

The influence of green product and green process innovation on financial performance and the role of sustainable business strategy as a mediator



Putu Indah Hapsari¹⁺

I Gusti Bagus Wiksuana²

Luh Gede Sri Artini³

Sayu Ketut Sutrisna Dewi⁴

^{1,2,3,4}Management Science, Udayana University, Bali, Indonesia.

¹Email: pt.indahhapsari@gmail.com

²Email: igb.wiksuana@yahoo.com

³Email: lg_artini@unud.ac.id

⁴Email: sutrisna.dewi@unud.ac.id



(+ Corresponding author)

ABSTRACT

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This study examines the impact of green product and green process innovation on the financial performance of export-oriented SMEs in Bali Province, with sustainable business strategy as a mediating variable. Grounded in the Resource-Based View (RBV) paradigm, the research emphasizes the role of distinctive resources in achieving a competitive advantage. A quantitative approach was employed, involving a survey of 452 export-oriented SME actors in Bali. Data were analyzed using Partial Least Squares-Structural Equation Modeling to explore the relationships between green innovation, sustainable business strategy, and financial performance. The results indicate that both green product innovation and green process innovation significantly and positively influence export financial performance. Furthermore, sustainable business strategy mediates the relationship between green innovation (both product and process) and financial performance. These findings highlight the importance of integrating sustainable practices to amplify the financial benefits of green innovation. The study provides actionable insights for SME actors and policymakers, suggesting that adopting sustainable business strategies can enhance competitiveness in the global market. Recommendations include fostering green innovation and embedding sustainability into core business strategies to improve financial outcomes. This research contributes to the theoretical framework by integrating green innovation and sustainable strategy concepts within the context of export-oriented SMEs.

Contribution/ Originality: This study addresses a gap in developing countries by demonstrating how green products and process innovation, mediated by sustainable strategy, enhance financial performance in Bali's export-oriented SMEs. Combining RBV theory with sustainability, it offers a novel framework linking green innovation to competitive advantage, assisting policymakers and SME managers in adopting eco-friendly practices.

1. INTRODUCTION

Small and medium-sized industries (SMEs) play a strategic role in the national economy. According to data from the Ministry of Industry, SMEs currently number 4.19 million business units, dominating 99.7% of the total industrial business units in Indonesia. SMEs also contribute 21.44% of the total industrial output value and over 60% to the national GDP in 2022. Although the specific percentage for exports varies, SMEs contribute around 14-20% of total national exports. This demonstrates the critical role of SMEs in enhancing the competitiveness of Indonesian products in the international market. In Bali, SMEs are vital to regional economic growth, with handicrafts and other creative products being the leading exports. The handicraft sector contributes up to 9% to Bali's Gross Regional

Domestic Product (GRDP). The financial performance of export-oriented SMEs has become a focus for the government, which encourages these businesses to align with sustainability principles (Ni, Cheng, & Huang, 2021) based on the triple bottom line (profit, people, and planet) as part of the national priority agenda toward a green economy (Díaz-Gil, 2024) low-carbon development, and the development of green SMEs as outlined in the 2020-2024 National Medium-Term Development Plan. Many SMEs have yet to fully meet the quality and sustainability standards required for international markets, which affects their competitiveness (Kijkasiwat & Phuensane, 2020). Facing competition from foreign products, Indonesian export-oriented SMEs struggle to compete in terms of price and quality, which impacts their export financial performance (Jasch & Stasiskiene, 2005).

