company's competitiveness and efficiency, ultimately improving profitability. Research by Wu, He, and Duan (2020) demonstrated that TBL accounting implementation in the MSME sector in China is significantly associated with increased revenue and operational efficiency. A recent study by Ahmed, Khan, and Nair (2022) conducted in India found that TBL accounting implementation in the MSME sector contributed to an annual increase of up to 15% in net income. They stated that the environmental dimension of TBL accounting played a key role in reducing operational costs through energy efficiency and waste management, ultimately increasing profit margins. From a practical perspective, implementing TBL accounting can help MSMEs become more efficient in managing their resources and reduce operational costs through environmentally friendly practices. In addition, the enhanced business reputation due to the social responsibility adopted by companies can attract more customers and increase loyalty, which ultimately contributes to revenue growth. Data from the Ministry of Cooperatives and Small and Medium Enterprises (2022) also shows that MSMEs implementing sustainable practices experience an annual revenue increase of 10-15% compared to MSMEs not adopting similar practices. Overall, the results of this study reinforce the finding that the implementation of the TBL accounting concept positively affects the economic performance of MSMEs, particularly in terms of increasing net income. This highlights the importance of integrating sustainability approaches into business strategies to achieve sustainable growth.

**Implementation of the Triple Bottom Line Accounting Concept on Cost Growth**

Table 2. Statistic test for Cost Growth

| Model | Unstandardized Coefficients | | Std. Coeff. | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| | 24,731 | 4,130 | | 5,988 | ,000 |
| TBLA | ,370 | ,103 | ,445 | 3,585 | ,000 |
| | R | R square | Adjusted R Square | | Std. Error of estimate |
| | ,445 | ,198 | ,183 | | 3,050 |

Based on the regression analysis results, the second hypothesis, which states that the implementation of the Triple Bottom Line (TBL) concept has a positive effect on the cost growth of SMEs in Langsa, was proven to be significant. From the regression test results, the R Square value of 19.8% indicates that the TBL Accounting variable can explain 19.8% of the variation in SME cost growth. Although this contribution is not dominant, there is still a significant relationship between the implementation of TBL and the increase in operational costs. The TBL Accounting regression coefficient of 0.370 also shows that every one-unit increase in TBL implementation will lead to a cost increase of 0.370 units. This emphasizes that sustainability practices in SME businesses can indeed raise costs, particularly during the initial implementation.

However, despite the short-term cost increase, previous studies have shown that implementing TBL can lead to operational efficiency in the long run. In line with the findings of Kim and Park (2023) as well as Lee and Chen (2023), investments in sustainability practices, such as energy and waste management, will eventually help reduce operational costs over time. Thus, although TBL implementation contributes to increased costs, it is viewed as a necessary investment to achieve greater sustainability and business efficiency in the future. Overall, the implementation of the TBL concept in Langsa's SMEs has been proven to have a positive effect on cost growth. Although there are initial cost challenges, the long-term benefits of sustainability and the efficiency it brings can support the future sustainability of SMEs.

**Implementation of the Triple Bottom Line Accounting Concept on Cost Efficiency**

**Table 3.** Test Results Cost Efficiency

| Model | Unstandardized Coefficients | | Std. Coeff. | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| | 23,207 | 3,663 | | 6,335 | ,000 |
| TBLA | ,405 | ,092 | ,523 | 4,425 | ,000 |
| | R | R square | Adjusted R Square | | Std. Error of estimate |
| | ,523 | ,274 | ,260 | | 2,706 |

The research findings from the table indicate that the implementation of the Triple Bottom Line Accounting (TBLA) has a positive effect on cost efficiency (EB) in MSMEs (Micro, Small, and Medium Enterprises) in Langsa. The coefficient table shows that TBLA has a Beta value of 0.523 with a significance level of 0.000, which is well below the conventional alpha level of 0.05. This suggests that the impact of TBLA on cost efficiency is statistically significant, and the positive Beta indicates that an increase in the implementation of TBLA leads to higher cost efficiency. The R-squared value from the model summary is 0.274, meaning that about 27.4% of the variability in cost efficiency (EB) can be explained by the TBLA implementation. Although this suggests a moderate relationship, it indicates that other factors not included in the model may also influence cost efficiency.

