SUSTAINABLE STRATEGY, RISK MANAGEMENT, AND FINANCIAL PERFORMANCE OF TOURISM OPERATORS

Tarjo¹*, Alexander Anggono², Jamaliah Said³, Abdul Halim⁴, Eklamsia Sakti⁵

¹,²Department of Accounting, Universitas Trunojoyo Madura, Indonesia ³Universiti Teknologi MARA, ARI, HCoE, Malaysia ⁴Department of Accounting, Universitas Gadjah Mada, Indonesia ⁵Department of Health Administration, Sekolah Tinggi Ilmu Kesehatan Ngudia Husada Madura, Indonesia

Correspondence: tarjo@trunojoyo.ac.id

Article Info

Abstract

The primary purpose of writing this paper is to empirically demonstrate the role of risk management in mediating the relationship between sustainable strategies and the financial performance of tourism operators comprising hotels, homestays, restaurants, and cafes. Researchers distributed a set of questionnaires to tourism operators in Indonesia and obtained two hundred and fifty respondents. Data was analyzed using Structural Equation Modeling - Partial Least Square (SEM PLS). The statistical tool employed is WarpPLS version 7.0. The first finding of the research is that sustainable strategies have a significant positive impact on the sustainable financial performance of tourism operators. Second, a sustainable approach has a significant positive effect on risk management. Third, risk management has a significant positive impact on the sustainable financial performance of tourism operators. The main discovery of this research is that risk management successfully serves as a mediator in the relationship between sustainable strategies and the financial performance of tourism operators.

How to cite:

© 2024 Author(s)
INTRODUCTION

In recent times, the issue of sustainability has become a widespread topic of discussion worldwide. According to the United Nation World Tourism Organization (UNWTO) report (UNWTO, 2022), the development of sustainable practices in the tourism sector has gained global attention, especially during the pandemic. (UNWTO, 2023b) reported that the growth of The Environmental Performance Index (EPI) in 2020 reached 81% and continued to increase until the end of the pandemic. Several pieces of literature indicate a significant increase in sustainability research since 2019 (Ellili, 2022; Gao et al., 2021; Li et al., 2023; Senadheera et al., 2022; Wan et al., 2023). Thus, the evolving discourse on sustainability and sustainable development in the tourism sector is expected to impact the financial performance of tourism operators.

According to the UNWTO (2022), sustainable strategy comprises three main components: economic, social, and environmental. The UNWTO report (UNWTO, 2023a) suggests that ecological strategy is crucial in improving sustainability performance in Indonesia. Based on this report, Indonesia produces 3.5% of solid waste and 2.03% of wastewater discharged into the sea. Previous research indicates that economic practices can influence financial performance (Domi et al., 2019; Pan et al., 2018; Sainaghi et al., 2017). Simultaneously, social practices undertaken by tourist destinations can also affect financial performance (Bagur-Femenías et al., 2015; de Grosbois, 2016; Ooi et al., 2015). Other studies find that environmentally friendly practices enhance financial performance (Claver-Cortés et al., 2007; Elkhwesky, 2022; Tan et al., 2017). So, each practice within sustainable strategy positively impacts the improvement of the financial performance of tourist destinations.

On the other hand, sustainable strategy only sometimes impacts all sub-sectors within the tourism sector (Uyar et al., 2020). For instance, implementing a sustainable strategy may be ineffective in improving financial performance in the hotel sector (Bagur-Femenías et al., 2015). Some even argue that a sustainable strategy negatively affects financial performance (Pulido-Fernández et al., 2015). Furthermore, this negative effect arises due to a high potential for fraud (Theodoulidis et al., 2017). Tarjo et al. (2023) reported a high potential for fraud in the Indonesian tourism sector. Therefore, the potential for fraud is a daunting threat to tourism operators, as it can jeopardize the performance and sustainability of tourist destinations.

Pearce (2011) stated that tourist scams are a disturbing fraud for destinations. Tourist scams can damage the life and survival of tourist destinations (Xu et al., 2022). From the theoretical perspective of Sunarti et al. (2020), risk management plays a vital role in preventing tourist scams in the tourism sector. The existence of risk management in tourist destinations can be a strategy to avoid risks that have the potential to occur now and in the future, including the risk of tourist scams (Kassem & Santamaria, 2023). Other research proves that risk management can guarantee the survival of tourist destinations and ensure that destinations avoid tourist scams (Ouyang et al., 2020). Thus, risk management provides various benefits for tourist destinations, such as preventing scams and future risks.

