

# buktipenelitian\_10103030\_3A09 0824150347.pdf

*by salsa billa*

---

**Submission date:** 02-Sep-2025 01:26PM (UTC+0700)

**Submission ID:** 2740061757

**File name:** buktipenelitian\_10103030\_3A090824150347.pdf (427.61K)

**Word count:** 8638

**Character count:** 49228

## Exploring the relationship between sustainable supply chain and sustainable development goals on the financial performance of SMEs

Rismawati<sup>a\*</sup>, Tri Darsono<sup>b</sup>, Darminto Pujotomo<sup>c</sup>, Hetty Karunia Tunjungsari<sup>d</sup>, Agustinus Numberi<sup>e</sup>, Rostamaji Korniawan<sup>f</sup>, Bejo Slamet<sup>g</sup> and Agustiyanto<sup>h</sup>

<sup>a</sup>Muhammadiyah University of Palopo, South Sulawesi, Indonesia

<sup>b</sup>Universitas Sebelas Maret Surakarta, Indonesia

<sup>c</sup>Industrial Engineering Department, Universitas Diponegoro, Semarang, Indonesia

<sup>d</sup>Universitas Tarumanagara, Jakarta, Indonesia

<sup>e</sup>Universitas Cenderawasih, Jayapura, Provinsi Papua, Indonesia

<sup>f</sup>School of Strategic and Global Studies, University of Indonesia, Jakarta, Indonesia

<sup>g</sup>Research Center for Fishery, National Research and Innovation Agency, Indonesia

<sup>h</sup>Universitas Sebelas Maret, Surakarta, Indonesia

### ABSTRACT

#### Article history:

Received October 20, 2023

Received in revised format

December 27, 2023

Accepted February 13 2024

Available online

February 13 2024

#### Keywords:

Sustainable supply chain

Sustainable Development Goals

(SDGs)

Financial performance

SMEs

This research aims to analyze the relationship between sustainable supply chains on financial performance, Sustainable Development Goals (SDGs) financial performance and Sustainable supply chains on Sustainable Development Goals (SDGs). This research uses a quantitative survey method, research data was obtained by distributing online questionnaires through media social to 390 respondents belonging to SMEs, and respondents were determined using the simple random sampling method. Data analysis used Structural Equation Modeling (SEM) Partial Least Square (PLS) with data processing to using SmartPLS 3.0 software. The questionnaire was designed using a Likert scale of 1 to 7. Independent variable in this research is the sustainable supply chain, the mediating variable is Sustainable Development Goals (SDGs) and the dependent variable is financial performance. The stages of data analysis are validity and reliability testing, significance or hypothesis testing, and mediation influence testing. The results of data analysis show that the Sustainable supply chain has a positive and significant relationship to financial performance, Sustainable Development Goals (SDGs) have a positive and significant relationship to financial performance and the Sustainable supply chain has a positive and significant relationship to Sustainable Development Goals (SDGs). To improve the financial performance of SMEs, they must implement a sustainable supply chain in their supply chain, namely from supplier to customer. To improve the financial performance of SMEs, they must implement Sustainable Development Goals (SDGs) in their management system. Implementing sustainability in the supply chain is important to increase operational efficiency and reduce negative impacts on the environment and society.

## 1. Introduction

In the era of Industrial Revolution 4.0 and the digital era, the current dynamics of environmental problems, sustainability has become a very strategic issue for organizations. In terms of sustainable practices, government policies have been widely developed, and on the other hand, public awareness of social and environmental problems is also growing. This creates quite strong pressure for companies to integrate sustainability issues which include economic, environmental and social aspects in

\* Corresponding author

E-mail address: [rismawati@umpalopo.ac.id](mailto:rismawati@umpalopo.ac.id) (Rismawati)

ISSN 2291-6830 (Online) - ISSN 2291-6822 (Print)

© 2024 by the authors; licensee Growing Science, Canada.

doi: 10.5267/j.uscm.2024.2.012

business decisions taken at various functions and organizational levels. According to Alamoush et al. (2021), current company performance measures are no longer only focused on operational and financial performance, but strategic performance which includes sustainability performance. Thus, sustainability performance has become one of the keys for improving a company's image and reputation (Alamoush et al., 2021). A sustainable supply chain strategy is a strategy that initiates a business to be able to survive and win the competition. In this case, we then need a measurement or assessment system to assess sustainability performance in every aspect which includes economic, social and environmental performance. On the other hand, Alexander et al. (2019) stated that performance measurement in the context of sustainable supply chains is a corporate agenda to achieve competitive advantage and avoid financial and reputational losses due to the impact on every economic activity.

The world economy continues to grow, apart from having a positive impact on the level of welfare of the world community, it also harms the environment, and this factor is very closely related to the social factors of a nation. One thing that influences the country's economic growth is the transportation sector. This is the basis for thinking about the importance of the concept of a sustainable supply chain. According to Al Lawati et al. (2022) environmental damage caused by human activities, triggered by increasingly rapid population growth and industrialization are used to meet increasing human needs. Industrialization which is carried out continuously causes negative impacts on the environment around them. This is because many industries do not pay attention to ecosystem balance so environmental pollution cannot be avoided. One of the company's goals is the sustainability of operational activities, therefore, apart from the profits expected by the company in the long term, the company's activities must be in line with civil justice and protect the surrounding environment (Alexander et al., 2019). Sustainable development goals (SDGs) help companies set appropriate goals to be achieved, measure performance, and manage changes so that their operations are more sustainable. Continuous efforts to build sustainable development are the focus for companies, especially in the oil and gas sector and the energy industry. In efforts to achieve sustainability, companies not only face complex challenges but also open new opportunities for harmonious synergy between economic, environmental and social aspects (Al Lawati et al., 2022).