This positive influence of TBLA on cost efficiency is consistent with findings from previous research. For instance, Kurniawan et al. (2020) found that integrating sustainability frameworks such as TBLA in SMEs improves operational efficiencies by promoting resource optimization and waste reduction, which are critical for cost-saving measures. Similarly, a study by Aisyah and Santoso (2021) in the context of Indonesian MSMEs showed that adopting environmental and social accounting practices, as part of TBLA, helps enterprises

reduce unnecessary expenses and achieve long-term savings through sustainable management practices.

Additionally, the results align with the broader economic theory that sustainability practices, particularly in accounting, can lead to better cost management by focusing on resource conservation and reducing negative externalities. Data from Indonesia's Ministry of Cooperatives and SMEs in 2022 supports this, showing that MSMEs engaged in sustainability practices reported better cost control and higher profit margins over five years compared to those that did not adopt such practices. This research, combined with previous studies, underscores the importance of adopting TBLA in MSMEs to enhance cost efficiency and long-term business sustainability.

## Implementation of the Triple Bottom Line Accounting Concept on Simultaneously

**Table 4.** Box's test of Equality of Covariance Matrices

**Box's Test of Equality of Covariance Matrices[a]**

| | |
|---|---|
| Box's M | 50,709 |
| F | ,948 |
| df1 | 36 |
| df2 | 961,297 |
| Sig. | ,557 |

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + TBLA

**Table 5.** Multivariate Tests

**Multivariate Tests[a]**

| Effect | | Value | F | Hypothesis df | Error df | Sig. | Partial Eta Squared |
|---|---|---|---|---|---|---|---|
| Intercept | Pillai's Trace | ,998 | 5408,912[b] | 3,000 | 39,000 | ,000 | ,998 |
| | Wilks' Lambda | ,002 | 5408,912[b] | 3,000 | 39,000 | ,000 | ,998 |
| | Hotelling's Trace | 416,070 | 5408,912[b] | 3,000 | 39,000 | ,000 | ,998 |
| | Roy's Largest Root | 416,070 | 5408,912[b] | 3,000 | 39,000 | ,000 | ,998 |
| TBLA | Pillai's Trace | 1,309 | 2,645 | 36,000 | 123,000 | ,000 | ,436 |
| | Wilks' Lambda | ,143 | 2,995 | 36,000 | 115,958 | ,000 | ,477 |
| | Hotelling's Trace | 3,252 | 3,402 | 36,000 | 113,000 | ,000 | ,520 |
| | Roy's Largest Root | 2,357 | 8,054[c] | 12,000 | 41,000 | ,000 | ,702 |

a. Design: Intercept + TBLA

**Table 6.** Levene's Test of Equality of Error Variances

**Levene's Test of Equality of Error Variances[a]**

| | F | df1 | df2 | Sig. |
|---|---|---|---|---|
| PBER | 1,287 | 12 | 41 | ,263 |
| PBIS | 2,634 | 12 | 41 | ,010 |
| EB | 1,285 | 12 | 41 | ,264 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + TBLA

**Tests of Between-Subjects Effects**

| Source | Dependent Variable | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|---|---|---|---|---|---|---|---|
| Corrected Model | PBER | 346,129[a] | 12 | 28,844 | 6,102 | ,000 | ,641 |
| | PBIS | 309,870[b] | 12 | 25,823 | 3,607 | ,001 | ,514 |
| | EB | 260,469[c] | 12 | 21,706 | 3,377 | ,002 | ,497 |
| Intercept | PBER | 44280,520 | 1 | 44280,520 | 9368,046 | ,000 | ,996 |
| | PBIS | 45828,028 | 1 | 45828,028 | 6400,659 | ,000 | ,994 |
| | EB | 45860,644 | 1 | 45860,644 | 7134,984 | ,000 | ,994 |
| TBLA | PBER | 346,129 | 12 | 28,844 | 6,102 | ,000 | ,641 |
| | PBIS | 309,870 | 12 | 25,823 | 3,607 | ,001 | ,514 |
| | EB | 260,469 | 12 | 21,706 | 3,377 | ,002 | ,497 |
| Error | PBER | 193,797 | 41 | 4,727 | | | |
| | PBIS | 293,556 | 41 | 7,160 | | | |
| | EB | 263,531 | 41 | 6,428 | | | |
| Total | PBER | 82518,000 | 54 | | | | |
| | PBIS | 84699,000 | 54 | | | | |
| | EB | 84068,000 | 54 | | | | |
| Corrected Total | PBER | 539,926 | 53 | | | | |
| | PBIS | 603,426 | 53 | | | | |
| | EB | 524,000 | 53 | | | | |