Another view reveals that sustainable strategies drive better financial performance due to mediating factors such as improved risk management and more innovation (Whelan et al., 2021). Atz et al. (2021) said that risk management can be a mediator to improve financial performance. Vishwanathan et al. (2020) stated that having a risk management
concept can improve tourism operators' financial performance. So, risk management has a vital role in improving the financial performance of tourism operators and can also be a mediator for sustainable strategies and the financial performance of tourism operators.

Based on previous arguments, this research uses risk management as a mediating variable, which refers to several studies that say that sustainable strategy should play a role in risk management (Kim et al., 2021; Roxas et al., 2020; Sainaghi et al., 2017; Torres-Delgado et al., 2023). Meanwhile, risk management can assist tourism operators in enhancing their performance (Bhatti & Nawaz, 2020; Mandal & Dubey, 2020). Some studies even consider risk management as a mediator for sustainable strategy (Kuo et al., 2021). Some researchers have developed models in which risk management serves as a mediator for sustainable strategy and the performance of tourist destinations (Roe et al., 2014). Lastly, Whelan et al. (2021) developed a model using risk management as a mediator for sustainable strategy and financial performance. However, it has yet to be studied empirically. Thus, a sustainable strategy has another function: supporting risk management. Improved performance in risk management within an organization can help improve the performance of tourist destinations. Based on this rationale, the researcher develops a second model, where sustainable strategy indirectly influences destination performance through risk management.

This study aims to empirically examine the role of sustainable strategy in risk management and, ultimately, its influence on the financial performance of tourism operators. The research gap lies in the ongoing debate between studies that support and oppose the relationship between sustainable strategy and sustainable performance. Apart from that, few researchers are still sensitive to the potential for fraud and the importance of risk management for the tourism sector in Indonesia (Sunarti et al., 2020). Whelan et al. (2021) stated that applying risk management as a mediator for sustainable strategy and the financial performance of tourism operators in the tourism sector has yet to be empirically proven. Therefore, the novelty of this research lies in adding mediating variables to the relationship between sustainable strategy and the financial performance of tourism operators. The researcher hopes to investigate the association between the two variables by including a mediating variable based on this gap. Risk management serves as the study's mediating variable. The model Roe et al. (2014) created served as the foundation for the decision to use risk management as a mediator. As a result, this study empirically builds upon earlier research.

According to the UNWTO (2022), the tourism industry includes sustainable strategy ideas: economic, social, and environmental aspects. Economic refers to financial innovation, entrepreneurial spirit, profit, etc. Social refers to a destination's efforts to improve the well-being of employees and society and provide employment opportunities. Environmental concerns involve a company's efforts to preserve and sustain the surrounding environment and avoid pollution from tourism destination operations. Theoretically, the implementation of sustainable strategies by destinations aligns with the improvement of financial performance in tourism destinations (Hamid et al., 2021). In Indonesia, sustainable strategy practices can positively impact the financial performance of Indonesian tourist destinations (Achmad & Yulianah, 2022; Fatina et al., 2023; Firman et al., 2023; Hermawan et al., 2023; Nugroho et al., 2023; Utami et al., 2023). Additionally, economic (Domi et al., 2019; Pan et al., 2018; Sainaghi et al., 2017), social (Bagur-Femenías et al., 2015; de Grosbois, 2016; Ooi et al., 2015), and environmental
practices (Claver-Cortés et al., 2007; Elkhwesky, 2022; Tan et al., 2017) enhanced the financial performance of tourism operators.

Based on the arguments above, a sustainable strategy aims to ensure that tourism operators can improve and sustain their performance over time. The objective aligns with the stakeholders’ desire that economic, social, and environmental practices can enhance stakeholder well-being. Tourism operators can continually boost their sustainable performance by actively implementing sustainable strategies. Hence, this research develops the following hypotheses:

H1: (a) Economic, (b) social, and (c) environmental have a significantly positive influence on the financial performance of tourism operators.

The primary goal of a sustainable strategy is to ensure that tourism operators can endure for as long as possible (UNWTO, 2022). The goal must be accompanied by efforts to prevent fraud. The sustainable strategy must integrate with risk management as one of the measures to prevent fraud. Kim et al. (2021) study argues that implementing risk management can leverage sustainable strategy. Sustainable strategies are essential for improving risk management (Roxas et al., 2020). Sainaghi et al. (2017) explain that the economic component can improve risk management because accounting functions within economics and serves as risk management. Torres-Delgado et al. (2023) found that a sustainable strategy can function in assessing risks in tourism operators, including fraud. Schulte and Knuts (2022) explained that a sustainable strategy can increase risk awareness so that stakeholders implement risk management.