To support sustainability efforts, the company also actively contributes to achieving the SDGs set by the United Nation (UN). SDGs serve as a guide in formulating programs that have a positive impact on society and the environment while achieving sustainable business success. This model includes integrated technological, economic and facility lifetime aspects. By using this model, companies can study and implement sustainable resource utilization to support upstream and downstream business activities. In applying the concept of sustainability, companies must understand and implement standard terminology and classifications in the literature, such as *sustainability* itself. According to Chauhan et al. (2022), the criteria required to fulfil this aspect are then compared with other economic criteria, such as cost minimization and profit maximization. This comparison will show varying differences, depending on the type of reserve or resource in question and their respective properties. In implementing sustainability in oil and gas operations, a holistic approach is needed that integrates various aspects, from monitoring and mitigating environmental impacts, and efficient use of energy, to sustainable social programs.

Companies must remain focused on environmental sustainability, including the use of limited natural resources. Apart from that, companies must also collaborate with various stakeholders, including the government, local communities and affected communities. This collaboration will ensure that the sustainability efforts carried out truly have a positive and sustainable impact on all parties involved. Through continuous efforts and harmonious synergy between economic, environmental and social aspects, companies in the oil and gas sector and other energy industries can contribute actively to achieve sustainable development. By integrating SDGs into their business operations, companies can become agents of meaningful change in developing the world more sustainable and prosperous for all. The concept of sustainability has been widely used as a framework for thinking in the development of various activities, both economic and non-economic activities. Avramiou et al. (2019) describe the development of research related to sustainable development since the 1990s which has continued to increase. Apart from that, the relationship between the concept of sustainability and the supply chain is also introduced. Sustainable Supply Chain Management (SCM) must consider economic, social and environmental aspects. Arena et al. (2023) define sustainable development as improving the quality of life to enable humans to live in a healthy environment and improve social, economic and environmental conditions for the current and next generations. According to Baliga et al. (2019), various Natural Resources (SDA) management problems are influenced by dynamism and uncertainty.

In sustainable supply chain management, reducing the carbon footprint is a top priority (Malys, 2023). By adopting more efficient shipping practices, choosing environmentally friendly transportation, and using technology that reduces emissions, we can contribute to global efforts in the fight against climate change. Selecting suppliers who are committed to sustainable practices is an important step in sustainable supply chain management by paying attention to supplier policies regarding environmental protection, fair working conditions and business ethics. According to Zimon et al. (2020), collaboration with sustainable suppliers will help create responsible supply chains. Having an optimal supply chain is something that must be the company's focus. However, the concept of a sustainable supply chain seems to have begun to be looked at by many companies, to ensure that their supply chain can continue to operate optimally in the long term, with minimal environmental impact. The hope is that by using this concept as the basis for supply chain operations, companies can actively participate in maintaining the environment from adverse impacts that arise, and at the same time can maintain each post in the supply chain for a long period (Avramiou et al., 2019).

According to Nayal et al. (2022), a sustainable supply chain refers to the sustainability of the company's supply chain. By considering the environmental and human impacts of the product's journey from the source of raw materials, the production process, storage, shipping, and every other process, the company strives to make the process run as efficiently as possible. The main aim of implementing this supply chain model is to minimize the impact of environmental damage caused by the running of the supply chain. Not in the sense of eliminating it, but to reduce it to a minimum point. The company makes the necessary efforts to ensure that every post from upstream to downstream production activities runs by the standards provided by the local government. Even though it is not mandatory, many entrepreneurs are starting to look at this concept based on awareness of the environmental impact which is quite large. According to Monteiro et al. (2018), Profit orientation also drives companies to always think about strategies and ways to obtain large profits for the continuity and progress of the company. Therefore, companies must be able to anticipate all risks that occur, companies must master information by using appropriate methods to analyze the company's condition. However, aspects of company performance are also important apart from profits. Because large profits are not a measure that the company has been able to work effectively (Bose et al., 2022). Thus, what must be done by the company is not only a way or effort to increase profits, but what is more important is an effort to increase company performance. This is the main task of a manager to always maintain stability, growth and reliable profit achievements with investment, as well as enable the company to implement a strategy so that the company can run effectively and encourage the company's progress. The performance of a company is related to how the company manages its resources to generate profits that will increase the company's prosperity. Performance is not just a matter of big profits but is also related to the effectiveness of a company in managing its business (Chauhan et al., 2022).

## 2. Literature Review

### 2.1 Sustainable Supply Chain

A sustainable supply chain, or better known as a sustainable supply chain, is the design and management of a system that integrates environmentally and socially responsible practices throughout the entire life cycle of a product or service (Khaled, et al., 2021) This sustainability principle is applied in all aspects of the supply chain, starting from the procurement of raw materials until the product is received by consumers. In essence, the main goal of a sustainable supply chain is to reduce negative impacts on the environment and society, while maximizing profits for the business. One of the benefits of implementing it is reducing carbon emissions and environmental footprint, for example through the use of renewable energy in choosing transportation modes, warehouse design and inventory management. Apart from that, implementing a sustainable supply chain can also improve a company's reputation. Currently, consumers are starting to care about the social and environmental aspects of the products and services they consume. Implementing a sustainable supply chain can be a competitive advantage for companies while increasing consumer confidence and competitiveness. The sustainable supply chain is a way for companies to understand environmental and human impacts through the supply chain starting from the production process, and distribution to consumers (Chauhan et al., 2022). According to Ikram et al. (2021), the supply chain contains the entire supply chain and coordinates every activity, use of tools, and involvement in the production and delivery of products. From this understanding, the true goal of a sustainable supply chain is to reduce various damages that arise due to water use or waste production by carrying out positive activities for the people around them. In addition, companies try to show that they pay close attention to business ethics. According to Kumar et al. (2019), sustainable supply chain management is a systematic and integrated approach that will help companies develop a *win-win* strategy to gain profits and market share while reducing the impact on the environment. The application of sustainable supply chain management can be used to overcome socio-environmental issues and improve societal performance. Supply chain management (SSCM) is a development of supply chain management studies by combining it with the concept of sustainability and has also become one of the scientific research trends in the field of supply chain.