New investments by SMEs can focus on developing more environmentally friendly products and processes. With increasing environmental awareness, companies are expected to invest in technologies and practices that support sustainability. This includes adopting efficient and eco-friendly production methods to reduce waste and resource usage, as well as creating sustainable products with minimal environmental impact. Investments in environmentally oriented products result in green products (eco-green or eco-friendly products) (Ranihusna, 2024) designed to minimize negative environmental effects. Green products can attract environmentally conscious consumers, thereby increasing sales and profitability. Research by Ikpor et al. (2022) found that 81% of consumers consider it important for companies to care about environmental conditions. Another fact is that SMEs producing goods or services that apply sustainability principles achieve better export value (Maitah, Smutka, Sahatqija, Maitah, & Phuong Anh, 2020). Green products are inseparable from innovations in their production processes (Tariq, Badir, Tariq, & Bhutta, 2017). Green process innovation involves using raw materials that meet specific criteria: renewable, reusable, and non-destructive to environmental functions (Li, Jayaraman, Paulraj, & Shang, 2016). One form of green innovation is utilizing production waste to create derivative products, minimizing waste (zero waste) (Pender, Romoli, & Fuller, 2024). Additionally, the use of environmentally friendly energy sources such as renewable energy (bioenergy, solar, and water) is part of the production process for green SMEs (Khan, Arif, Sahar, Ali, & Abbasi, 2022).

SMEs that adopt green product and green process innovation typically see improved financial performance, claims Khan et al. (2022). According to research by Sun and Park (2018), one tactic used by enterprises to grow their operations and enhance the export financial performance of SMEs is green process innovation. According to Roespinoedji, Saudi, Hardika, and Rashid (2019), export financial performance is positively impacted by green process innovation. Green process innovation, according to Wong (2012), is an organization's endeavor to create new eco-friendly products using the 3Rs (Reduce, Reuse, and Recycle) in order to improve export-related financial performance. By adopting eco-friendly production systems, SME products will be selected for export to other countries, often at exclusive prices. However, findings from Xie, Hoang, and Zhu (2022) indicate that green process innovation does not significantly impact the financial performance of export-oriented industries. Export-oriented SMEs in Indonesia, particularly in Bali, face challenges such as immature product life cycles and conventional strategies. Immature product life cycles result in less competitive pricing, requiring SMEs to seek financing facilitation. Similarly, best practices for green implementation in Philippine food SMEs require investments of around IDR 62.5 million in green equipment. In the long term, these practices lead to cost savings of IDR 146.8 million. Toscano, Balzarotti, and Re (2022) found that SMEs face constraints due to a lack of sustainable business strategies.

Export financial performance is positively correlated with sustainable company strategy, according to a number of research studies Sousa et al. (2023). According to Bubicz, Barbosa-Póvoa, and Carvalho (2021), SMEs' financial performance is impacted by their sustainable business plan. Zandi, Khalid, and Islam (2019) showed that by implementing sustainable business practices, SMEs enhance their financial performance and support the growth of the green economy. In order to gain a competitive edge, research on sustainable company strategy requires special and unique resources. The strategy to sustain sustainable business strategies includes the development of green products and green processes (Hidayatullah, Windhyastiti, Aristanto, Rachmawati, & Alvianna, 2022). Financial obstacles that prevent SMEs from implementing green innovations and creating green products, which in turn

impede export procedures, are the driving force behind the adoption of sustainable business strategies (Edeh, Obodoechi, & Ramos-Hidalgo, 2020). RBV theory states that in order to improve SMEs' export financial performance, sustainable business strategy mechanisms must be put in place to facilitate the development of green products and green processes (Huong et al., 2021). The relationship between green innovation and financial success is mediated by a sustainable business strategy, which ensures that green activities are both profitable and environmentally beneficial.

RBV theory states that businesses can promote sustainable practices by utilizing resources such as clean technology (green process innovation) and green innovation (green products) (Li et al., 2020). Researchers have addressed conflicting results about the impact of green products and green process innovation on export financial success. Purnamawati, Jie, Hong, and Yuniarta (2022) make the case that more environmentally friendly product innovations should be taken into consideration in order to attain more consistent export financial performance. RBV theory aids in understanding how innovations develop into strategic assets that enhance market distinction and value. RBV research may demonstrate how a business's relationships with stakeholders, including consumers, communities, and governments, can serve as vital assets for promoting sustainable projects. RBV emphasizes the importance of green products and green process innovation as strategic resources for competitive advantage, according to research on the export financial performance of Bali's SMEs employing sustainability and RBV methodologies. While increasing profitability and export competitiveness, sustainability ensures that green business practices have a positive environmental impact. The successful integration of these two ideologies is measured by financial performance, which drives the shift to a green economy both locally and globally.