Based on these arguments, a sustainable strategy can be a way to assess risks for tourism operators. Furthermore, the economic element in sustainable strategy plays a vital role in ensuring the functioning of risk management. Theoretically, improving risk management can prevent fraud, alleviate stakeholder concerns, and ensure stakeholder happiness. This research develops the following hypotheses:

H2: (a) Economic, (b) social, and (c) environmental have a significantly positive influence on risk management.

Risk management assesses every risk within an organization (Tarantino, 2008). This function also reduces the potential for fraud. One of the terrible frauds for tourist destinations and tourists is tourist scams (Pearce, 2011). Sunarti et al. (2020) suggest implementing risk management to prevent tourist scams. Reducing the risk of tourist scams refers to the high potential for fraud in tourist destinations (Tarjo et al., 2023). The decrease in the risk of fraud will enhance the financial performance of tourist destinations (Bhatti & Nawaz, 2020). Mandal and Dubey (2020) research suggests that risk management positively influences the improvement of financial performance in tourism operators.

Thus, risk management ensures that potential fraud and fraudulent practices protect tourism operators. The reduction of fraud among tourism operators undoubtedly satisfies stakeholders. Additionally, risk management can enhance sustainable performance. The benefit leads to improved performance and increased stakeholder well-being. Consequently, the present study formulates the subsequent hypothesis:
H3: Risk management has a significantly positive influence on the financial performance of tourism operators.

A sustainable strategy represents a company's efforts to execute economic, social, and environmental sustainability functions (UNWTO, 2022). They are interrelated and enhance the financial performance of tourist destinations (González-Rodríguez et al., 2019; Madanaguli et al., 2022). Specifically, economics focuses on how companies increase their profits (Domi et al., 2019; Pan et al., 2018; Sainaghi et al., 2017). Furthermore, a company's efforts to improve employee and community well-being constitute social (Bagur-Femenías et al., 2015; de Grosbois, 2016; Ooi et al., 2015). Finally, environmental preservation and innovation efforts constitute practices of the environmental component (Claver-Cortés et al., 2007; Elkhwesky, 2022; Tan et al., 2017). Thus, sustainable strategy significantly positively influences financial performance.

On the other hand, in applying environmental strategy to the dark side, as Tarjo et al. (2022) explained, the potential for fraud causes a decline in the performance of the sustainable strategy. Ly et al. (2022) found many tourist scams in tourist destinations, causing damage to social welfare. Pearce (2011) states that tourist scams are very detrimental to tourist destinations and visitors, especially economically. Ouyang et al. (2020) suggest that tourist destinations implement risk management to prevent tourist scams and increase their sustainability.

Companies must leverage sustainable strategy to improve risk management performance (Kim et al., 2021) and as a means of risk assessment (Sainaghi et al., 2017). Risk management will undoubtedly enhance financial performance (Bhatti & Nawaz, 2020; Mandal & Dubey, 2020). Thus, risk management significantly positively influences the financial performance.

Meanwhile, some researchers suggest that risk management becomes a mediator for sustainable strategy and financial performance (Kuo et al., 2021). Research by Atz et al. (2021) developed a concept where risk management can be a mediating variable and is suitable for improving the financial performance of tourism operators. Studies have even produced models claiming risk management might mediate between sustainable strategy's effects on financial performance (Roe et al., 2014; Whelan et al., 2021). From the stakeholder theory perspective, sustainable strategy becomes one of the means to improve stakeholders' well-being. Sustainable strategy and risk management can enhance financial performance, and sound financial performance can satisfy stakeholders. Based on this theory, sustainable strategy significantly influences risk management, and risk management can significantly and positively influence financial performance. Thus, this research develops the following hypotheses:

H4: (a) Economic, (b) social, and (c) environmental indirectly influences the financial performance of tourism operators through risk management.

METHODOLOGY

The population of this research includes all tourism operators in Indonesia. The selection of tourism operators and village tourism is based on recommendations from UNWTO and previous research. According to a report by UNWTO (2022), Indonesia has
the world's best natural (water) management. UNWTO has recognized the water and nature tourism field in Indonesia as one of the best sustainable operators in the world (UNWTO, 2022). Based on this report, researchers used tourist destinations in the form of natural tourism.