### 2.2 Sustainability Development Goals (SDGs)

According to Jacob et al. (2023), if all goals of the SDGs are achieved, the environment is expected to be better for people's lives. All elements of society are expected to participate in preserving the environment. To achieve the SDGs, the private sector and the government sector must include SDGs elements in their corporate strategy, followed by the implementation of the strategy. SDGs cannot be achieved without cooperation between government, the private sector, public organizations and society. According to Iazzi et al. (2022), one way is to create regulations for the private sector that will list on the stock exchange to fulfil several requirements, one of which is that listed companies are encouraged to make disclosures related to SDGs. This is something that investors must consider in making their decisions. In achieving the SDGs, it is necessary to have good governance mechanisms within the company, one of which is the functioning of supervision and the existence of a good quality assessment mechanism. Companies that integrate SDGs into their corporate strategy will be able to increase investment from more shareholders and maximize company value. Apart from that, implementing SDGs in company strategy can reduce risks, identify opportunities and provide long-term benefits. According to Gaur et al. (2019), preparation of sustainability reports in Indonesia is still not mandatory. The exception is for companies that produce the greatest pollution, which are required to report their environmental responsibility, such as mining companies, construction companies, etc. The government has a large role in making sustainability reports into mandatory reports through regulatory instruments. The Financial Services Authority (OJK) is preparing regulations that require issuers to report their economic, social and

environmental aspects (Centobelli et al., 2020). When sustainability reports become mandatory, companies will become more accountable and more transparent. In this way, stakeholders will feel more confident in the company, and this can increase the company's value. Having sustainable development reporting will increase company accountability. This is an opportunity to rebuild stakeholder trust in the company. According to Ghufuran et al. (2021), sustainable development reporting also encourages companies to participate in progress and can be used to report the company's contribution for achieving the SDGs and presenting more useful information for company stakeholders.

According to Iazzi et al. (2022), Sustainable Development (SD) has two main keys, namely awareness of the needs of poor communities in developing countries and the limitations of technology and financial organizations related to the capacity of the environment to meet the needs of current and future generations. SDGs or Sustainable Development Goals are 17 goals with 169 measurable achievements and deadlines that have been determined by the UN as a world development agenda for the benefit of humans and the planet. According to Ghufuran et al. (2021); and Iazzi et al. (2022), this goal was jointly proclaimed by countries across governments in a UN resolution published on 21 October 2015 as a joint development ambition until 2030. One form of SDGs that is usually implemented in Indonesia is Customer Social Responsibility (CSR) and Sustainable Disclosure. Sustainable Disclosure is known as sustainable disclosure is usually reported together with disclosure of inside information.

### 2.3 Financial performance

Financial performance is an analysis carried out to see the extent to which a company has implemented financial implementation rules properly and correctly. Financial performance in the context of the business world has a very broad meaning. The definition of financial performance is the company's ability to manage and control the resources it owns. Financial performance is a description of the company's financial condition in a certain period regarding aspects of raising funds and distributing funds, which is usually measured by indicators of capital adequacy, liquidity and profitability. Financial performance is an illustration of the company's achievement of success which can be interpreted as the results that have been achieved for the various activities that have been carried out. It can be explained that financial performance is an analysis carried out to see the extent to which a company has implemented financial implementation rules properly and correctly. According to Chauhan et al. (2022), financial performance is the result or achievement that has been achieved by company management in carrying out its function of managing company assets effectively during a certain period. Financial performance is needed by companies to know and evaluate the level of success of the company based on the financial activities that have been carried out. Avrampou et al. (2019) explain that the meaning of financial performance is the periodic determination of the operational effectiveness of an organization and its employees based on previously established targets, standards and criteria. Bose et al. (2022) state that financial performance is the result of an evaluation of work that has been completed, the results of the work are compared with criteria that have been determined together. Every work that has been completed needs to be assessed periodically. From several definitions of financial performance above, a simple conclusion can be drawn that financial performance is the company's achievements in a period that describes the company's financial health condition with indicators of capital adequacy, liquidity and profitability (Centobelli et al., 2020).

According to Baliga et al. (2019), the company's financial performance is one of the bases for assessing the company's financial condition which is carried out based on an analysis of the company's financial ratios. Meanwhile, the definition of financial performance according to Chauhan et al. (2022), namely the results or achievements that have been achieved by company management in carrying out the function of managing company assets effectively during a certain period. With this explanation, it can be concluded that financial performance is the company's achievements in a period which describes the company's financial condition with indicators of capital adequacy, liquidity and profitability. According to Arena et al. (2023) states that the objectives of measuring a company's financial performance are: 1. Knowing the level of liquidity. Liquidity shows a company's ability to fulfil financial obligations that must be settled immediately when they are billed. 2. Know the level of solvency. Solvency shows the company's ability to fulfil its financial obligations if the company is liquidated, both short-term and long-term financial. 3. Know the level of profitability. Profitability or what is often called profitability shows the company's ability to generate profits during a certain period. 4. Know the level of stability. Stability shows the company's ability to carry out its business stably, which is measured by considering the company's ability to pay its debts and pay interest charges on its debts on time (Baliga et al., 2019). Company performance is a description of the financial condition of a company which is analyzed using financial analysis tools so that it can be known about the good and bad financial condition of a company which reflects work performance in a certain period. This is very important so that resources are used optimally in facing environmental changes. Financial performance assessment is one way that management can fulfil its obligations to funders and also to achieve the goals set by the company. Financial performance is one of the factors that shows the effectiveness and efficiency of an organization in achieving its goals. Financial performance measurement can be seen using financial report analysis or ratio analysis and ratios are a way to compare and investigate the relationships that exist between various pieces of financial information. Commonly used ratios are liquidity, solvency and profitability ratios. In the liquidity ratio, the main thing that is measured is the company's ability to pay off its obligations in the short term without excessive pressure. This ratio focuses on current assets and current liabilities. Solvency is a company's long-term ability to fulfil its long-term obligations. This solvency measurement can also be called the leverage ratio. Profitability is a measure of a company's ability to generate profits by using assets and managing its operations efficiently.



Profitability Ratio, namely a ratio that shows the company's ability to generate profits. For shareholders (company owners), this ratio shows their level of income from investment (Arena et al., 2023).