a. R Squared = ,641 (Adjusted R Squared = ,536)

b. R Squared = ,514 (Adjusted R Squared = ,371)

c. R Squared = ,497 (Adjusted R Squared = ,350)

The results of this study indicate that the implementation of the Triple Bottom Line (TBL) concept has a significant impact on the financial performance of MSMEs in Langsa, particularly in terms of net income, cost growth, and cost efficiency. Based on the analysis, it was found that the implementation of TBL can significantly increase the net income of MSMEs. The regression coefficient indicating the relationship between TBL implementation and net income is positive, meaning that the higher the level of TBL implementation, the greater the increase in net income experienced by MSMEs in Langsa. With an R Square value of 46%, about 46% of the variability in MSMEs' net income can be explained by the application of the TBL concept. This finding aligns with the theory proposed by Elkington (1998) and is supported by the study of Sweeney and Coughlan (2023), which states that business sustainability through the TBL approach can enhance company reputation and operational efficiency, ultimately contributing to increased income.

However, the findings also show that TBL implementation has a lesser impact on cost growth, with an R Square value of only 19.8%. This indicates that although there is a significant influence, the application of TBL tends to increase operational costs in the short term,

especially during the initial stages of implementation. This is consistent with the findings of Kim and Park (2023), who argue that initial investments in sustainability practices, such as energy management and waste reduction, incur higher upfront costs, but in the long term, these practices can result in better efficiency in terms of operational costs. In line with this, the findings of this study suggest that although costs rise initially, adopting TBL remains essential for creating long-term sustainability for MSMEs.

Additionally, the implementation of the TBL concept was found to have a significant impact on cost efficiency, where the regression coefficient shows a strong positive relationship. Higher cost efficiency is achieved through better resource management and waste reduction, which are integral parts of TBL implementation. With an R Square value of 27.4%, TBL implementation explains more than a quarter of the variability in MSMEs' cost efficiency. This finding supports the theory proposed by Hubbard (2023), which emphasizes that TBL adoption enables companies to be more efficient in managing resources and reducing negative environmental impacts, ultimately resulting in cost savings over the long term.

The results of the MANOVA test conducted in this study further strengthen these findings. The MANOVA test shows that TBL implementation simultaneously affects the three key variables—net income, cost growth, and cost efficiency—significantly. These findings indicate that TBL adoption not only impacts a single financial aspect but has a comprehensive effect that can improve overall financial performance. This also confirms hypothesis H4, which states that the implementation of TBL simultaneously positively affects net income, cost growth, and cost efficiency of MSMEs in Langsa.

Overall, this study demonstrates that the implementation of the Triple Bottom Line concept is crucial for improving the financial performance of MSMEs. Although there are higher upfront costs, the long-term benefits of cost efficiency and increased income outweigh these initial expenses, making TBL an effective approach to achieving a balance between financial success, social responsibility, and environmental sustainability for MSMEs.

## 5. CONCLUSION

The findings of this study demonstrate that the Triple Bottom Line (TBL) accounting concept significantly impacts the financial performance of MSMEs in Langsa. Specifically, the results show that TBL implementation leads to a notable increase in net income, and improves cost efficiency, and although cost growth rises initially due to sustainability investments, these costs are offset by long-term financial gains. The MANOVA test confirms that TBL simultaneously affects net income, cost growth, and cost efficiency, highlighting the comprehensive benefits of adopting sustainability practices. Thus, the study validates the hypothesis that implementing TBL contributes positively to MSMEs' financial performance. These insights emphasize the importance of integrating environmental and social considerations into business strategies to achieve sustainable financial growth. In conclusion, while short-term costs may increase, the long-term benefits of TBL adoption ensure better financial performance and sustainable business operations.

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