Natural tourism destinations are the target of this research. The sample selection technique uses purposive sampling. The criteria for the research sample are as follows:

1. Natural tourism operators in Indonesia.
2. Respondents selected are managers of tourism operators in hotels, homestays, restaurants, and cafes.

Researchers distributed 300 questionnaires to 29 tourist destinations in Madura and Lombok. However, only 250 were completed, with details: Restaurant managers, 63 respondents; Cafe managers, 100 respondents; Hotel Managers, 42 respondents; and Homestay managers, 45. The following Table 1 is the research sample:

<table>
<thead>
<tr>
<th>Description</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires distributed</td>
<td>300</td>
</tr>
<tr>
<td>Returned questionnaires</td>
<td>250</td>
</tr>
<tr>
<td><strong>Total sample</strong></td>
<td><strong>250</strong></td>
</tr>
<tr>
<td>Restaurant managers</td>
<td>63</td>
</tr>
<tr>
<td>Cafe manager</td>
<td>100</td>
</tr>
<tr>
<td>Hotel Manager</td>
<td>42</td>
</tr>
<tr>
<td>Homestay manager</td>
<td>45</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>136</td>
</tr>
<tr>
<td>Female</td>
<td>114</td>
</tr>
</tbody>
</table>

This research uses data from questionnaire distribution and consists of values from each question in the questionnaire. Statements regarding the sustainability performance of tourism operators will be taken from the study (Luo, 2018). Sustainable performance consists of four main components: economic, efficiency, effectiveness, and the environment, often called 4E. The economic component focuses on recording income and expenses incurred by tourism operators. The efficiency component refers to the number of visitors and travel data to tourism operators. The effectiveness component refers to facilities and complaints from visitors. The environment component discusses environmental impact. Thus, the number of statements for sustainable performance is six questions.

Sustainable strategy focuses on three components: economic, social, and environmental (UNWTO, 2022). Questions for sustainable strategy consist of fourteen questions: five for economic, five for social, and four for environmental. Risk management refers to risk assessment and response to these risks (Becken & Hughey, 2013; Oulasvirta & Anttiroiko, 2017). For risk management, the researcher uses six questions. The Likert scale for all questions is from one (strongly disagree) to five (strongly agree).

The data analysis method uses SEM-PLS with the help of the WarpPLS application. The initial stage for SEM-PLS testing is to test the outer model which refers to the validity and reliability tests (Kock, 2021). The validity test consists of convergent validity and discriminant validity. Discriminant validity uses the loading factor value and
Average Variance Extracted (AVE). The value limit for the loading factor is 0.7 while the AVE is 0.5. Discriminant validity uses the square root value of AVE with the condition that this value must be greater than the correlation value between constructs. Meanwhile, the reliability test uses the composite reliability value with a value limit of 0.7 and Cronbach’s alpha of 0.6 (Kock, 2021).

The second stage of SEM-PLS testing is the inner model. The inner model test consists of four tests, i.e., goodness of fit model, R-square, Q-square, and path coefficient (Kock, 2021). The goodness of fit model ensures that the model used is fit or not based on ten types of tests. The R-square tests how much chance future research and the Q-square is to see how accurate the developed model is. The path coefficient test is the main reference for making research hypothesis decisions (Kock, 2021). The research design is as follows in Figure 1:

![Figure 1. Research Model](source: authors analysis, 2023)

**FINDINGS AND DISCUSSION**

**Outer Model**  
Kock (2021) stated that the outer model consists of convergent validity, discriminant validity, composite reliability, and Cronbach's alpha. Convergent validity is tested based on the loading factor values (with an alpha value of 0.7) and Average Variance Extracted (AVE) (with an alpha value of 0.5). Based on the testing presented in Table 2, it is evident that all questions have loading factors more significant than the alpha value. In the AVE test, the results show a similar outcome, with the AVE values being more significant than alpha. The researcher presents Table 2 as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question</th>
<th>Loading Factor</th>
<th>AVE</th>
<th>CR</th>
<th>CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>Eco1</td>
<td>(0.821)</td>
<td>0.702</td>
<td>0.922</td>
<td>0.894</td>
</tr>
<tr>
<td></td>
<td>Eco2</td>
<td>(0.866)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eco3</td>
<td>(0.870)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eco4</td>
<td>(0.838)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discriminant validity test uses the square root of AVE values. The requirement for discriminant validity is that the square root of AVE values must be greater than the inter-construct values (Kock, 2021). In Table 3 shows the results of the discriminant validity test indicating that the square root of AVE values is substantial. This outcome serves as evidence that the criteria for discriminant validity are met. Below are the findings from the discriminant validity test:

Table 3. Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>Eco</th>
<th>RisM</th>
<th>FP</th>
<th>Soc</th>
<th>Env</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eco</td>
<td>(0.838)</td>
<td>0.604</td>
<td>0.586</td>
<td>0.138</td>
<td>0.672</td>
</tr>
<tr>
<td>RisM</td>
<td>0.604</td>
<td>(0.847)</td>
<td>0.555</td>
<td>0.239</td>
<td>0.591</td>
</tr>
<tr>
<td>FP</td>
<td>0.586</td>
<td>0.555</td>
<td>(0.834)</td>
<td>0.240</td>
<td>0.509</td>
</tr>
<tr>
<td>Soc</td>
<td>0.138</td>
<td>0.239</td>
<td>0.240</td>
<td>(0.717)</td>
<td>0.169</td>
</tr>
<tr>
<td>Env</td>
<td>0.672</td>
<td>0.591</td>
<td>0.509</td>
<td>0.169</td>
<td>(0.875)</td>
</tr>
</tbody>
</table>

Note: "()" is square root AVEs
Source: processed using WarpPLS version 7, 2023

Lastly, Cronbach's Alpha and the Composite Reliability test executes the reliability test. The composite reliability test has an alpha threshold 0.7, while the Cronbach's alpha requirement is 0.6. The values of all the variables in Table 1’s CR (composite reliability) column are more than 0.7. On the other hand, each variable's value is >0.6 in the CA column, which forms the foundation for Cronbach's alpha test. As a result, all requirements for Cronbach's alpha, composite reliability, discriminant validity, and convergent validity tests have been satisfied.
Inner Model

After achieving the criteria for the outer model, the next stage is the inner model. According to Kock (2021), the goodness of fit model, R-square, Q-square, and path coefficient are the four tests that build the inner model. Based on the testing presented in Table 4, the goodness of fit model comprises ten tests. The research model is appropriate for hypothesis testing, according to the goodness of fit model's results, since each of the ten test requirements has been satisfied. The researcher presents the goodness of fit model test as follows:

Table 4. Goodness of Fit Model

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Score</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>APC</td>
<td>0.235, P&lt;0.001</td>
<td>Fit</td>
</tr>
<tr>
<td>ARS</td>
<td>0.436, P&lt;0.001</td>
<td>Fit</td>
</tr>
<tr>
<td>AARS</td>
<td>0.427, P&lt;0.001</td>
<td>Fit</td>
</tr>
<tr>
<td>AVIF</td>
<td>1.666</td>
<td>Ideally</td>
</tr>
<tr>
<td>AFVIF</td>
<td>1.814</td>
<td>Ideally</td>
</tr>
<tr>
<td>GoF</td>
<td>0.544</td>
<td>Large</td>
</tr>
<tr>
<td>SPR</td>
<td>1</td>
<td>Ideally</td>
</tr>
<tr>
<td>RSCR</td>
<td>1</td>
<td>Ideally</td>
</tr>
<tr>
<td>SSR</td>
<td>1</td>
<td>Acceptable</td>
</tr>
<tr>
<td>NLBCDR</td>
<td>1</td>
<td>Acceptable</td>
</tr>
</tbody>
</table>

Source: processed using WarpPLS version 7, 2023

The next stage involves the R-square and Q-square tests. R-square assesses the likelihood of future research. In the R-square test, the R-square value is 0.445, while in the adj, the R-square is 0.438. Meanwhile, in the R-square test for SFP, the value is 0.426 with an adj—R-square of 0.416. The results in Table 4 indicate that the likelihood of future research is still significant.

Table 5 also presents the results of the Q-square test. The Q-square measures the accuracy of the research model. The Q-square value is 0.452, as seen in the RisM column. On the other hand, in the SFP column, the Q-square value is 0.432. These results indicate that the accuracy of the research model is relatively high. The results of the R-square and Q-square tests are as follows:

Table 5. R-square and Q-square

<table>
<thead>
<tr>
<th></th>
<th>RisM</th>
<th>SFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-square</td>
<td>0.445</td>
<td>0.426</td>
</tr>
<tr>
<td>Adj. r-square</td>
<td>0.438</td>
<td>0.416</td>
</tr>
<tr>
<td>Q-square</td>
<td>0.452</td>
<td>0.432</td>
</tr>
</tbody>
</table>

Source: processed using WarpPLS version 7, 2023

The concluding section presents the results of the path coefficient, serving as the basis for addressing the research hypotheses:

1. The direct test of sustainable strategies on sustainable financial performance. Table 6 shows that sustainable strategies using the proxies Eco, Soc, and Env have p-values <0.05.