#### *The relationship between sustainable supply chain and financial performance*

Chauhan et al. (2022) show that supply chain management has a significant effect on performance. This shows that the better the implementation of supply chain management, the better the company's performance. Bose et al. (2022); and Centobelli et al. (2020) define supply chain management as management activities in obtaining raw materials into goods in process or semi-finished goods and finished goods, and sending these products to consumers through the distribution system. Supply chain management is the distribution of products or goods to customers (Chauhan et al., 2022). The supply chain is a network of various companies and organizations that relate and coordinate to achieve the same goal in delivering goods, namely to maximize company goals and meet consumer needs. Supply chain management aims to maximize the value of the goods or products obtained, the goods arrive at the right time and to meet consumer needs and desires. Supply chain management can also minimize costs such as raw material costs, storage costs and transportation costs (Avrampou et al., 2019)

**Hypothesis 1:** Sustainable supply chain has a positive and significant relationship with financial performance.

#### *The relationship between Sustainable Development Goals (SDGs) and financial performance*

One of the reasons for this is that several SDG goals must be directly implemented in the community and the community can directly receive the benefits. Based on previous research conducted by Alexander et al. (2019); and Al Lawati et al. (2022) company reputation can have a significant influence on financial performance. According to Alamoush et al. (2021) on profitability, it is proven that the more SDG disclosures a company makes, the higher its profitability. This research also focuses on company size which can influence company profitability. Previous research conducted by Baliga et al. (2019); and Chauhan et al. (2022) shows the results that company size has a significant effect on company profitability. Therefore, it is based on theory and previous research.

**Hypothesis 2:** Sustainable Development Goals (SDGs) have a positive and significant relationship with financial performance.

#### *Relationship of Sustainable Supply Chain to Sustainable Development Goals (SDGs)*

According to Khan et al. (2021) and Khaled et al. (2021), sustainable supply chain management also involves optimizing resource use. By reducing waste, recycling materials and minimizing energy consumption, we can reduce negative impacts on the environment and save operational costs. Recovery and recycling are becoming important components of sustainable supply chain management. Through collaboration with business partners, we can create effective recovery and recycling programs to reduce waste and ensure that used products or materials can be managed properly. Transparency in the supply chain helps ensure sustainable management. According to Wang et al. (2020), Wolf (2014) and Zimon et al. (2020), one of the benefits of sustainable development goals is that more innovation emerges from changes in consumer behaviour from increased pressure from social enterprises entering the market with innovative and sustainable solutions. This can lead to the further development of business processes or products in terms of sustainability, to the development of new types of solutions. Especially for young talent, it is very interesting whether and how potential employers take their social responsibilities seriously.

**Hypothesis 3:** Sustainable supply chain has a positive and significant relationship to Sustainable Development Goals (SDGs).

### 3. Method

This research uses a quantitative survey method, research data was obtained by distributing online questionnaires via social media to 390 respondents belonging to SMEs, and respondents were determined using a simple random sampling method. Data analysis uses Structural Equation Modeling (SEM) Partial Least Squares (PLS) with tools. SmartPLS 3.0 software data processing. The questionnaire was designed using a 5-point scale from 1 to 7. The independent variable in this research is the sustainable supply chain, the mediating variable is Sustainable Development Goals (SDGs) and the dependent variable is financial performance. The stages of data analysis are validity and reliability testing, significance or hypothesis testing, and mediation influence testing. The structure of the proposed method is as follows:



Fig. 1. The proposed study

#### 4. Result and Discussion

##### 4.1 Convergent validity

Convergent validity of the measurement model can be obtained from the correlation between the item/instrument score and construct score (loading factor) with the criterion of a loading factor value for each instrument  $> 0.7$ . Convergent Validity testing is carried out by looking at the outer loading value of each indicator on the latent variable. An outer loading value  $> 0.7$  indicates that a variable has explained 50% or more of the indicator variance. However, according to Chin et al. (1999), an outer loading value of 0.5 to 0.6 can be considered sufficient for convergent validity requirements.

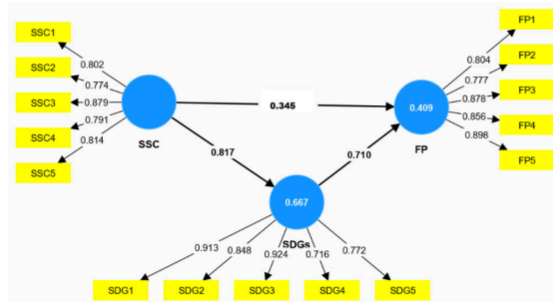


Fig. 2. Validity Testing

Based on Fig. 2, all indicators have an outer loading value of more than 0.7. This indicates that each study variable has been able to be explained by its indicators and meets the requirements for convergent validity. Convergent Validity is carried out by looking at the item reliability (validity indicator) which is shown by the loading factor value. The loading factor is a number that shows the correlation between the score of a question item and the score of the construct indicator that measures that construct. A loading factor value greater than 0.7 is said to be valid. However, according to Hair et al. (1998) for the initial examination of the factor loading matrix, approximately 0.3 is considered to have met the minimum level, and for factor loadings approximately 0.4 is considered better, and for factor loadings greater than 0.5 is generally considered significant. In this research, the loading factor limit used was 0.7. After data processing using SmartPLS 3.0, the loading factor results can be shown in the table. From the results of data processing using SmartPLS shown in Fig. 2, the majority of indicators for each variable in this study have a loading factor value greater than 0.70 and are said to be valid.

##### 4.2 Discriminant Validity

The value of the indicator correlation construct must be greater for the associated construct than for other constructs. A larger value indicates the suitability of an indicator to explain the associated construct compared to explaining other constructs. Discriminant Validity is carried out by looking at the cross-loading values of construct measurements. The cross-loading value shows the magnitude of the correlation between each construct and its indicators and the indicators of the other block constructs. A measurement model has good discriminant validity if the correlation between the construct and its indicators is higher than the correlation with indicators from other block constructs.