2. The coefficient values for Eco are 0.344, Soc is 0.114, and Env is 0.107, indicating a positive direction.
3. The direct relationship between sustainable strategies and risk management. In Table 6, each proxy for sustainable strategies has p-values <0.05 (details: Eco <0.001, Soc 0.016, and Env <0.001).

4. The coefficient values are Eco 0.371, Soc 0.134, and Env 0.320.

5. The test of the direct influence of risk management on financial performance has similar results.

6. The significance result from RisM to SFP is <0.001 with a coefficient of 0.257.

The next part involves the indirect test uses three proxies for sustainable strategies. The indirect significance of the Eco proxy is 0.016, with a coefficient of 0.095. The Soc has an indirect significance value of <0.001 with a coefficient of 0.173. The Env also yields similar results, with an indirect significance value of 0.032 and a coefficient of 0.082. Thus, risk management successfully acts as a mediator in the relationship between sustainable strategies and financial performance. In conclusion, all hypotheses have been successfully addressed. Table 6 presents the path coefficient’s findings:

<table>
<thead>
<tr>
<th>Path</th>
<th>Coefficient</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eco→FP</td>
<td>0.344</td>
<td>&lt;0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>Soc→FP</td>
<td>0.114</td>
<td>0.034</td>
<td>Accepted</td>
</tr>
<tr>
<td>Env→FP</td>
<td>0.107</td>
<td>0.044</td>
<td>Accepted</td>
</tr>
<tr>
<td>Eco→RisM</td>
<td>0.371</td>
<td>&lt;0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>Soc→RisM</td>
<td>0.134</td>
<td>0.016</td>
<td>Accepted</td>
</tr>
<tr>
<td>Env→RisM</td>
<td>0.320</td>
<td>&lt;0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>RisM→FP</td>
<td>0.257</td>
<td>&lt;0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>Eco→RisM→FP</td>
<td>0.095</td>
<td>0.016</td>
<td>Accepted</td>
</tr>
<tr>
<td>Soc→RisM→FP</td>
<td>0.173</td>
<td>&lt;0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>Env→RisM→FP</td>
<td>0.082</td>
<td>0.032</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: processed using WarpPLS version 7, 2023

Sustainable Strategies and Financial Performance of Tourism Operators

Our first finding is that sustainable strategies play a role in improving financial performance. The path coefficient results demonstrate that sustainable strategies (economic, social, and environmental) have p-values lower than 5%, indicating a significant influence. The economic, social, and environmental coefficients are positive. This result demonstrates that sustainable practices significantly improve the financial performance of tourism operators, addressing our first hypothesis.

Our findings align with research suggesting that economic (Domi et al., 2019; Pan et al., 2018; Sainaghi et al., 2017), social (Bagur-Femenías et al., 2015; de Grosbois, 2016; Ooi et al., 2015), and environmental (Claver-Cortés et al., 2007; Elkhwesky, 2022; Tan et al., 2017) components have a significant positive effect on financial performance. Additionally, we provide evidence supporting the view that tourism operators in Indonesia have implemented sustainable strategies effectively, thereby enhancing financial performance (Achmad & Yulianah, 2022; Fatina et al., 2023; Firman et al., 2023; Hermawan et al., 2023; Nugroho et al., 2023; Utami et al., 2023).

We present evidence regarding the depiction of sustainable strategies in tourism operators in Indonesia. Survey results also support research findings, indicating that, on average, respondents feel a positive impact from the implementation of sustainable strategies. Stakeholders directly experience tangible benefits, such as improved financial
performance. Thus, from the stakeholder theory perspective, sustainable strategies can provide satisfaction to stakeholders by practicing good social, environmental, and economic practices.

**Sustainable Strategies and Risk Management**

Our second finding is that sustainable strategies positively impact risk management. We validate this conclusion based on the path coefficient test outcomes. In the path coefficient table, each proxy for sustainable strategies, such as economic, social, and environmental factors, significantly and positively affects risk management. These results address our second hypothesis with significance values below 5% and positive coefficient values.

This finding supports the argument presented by Kim et al. (2021) that sustainable strategies can be one way to enhance risk management. Additionally, this research confirms the statement by Sainaghi et al. (2017) that the economic component is significant in risk management. Furthermore, Torres-Delgado et al. (2023) explain that implementing sustainable strategies also helps tourism operators mitigate the risk of fraud. Thus, our research aligns with previous theories and findings.

From the stakeholder theory perspective, risk management is one of the crucial components in addressing fraud. Fraud is scary for stakeholders, so tourism operators can implement sustainable strategies to address risk management issues (Tarjo et al., 2023). Sustainable strategies address social and environmental issues and play a crucial role in addressing the risk of fraud, ensuring continued financial improvement, and ultimately providing a happy ending for stakeholders. Thus, economic, social, and environmental strategies can help tourism operators enhance their risk management.

**Risk Management and Financial Performance of Tourism Operators**

Thirdly, risk management plays a crucial role in improving the financial performance of tourism operators. Table 6 shows evidence that there is a significant and positive relationship between risk management and financial performance. The direct relationship between them has low significance values below alpha, and the high coefficient values provide evidence of a positive relationship. Thus, we successfully address our third hypothesis in this study.

This finding is consistent with the arguments put forward by Mandal and Dubey (2020), stating that risk management can enhance the financial performance of tourism operators. Several studies believe risk management can also encourage financial performance (Atz et al., 2021; Vishwanathan et al., 2020). On the other hand, the main reason destinations need risk management is the high incidence of fraud (Tarjo et al., 2023). Theoretically, an organization's risk assessment, in this case about tour operators, involves risk management. The role of risk management in mitigating risks, including fraud, is a primary function in reducing fraud. Bhatti and Nawaz (2020) explain that reducing fraud leads to an improvement in financial performance. Therefore, risk management is crucial in addressing fraud and improving financial performance.

From the stakeholder theory perspective, stakeholders will significantly enhance their well-being, including implementing risk management. It helps stakeholders address risks in the organization, assuring well-being for them. In this case, well-being translates
into financial performance. Therefore, our finding satisfies stakeholders because tourism operators can improve their financial performance by implementing risk management.

Sustainable Strategies, Risk Management, and Financial Performance of Tourism Operators

We find evidence that risk management can mediate between sustainable strategies and the financial performance of tourism operators. We prove that each component of sustainable strategies indirectly improves financial performance. For the economic component, the p-value of the indirect effect is significantly less than 5%, and the coefficient is positive. Similarly, for the social component, the significance value of the indirect model is less than 0.05, with a positive coefficient. Lastly, the environmental component also has a low significance value below 0.05, and the significant coefficient indicates a positive influence from the model. Based on these findings, we successfully address our fourth hypothesis and the main finding of this study.

We can prove the framework proposed by Whelan et al. (2021), stating that the relationship between sustainable strategies and financial performance has a mediator, namely risk management. Additionally, we confirm the theory of Roe et al. (2014) that risk management can bridge the theoretical gap between sustainable strategies and financial performance. These findings also align with research that develops the concept that risk management can be a mediator to increase financial performance (Atz et al., 2021; Vishwanathan et al., 2020). This finding also supports the theory that sustainable strategies (economic, social, and environmental) can enhance risk management (Kim et al., 2021; Sainaghi et al., 2017; Torres-Delgado et al., 2023), and risk management can improve the financial performance of tourism operators (Bhatti & Nawaz, 2020; Mandal & Dubey, 2020).

We integrate these results with stakeholder theory, suggesting that implementing sustainable strategies, such as increased profit, social well-being, and environmental preservation, is critical to improving stakeholder well-being (Whelan et al., 2021). Profit measures satisfaction for company owners (Domi et al., 2019; Pan et al., 2018; Sainaghi et al., 2017), social practices satisfy employees (Bagur-Femenías et al., 2015; de Grosbois, 2016; Ooi et al., 2015), and the surrounding community and environmental practices help preserve the environment around tourism operators (Claver-Cortés et al., 2007; Elkhwesky, 2022; Tan et al., 2017). On the other hand, the economic component also plays a crucial role in improving risk management. However, the other two components can also enhance risk management. Therefore, all three components complement each other, resulting in an improvement in risk management. Increased risk management will reduce or even avoid the risk of fraud or other detrimental risks to tourism operators (Ouyang et al., 2020). The advantages of risk management are that it can raise stakeholders' well-being and boost the financial performance of tourism operators.