##### 4.3 Composite Reliability

A composite reliability value of 0.6–0.7 and a Cronbach's alpha value of  $> 0.7$  are considered to have good reliability (Sarstedt, et al., 2011). Based on the table 13, all constructs have a composite reliability and Cronbach's alpha value of  $> 0.7$  so it is concluded that they are reliable. Apart from being measured by assessing convergent validity and discriminant validity, the outer model can also be done by looking at the reliability of the construct or latent variable which is measured by the composite reliability value. A construct is declared reliable if the composite reliability has a value  $> 0.7$ , then the construct is declared reliable. SmartPLS output results for composite reliability values can be shown in the table. From the SmartPLS output results in Table, the composite reliability value for all constructs is above 0.70. With the resulting values, all constructs have good reliability by the required minimum value limits.

**Table 1**  
Reliability Test Cronbach's alpha

	Cronbach's Alpha	rho_A	Composite Reliability
Sustainable supply chain	0.956	0.916	0.912
Sustainable Development Goals (SDGs)	0.932	0.943	0.965
Financial performance	0.912	0.914	0.911

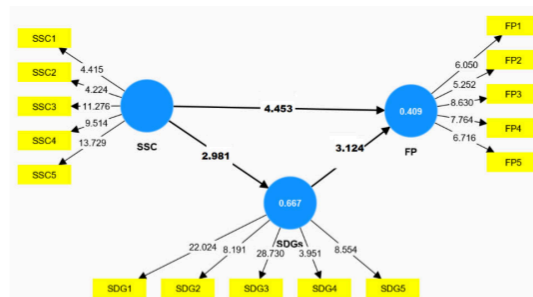
The next evaluation is by comparing the AVE root value with the correlation between constructs. The recommended result is that the AVE root value must be higher than the correlation between constructs (Yamin & Kumiawan, 2011). The model has better discriminant validity if the square root of the AVE for each construct is greater than the correlation between the two constructs in the model. A good AVE value is required to have a value greater than 0.50. In this research, the AVE value and square root of AVE for each construct can be shown in the table. The table shows that the square root value of AVE for each construct is greater than the correlation value so the construct in this research model can still be said to have good discriminant validity.

**Table 2**  
Reliability test

	Average Variance Extracted (AVE)
Sustainable supply chain	0.721
Sustainable Development Goals (SDGs)	0.776
Financial performance	0.617

#### 4.3 Hypothesis testing

To find out the structural relationship between latent variables, hypothesis testing must be carried out on the path coefficient between variables by comparing the p-value with alpha (0.005) or a t-statistic of (>1.96). The P-value and t-statistics are obtained from the output in SmartPLS using the bootstrapping method. Hypothesis testing is carried out by paying attention to the original sample estimates (O) values to determine the direction of the relationship between variables, as well as t-statistics (T) and p-values (P) to determine the level of significance of the relationship. Original sample values that are close to +1 indicate a positive relationship, while values that are close to -1 indicate a negative relationship. The t-statistics value is more than 1.96 or the p-value is smaller than the significance level.



**Fig. 3. Hypothesis Testing**

Hypothesis testing is carried out based on the results of Inner Model testing (structural model) which includes r-square output, parameter coefficients and t-statistics. To see whether a hypothesis can be accepted or rejected, include paying attention to the significance values between constructs, t-statistics and p-values. This research hypothesis testing was carried out with the help of SmartPLS (Partial Least Square) 3.0 software. These values can be seen from the bootstrapping results. The rules of thumb used in this research are t-statistics > 1.96 with a significance level of p-value of 0.05 (5%) and the beta coefficient is positive. The hypothesis testing value of this research can be shown in Table and the results of this research model can be depicted as shown in Fig. 3.

**Table 3**  
Hypothesis Testing

	T Statistics	P Values	Conclusion
Correlation			
Sustainable supply chain and financial performance	4.453	0.000	Supported
Sustainable Development Goals (SDGs) and financial performance	2.981	0.000	Supported
Sustainable supply chain and Sustainable Development Goals (SDGs)	3.124	0.000	Supported



### *The relationship between sustainable supply chain and financial performance*

Based on the results of the analysis, it was obtained that the p-value was  $<0.050$  and the oath coefficient value was positive, so it was concluded that there was a positive and significant relationship. According to Malys (2023); and Monteiro et al. (2018), a sustainable supply chain will provide many innovations to the business we currently manage. Changes in one way or another will have a good impact because they indicate that the company continues to develop operationally and keeps up with current developments. Not only from an operational perspective, but also the value held by the company will also gradually develop. The business orientation is then not only pragmatically aimed at profit, but also at a more controlled environmental impact. By using sustainable principles and the market starting to recognize this, gradually the value of your business will increase. The market that appreciates the choice of this principle in business activities is quite massive, so the effect on brand value will be good. Indeed, this will not happen overnight. However, the effect provided will also be a long-term effect, so that the business can have prospects that are much better than before (Avrampou et al., 2019). It cannot be denied that the transition from a conventional model to a sustainable business model require quite a lot of costs. However, from the various data displayed, businesses will gain long-term financial efficiency. According to Wang et al. (2020); Zimon et al. (2020) Significant cost reductions will emerge from this supply chain model so that companies will also be able to manage the prices they release to increasingly competitive markets. So not only is the effect good for business but also for the customers you have. Supply chain sustainability is an important aspect of company operations, which affects company performance and reputation, and can also hurt the environment and society if not managed well (Avrampou et al., 2019).

### *The relationship between Sustainable Development Goals (SDGs) and financial performance*

Based on the results of the analysis, it was obtained that the p-value was  $<0.050$  and the oath coefficient value was positive, so it was concluded that there was a positive and significant relationship. Based on hypothesis test calculations, the results obtained show that Sustainable Development Goals (SDGs) affect financial performance. The direction of influence that both variables have is negative, meaning that when a company carries out more indicators in the Sustainable Development Goals (SDGs), it can cause a decrease in the company's level of profitability. The results of this research are in line with research conducted by Wolf (2014); and Zimon et al. (2020) which state that SDGs in economic indicators have a significant negative influence on company profitability. The negative relationship between Economic Indicators in SDGs and company profitability can be explained based on changes in levels of company profitability. The results of this research are not in line with stakeholder and legitimacy theory. In stakeholder and legitimacy theory, it is explained that when a company maintains good relations with its stakeholders and keeps its business activities in line with community norms, then stakeholders and the surrounding community will support the business activities. However, SDG disclosure has proven unable to increase stakeholder and public trust in companies. Companies will only incur higher costs to support SDG disclosure and reduce their profits. Research by Shihin et al. (2017); and Zhou et al. (2020) state that companies with high profitability only implement a few SDGs in their sustainability reports because companies that focus on income think that SDG activities will reduce income. In this case, investors will be more interested in companies with high profitability, without assessing whether the company has disclosed its social responsibility or not. Investment returns are in line with expectations, so investors have no interest in investing. Despite this, the company still has a good image in society. During the 3-year research period, the company continued to carry out its social responsibilities by the indicators contained in the SDGs. More than 50% of companies still maintain their commitment to SDGs, where companies do not reduce the level of SDGs implemented even though their profitability has decreased (Bose et al., 2022). Companies can still prove good performance to investors, even though they have implemented the SDGs. This can have a serious impact on the sustainability and success of the company's business in the future. Companies that do not carry out social responsibility have a greater chance of having a bad image socially and environmentally.

### *Relationship of Sustainable Supply Chain to Sustainable Development Goals (SDGs)*

Based on the results of the analysis, it was obtained that the p-value was  $<0.050$  and the oath coefficient value was positive, so it was concluded that there was a positive and significant relationship. Sustainable supply chain management also involves optimizing resource use. By reducing waste, recycling materials and minimizing energy consumption, you can reduce negative impacts on the environment and save operational costs (Chauhan et al., 2022). Recovery and recycling are becoming important components in sustainable supply chain management. Through collaboration with business partners, you can create effective recovery and recycling programs to reduce waste and ensure that used products or materials can be managed properly. Transparency in the supply chain helps ensure sustainable management. By implementing accurate tracking and reporting systems, you can monitor and manage environmental impacts and ensure compliance with social and ethical standards. By implementing sustainable supply chain management, you can reduce risk, increase efficiency and maintain responsible business reputation. According to Rygh et al. (2022), SDGs or sustainable development goals are things that facilitate the alignment of company strategy with the current needs of society. They highlight areas of innovation and can help open new markets. That is why the topic of opportunities is very relevant in the context of goals. According to Wang et al. (2020) For SMEs implementing the SDGs, one of the benefits of sustainable development goals is that more innovation emerges from changes in consumer behaviour, but also from increased pressure from social enterprises entering the market with innovative and sustainable solutions. This can lead to the further development of business processes or products in terms of sustainability,

but also to the development of new types of solutions. Especially for young talent, it is very interesting whether and how potential employers take their social responsibilities seriously. Companies that are strategically and credibly oriented towards sustainability goals have a better chance of convincing this talent to join them. Working together with other parties to make the SDGs a success is a strongifying element. Sustainable development goals are creating a good reputation (Avrampou et al., 2019). Communicating a company's engagement with the SDGs internally and externally can reassure employees and external stakeholders and turn them into multipliers or advocates. Many entrepreneurs and companies, sometimes without realizing it, are already contributing to sustainable development.

According to Zhou et al. (2020), the implementation of environmental performance influences sustainable development. Environmental performance describes how the company cares about the surrounding environment. A company's environmental performance will be good if it carries out business by established environmental regulations, is responsible for the community around the company and makes efforts that are useful for the long-term interests of society. Implementing sustainable procurement practices is an important step in implementing sustainability in the supply chain. Sustainable procurement is a procurement process that takes into account environmental, social and economic aspects. Some sustainable procurement practices that can be carried out by companies include choosing suppliers who meet sustainability standards: Suppliers who meet these standards will reduce the negative impact of supply chain activities, evaluate supplier performance regularly to ensure that suppliers continue to meet sustainability standards, develop work with suppliers: Develop appropriate frameworks with suppliers to increase efficiency and reduce environmental impacts, apply sustainable procurement principles such as ISO 20400 principles which cover environmental, social and economic aspects in the procurement process, carry out due diligence on suppliers to ensure that they meet sustainability standards, increase transparency increase transparency in the procurement process by reporting supplier performance and the environmental impact of supply chain activities, increase internal awareness and competence in sustainable procurement by providing training and education to employees involved in the procurement process. According to Wolf (2014); and Zimon et al. (2020) implementation of sustainable procurement practices will help companies to increase operational efficiency, reduce negative impacts on the environment and society, and improve the company's reputation. Developing a long-term sustainability development strategy will enable companies to improve performance and reduce the negative impacts of activities. Apart from that, a good strategy will improve the company's reputation and increase its trust (Centobelli et al., 2020). This will make the company stronger in facing uncertainty and improve long-term performance. Reporting sustainability performance transparently will increase stakeholder trust and improve the company's reputation. This will also help companies evaluate sustainability performance and take corrective action if necessary (Arena et al., 2023). According to Malys (2023); and Monteiro et al. (2018) Public awareness of the increasing environmental damage caused by the industrial activities of large companies means that the public needs information about the extent to which companies are responsible for this damage. This ecological crisis has prompted concern from various countries in the world. One of the efforts is to formulate Sustainable Development Goals which are expected to help overcome poverty, inequality and climate change in the form of real action. Representation of women in the leadership of a company can be one of the incentives for companies to be more concerned about voluntary disclosure. This is because the nature of female leadership is more proactive in collaborating, careful in decision making and more sensitive to environmental problems.