CONCLUSION

Through risk management, this empirical study investigates the indirect impact of sustainable strategy on the financial performance of tourism operators. Tourism operators in Indonesia serve as the research object, with 250 respondents as the data source. Based on SEM-PLS results, this study validates four theories.
Firstly, sustainable strategies positively influence the financial performance of tourism operators. Sustainable strategies consist of economic, social, and environmental efforts. Economics involves efforts by tourism operators to increase profits. Social activities refer to the efforts of tourism operators to enhance the well-being of employees and the surrounding community. Environment refers to efforts to preserve the environment around tourism operators. All three sustainable strategies can improve the financial performance of tourism operators, satisfying stakeholders, including owners, employees, the community, and the surrounding environment.

Secondly, sustainable strategies positively influence risk management. The three components of sustainable strategy complement each other in enhancing risk management for tourism operators. The economic component is the spearhead of sustainable strategies in improving risk management. The rationale is that financial practices are related to accounting, creating a connection with efforts to prevent fraud. On the other hand, social and environmental components can also be methods of assessing potential risks, including fraud. Therefore, utilizing all three components can provide additional benefits to risk management.

Thirdly, risk management positively influences the financial performance of tourism operators. Theoretically, risk management is an assessment. This assessment plays a crucial role in addressing all risks and fraud. The evaluation can provide the necessary information to operators about existing risks, allowing managers to take appropriate action to address these risks effectively. Therefore, risk management is vital in mitigating risks and improving financial performance.

Fourthly, and most importantly, risk management successfully acts as a mediator between sustainable strategies and the financial performance of tourism operators. This finding provides empirical evidence for previous researchers who developed a framework regarding sustainable strategy, risk management, and financial performance. This result proves that sustainable strategies, in the form of economic, social, and environmental practices, can positively impact risk management. The subsequent improvement in risk management due to implementing sustainable strategies can enhance the financial performance of tourism operators.

Based on the test results, this research provides several suggestions as follows:

1. Practical implementation means managers must continue improving the three sustainable strategies: environmental, economic, and social. The economic and social strategy must be upgraded to a better level to increase sustainability performance rapidly.
2. Policy recommendations are that managers with government support must improve the implementation of risk management so that the risk of fraud can be reduced.
3. Performance assessment is on 4E, not only 3E (efficient, effective, economic). 4E is implemented throughout Indonesia to improve financial and sustainable performance.

Meanwhile, this research also presents limitations in the form of:

1. The main limitation of this study is that it needs to include respondents from tourism operators in the islands. The researcher only selected respondents from easily accessible tourism operators with readily available information. Another limitation is the absence of variables directly related to fraud, such as tourism scams, corruption, and asset misuse.
2. Recommendations for future research include various types of tourism in Indonesia, including technology-based tourism, to increase the research sample. Additionally, future researchers can add variables directly related to fraud or criminal activities in tourism operators.

ACKNOWLEDGEMENT

Prof. Dr. Tarjo received funding for this research from Universitas Trunojoyo Madura based on Decree Number 5426/UN46.4.1/PT.03.07/2023 and Contract Number 5914/UN46.4.1/PT.01.03/2023.

REFERENCES


Doi: 10.47608/jki.v18i12024.77–94
Sustainable Strategy, Risk management, and Financial Performance of Tourism Operators
Tarjo et al. (2024)


 Industries.  


AUTHORS PROFILE

Prof. Dr. Tarjo, S.E., M.Si., CFE., CFR.A., CPA. 
ORCID-ID 0000-0001-8192-2442. Professor of Forensic Accounting in the Department of Accounting, Universitas Trunojoyo Madura, Indonesia. Doctoral Education in Accounting. Research interests include Forensic Accounting, Financial Accounting, Sustainable Accounting, and Tourism.

Prof. Dr Jamaliah Said. 
ORCID-ID 0000-0003-1912-2529. Professor of Accounting and Director of the

Alexander Anggono, S.E., M.Si., PhD., CFR.A. 
ORCID-ID 0000-0002-9443-8702. Assistant Professor of Accounting in the Department of Accounting, Universitas Trunojoyo Madura, Indonesia. Doctoral Education in Accounting. Research interests include Management Accounting, Public Sector Accounting, and Tourism Industry.

Prof. Dr. Abdul Halim, MBA., Ak., CA. 
ORCID-ID 0009-0001-4953-6821. Professor of Accounting in the Department of
Eklamsia Sakti, S. Ak., M. Ak.
ORCID-ID 0000-0003-1830-0290. Lecturer in Department of Health Administration, Sekolah Tinggi Ilmu Kesehatan Ngudia Husada Madura. Master's Education in Forensic Accounting. Research interests include Forensic Accounting, Finance, and Sustainable Accounting.