According to Rygh et al. (2022), financial performance is an analysis carried out to see the extent to which a company has implemented financial implementation rules properly and correctly. Company performance is a description of the financial condition of a company which is analyzed using financial analysis tools so that it can be known about the good and bad financial condition of a company which reflects work performance in a certain period. This is very important so that resources are used optimally in facing environmental changes. Measuring tools that can be used are several ratios, namely Liquidity Ratios, Leverage/solvency Ratios, Activity Ratios, Profitability/Profitability Rat and Valuation Ratios. The importance of assessing a company's financial performance according to Shibin et al. (2017) is as follows: 1) To determine the level of liquidity, namely the company's ability to obtain its financial obligations which must be fulfilled immediately or the company's ability to fulfil its finances when they are billed. 2) To determine the level of solvency, namely the company's ability to fulfil its financial obligations if the company is liquidated, both short-term and long-term financial obligations. 3) To determine the level of profitability or profitability, which shows the company's ability to generate profits during a certain period. 4) To determine the level of business stability, namely the company's ability to carry out its business stably, which is measured by considering the company's ability to pay interest charges on its debts including repaying the principal of its debts on time as well as the ability to pay dividends regularly to shareholders without experiencing financial obstacles or crises (Baliga et al., 2019).

## 5. Conclusion

The results of data analysis show that sustainable supply chains have a positive and significant relationship to financial performance, Sustainable Development Goals (SDGs) have a positive and significant relationship to financial performance and Sustainable supply chains have a positive and significant relationship to Sustainable Development Goals (SDGs). To improve the financial performance of SMEs, they must implement a sustainable supply chain in their supply chain, namely from supplier to customer. To improve the financial performance of SMEs, they must implement Sustainable Development Goals (SDGs) in their management system. Implementing sustainability in the supply chain is important to increase

operational efficiency and reduce negative impacts on the environment and society. Several steps that can be taken to improve sustainability performance in the supply chain include: identifying factors that influence sustainability, analyzing the environmental impact of supply chain activities, implementing sustainable procurement practices, developing long-term sustainability development strategies, using technology to monitor and improve sustainability performance in the supply chain and prepare reports and report sustainability performance in the supply chain transparently. Doing these things will help the company improve its sustainability performance, maintain stakeholder trust and improve the company's reputation. Developing a long-term sustainability development strategy will enable the company to improve performance and reduce the negative impacts of activities. In addition, a good strategy will improve the company's reputation and increase trust. This will make the company stronger in facing uncertainty and improve long-term performance.

## References

- Al Lawati, H., & Hussainey, K. (2022). Does sustainable development goals disclosure affect corporate financial performance? *Sustainability*, 14(13), 7815.
- Alamouh, A. S., Ballini, F., & Dalaklis, D. (2021). Port sustainable supply chain management framework: Contributing to the United Nations' sustainable development goals. *Maritime Technology and Research*, 3(2), 137-161.
- Alexander, A., & Delabre, I. (2019). Linking sustainable supply chain management with the sustainable development goals: Indicators, scales and substantive impacts. *Sustainable development goals and sustainable supply chains in the post-global economy*, 4(3), 95-111.
- Arena, M., Azzone, G., Ratti, S., Urbano, V. M., & Vecchio, G. (2023). Sustainable development goals and corporate reporting: An empirical investigation of the oil and gas industry. *Sustainable Development*, 31(1), 12-25.
- Avrampou, A., Skouloudis, A., Iliopoulos, G., & Khan, N. (2019). Advancing the sustainable development goals: Evidence from leading European banks. *Sustainable Development*, 27(4), 743-757.
- Baliga, R., Raut, R. D., & Kamble, S. S. (2019). Sustainable supply chain management practices and performance: An integrated perspective from a developing economy. *Management of Environmental Quality: An International Journal*, 31(5), 1147-1182.
- Bose, S., & Khan, H. Z. (2022). Sustainable development goals (SDGs) reporting and the role of country-level institutional factors: An international evidence. *Journal of Cleaner Production*, 335, 130290.
- Centobelli, P., Cerchione, R., & Esposito, E. (2020). Pursuing supply chain sustainable development goals through the adoption of green practices and enabling technologies: A cross-country analysis of LSPs. *Technological Forecasting and Social Change*, 153, 119920.
- Chauhan, C., Kaur, P., Arrawatia, R., Ractham, P., & Dhir, A. (2022). Supply chain collaboration and sustainable development goals (SDGs). Teamwork makes achieving SDGs dream work. *Journal of Business Research*, 147, 290-307.
- Chin, W. W., Salisbury, W. D., Pearson, A. W., & Stollak, M. J. (1999). Perceived cohesion in small groups: Adapting and testing the perceived cohesion scale in a small-group setting. *Small group research*, 30(6), 751-766.
- D'Adamo, I., Gastaldi, M., & Morone, P. (2022). Economic sustainable development goals: Assessments and perspectives in Europe. *Journal of Cleaner Production*, 354, 131730.
- Das, D. (2018). The impact of Sustainable Supply Chain Management practices on firm performance: Lessons from Indian organizations. *Journal of Cleaner Production*, 203, 179-196.
- Gaur, A., & Vazquez-Brust, D. A. (2019). Sustainable development goals: Corporate social responsibility? A critical analysis of interactions in the construction industry supply chains using externalities theory. *Sustainable Development Goals and Sustainable Supply Chains in the Post-global Economy*, 133-157.
- Ghufran, M., Khan, K. I. A., Thaheem, M. J., Nasir, A. R., & Ullah, F. (2021). Adoption of Sustainable Supply Chain Management for Performance Improvement in the Construction Industry: A System Dynamics Approach. *Architecture*, 1(2), 161-182.
- Hair, J. F. Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1988). *Multivariate Data Analysis*, 5<sup>th</sup> ed., New Jersey, Prentice-Hall.
- Iazzi, A., Ligorio, L., Vrontis, D., & Trio, O. (2022). Sustainable Development Goals and healthy foods: Perspective from the food system. *British Food Journal*, 124(4), 1081-1102.
- Ikram, M., Zhang, Q., Sroufe, R., & Ferasso, M. (2021). Contribution of certification bodies and sustainability standards to sustainable development goals: an integrated grey systems approach. *Sustainable Production and Consumption*, 28, 326-345.
- Jacob-John, J., D'Souza, C., Marjoribanks, T., & Singaraju, S. (2023). Sustainable Development Goals: a review of SDG 12.3 in food supply chain literature. *Benchmarking: An International Journal*, 30(9), 3465-3481.
- Khaled, R., Ali, H., & Mohamed, E. K. (2021). The Sustainable Development Goals and corporate sustainability performance: Mapping, extent and determinants. *Journal of Cleaner Production*, 311, 127599.
- Khan, P. A., Juhl, S. K., & Akhtar, S. (2021). Firm sustainable development goals and firm financial performance through the lens of green innovation practices and reporting: a proactive approach. *Journal of Risk and Financial Management*, 14(12), 605.
- Kumar, G., & Goswami, M. (2019). Sustainable supply chain performance, its practice and impact on barriers to collaboration. *International Journal of Productivity and Performance Management*, 68(8), 1434-1456.

- Malys, L. (2023). The approach to supply chain cooperation in the implementation of sustainable development initiatives and the company's economic performance. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 18(1), 255-286.
- Monteiro, M. D. S., Viana, F. L. E., & Sousa-Filho, J. M. D. (2018). Corruption and supply chain management toward the sustainable development goals era. *Corporate Governance: The International Journal of Business in Society*, 18(6), 1207-1219.
- Nayal, K., Kumar, S., Raut, R. D., Queiroz, M. M., Priyadarshinee, P., & Narkhede, B. E. (2022). Supply chain firm performance in circular economy and digital era to achieve sustainable development goals. *Business Strategy and the Environment*, 31(3), 1058-1073.
- Rygh, A., Chiarapini, E., & Segovia, M. V. (2022). How can international business research contribute towards sustainable development goals? *Critical perspectives on international business*, 18(4), 457-487.
- Shibin, K. T., Gunasekaran, A., & Dubey, R. (2017). Explaining sustainable supply chain performance using a total interpretive structural modelling approach. *Sustainable Production and Consumption*, 12, 104-118.
- Wang, X., Yuen, K. F., Wong, Y. D., & Li, K. X. (2020). How can the maritime industry meet Sustainable Development Goals? An analysis of sustainability reports from the social entrepreneurship perspective. *Transportation Research Part D: Transport and Environment*, 78, 102173.
- Wolf, J. (2014). The relationship between sustainable supply chain management, stakeholder pressure and corporate sustainability performance. *Journal of Business Ethics*, 119, 317-328.
- Yamin, S., & Kurniawan, H. (2011). Generasi baru mengolah data penelitian dengan partial least square path modeling. *Jakarta: Salemba Infotek*.
- Zhou, M., Govindan, K., & Xie, X. (2020). How fairness perceptions, embeddedness, and knowledge sharing drive green innovation in sustainable supply chains: An equity theory and network perspective to achieve sustainable development goals. *Journal of Cleaner Production*, 260, 120950.
- Zimon, D., Tyan, J., & Sroufe, R. (2020). Drivers of sustainable supply chain management: Practices to alignment with unsustainable development goals. *International Journal for Quality Research*, 14(1), 45-56.



© 2024 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).



## ORIGINALITY REPORT

28%

SIMILARITY INDEX

28%

INTERNET SOURCES

20%

PUBLICATIONS

%

STUDENT PAPERS

## PRIMARY SOURCES

1	<a href="http://ijsoc.goacademica.com">ijsoc.goacademica.com</a> Internet Source	4%
2	<a href="http://www.17goalsmagazin.de">www.17goalsmagazin.de</a> Internet Source	2%
3	<a href="http://theijbmt.com">theijbmt.com</a> Internet Source	2%
4	<a href="http://international.areaai.or.id">international.areaai.or.id</a> Internet Source	2%
5	<a href="http://www.jurakunman.stiesuryanusantara.ac.id">www.jurakunman.stiesuryanusantara.ac.id</a> Internet Source	2%
6	<a href="http://www.bircu-journal.com">www.bircu-journal.com</a> Internet Source	1%
7	<a href="http://ijset.org">ijset.org</a> Internet Source	1%
8	<a href="http://www.jisem-journal.com">www.jisem-journal.com</a> Internet Source	1%
9	<a href="http://jurnal.poltekapp.ac.id">jurnal.poltekapp.ac.id</a> Internet Source	1%
10	<a href="http://j-innovative.org">j-innovative.org</a> Internet Source	1%
11	<a href="http://ijerfa.afdifaljournal.com">ijerfa.afdifaljournal.com</a> Internet Source	1%
12	<a href="http://repository.uki.ac.id">repository.uki.ac.id</a> Internet Source	1%
13	<a href="http://bircu-journal.com">bircu-journal.com</a>	

Internet Source

1 %

14

[dinastipub.org](https://dinastipub.org)

Internet Source

1 %

15

[intradef.org](https://intradef.org)

Internet Source

1 %

16

[journal.multitechpublisher.com](https://journal.multitechpublisher.com)

Internet Source

1 %

17

[jrssem.publikasiindonesia.id](https://jrssem.publikasiindonesia.id)

Internet Source

1 %

18

[infor.seaninstitute.org](https://infor.seaninstitute.org)

Internet Source

1 %

19

[ecohumanism.co.uk](https://ecohumanism.co.uk)

Internet Source

1 %

20

Siti Rahmayuni, Anwar Arifin Pinem. "The Effect of Risk Management on Performance Finance with Supervision as Moderation", Walter de Gruyter GmbH, 2024

Publication

1 %

21

[iccd.asia](https://iccd.asia)

Internet Source

1 %

22

[pdfs.semanticscholar.org](https://pdfs.semanticscholar.org)

Internet Source

1 %

23

R. Iqbal Robbie, Ali Roziqin, Shannaz Mutiara Deniar, Ardik Praharjo, Kenny Roz. "Environmental Issues and Social Inclusion in a Sustainable Era", Routledge, 2023

Publication

1 %

24

[conference.loupiasconference.org](https://conference.loupiasconference.org)

Internet Source

1 %

---

Exclude quotes	Off	Exclude matches	< 1%
Exclude bibliography	On		