2. LITERATURE REVIEW AND HYPOTHESIS

2.1. Resource-Based View (RBV) Theory

One important method in the study of sustainable corporate strategy is the Resource-Based View (RBV) hypothesis. RBV emphasizes that the secret to gaining a sustained competitive edge is a company's internal resources and assets. According to RBV, value creation requires special and priceless resources (Suoniemi, Meyer-Waarden, Munzel, Zablah, & Straub, 2020). RBV supports the idea that businesses should incorporate social and environmental responsibility into their corporate strategies to be considered sustainable. Based on RBV research, businesses can develop strategies focused on: 1) creating new resources, such as educating employees or investing in green technology; 2) collaborating with stakeholders, such as partnering with institutions and communities to generate shared value. By understanding and applying RBV theory, businesses can create sustainable plans that benefit society and the environment, in addition to generating profit (Ringo, Tegambwage, & Kazungu, 2023).

Green process innovation and green products can increase a company's negotiating power, according to the RBV (Ringo, Tegambwage, & Kazungu, 2022). Customers who care about the environment tend to find sustainable items more appealing, which boosts sales and customer loyalty. Through cost reduction, better efficiency, and product differentiation, innovations with a sustainability focus can help improve financial performance (Aydiner, Tatoglu, Bayraktar, & Zaim, 2019). According to Ozdemir (2020) a sustainable corporate strategy can act as a link between financial performance and green innovation. Businesses can improve results by utilizing their current resources by incorporating green innovation into their overall business plan (Aljuboory, Singh, Haddad, Al-Ramahi, & Ali, 2021). A clear and sustainability-focused strategy ensures consistent adoption of green innovation across the organization, enhancing its effectiveness and impact.

2.2. Green Product and Export Financial Performance

RBV theory emphasizes that green product innovation leads to sustainable export financial performance (Ahmed & Shafiq, 2022). Previous research on green products and export financial performance has primarily focused on non-oil industries outside SMEs. Zhou, Sawyer, and Safi (2021) tested green products in the manufacturing industry. They argued that green products consistently improve export financial performance. Choi and Johnson (2019) examined

the relationship between green product strategic orientation and corporate financial and non-financial performance. Sharma et al. (2021) and Hu, Qiu, She, and Wang (2021) found a significant positive relationship between green products and export financial performance. Similar findings were reported by Gerschewski, Scott-Kennel, and Rose (2020) in manufacturing firms. However, other studies have shown different findings. Song, Wang, and Ma (2020) found no relationship between green products and firm financial performance. Similarly, Hu et al. (2021) concluded that green products do not have a significant effect on SMEs' export financial performance. Thus, the first hypothesis of this study is as follows:

H₁: Green products positively influence export financial performance.

2.3. Green Process Innovation and Export Financial Performance

Green process innovation refers to how industrial companies pay attention to the environment in production processes, such as conserving energy, resources, waste, and ecological impacts (Xie et al., 2022). Companies need to execute strategies and innovations, according to the RBV perspective (Aydiner et al., 2019). According to earlier studies, export financial performance is impacted by green process innovation (Duque-Grisales, Aguilera-Caracuel, Guerrero-Villegas, & García-Sánchez, 2020). But according to Marie, Aysolmaz, Figge, and Joshi (2023), there is no connection between export financial performance and green process innovation. Additional investigation is necessary to validate these contradictory results. One strategy for maintaining SMEs' competitiveness and growth while satisfying export demands is green process innovation. The creation and marketing of efficient and successful goods that are acceptable in export markets are among the reasons why export-oriented SMEs are adopting green process innovation (Maitah et al., 2020). Innovation in green processes can increase the likelihood of achieving long-term export financial success. Therefore, the second hypothesis of this study is as follows:

H₂: Green process innovation positively influences export financial performance.

2.4. Sustainable Business Strategy and Export Financial Performance

An approach to business strategy planning and execution that considers long-term social, environmental, and economic impacts is known as "sustainable business strategy" (Bahuguna, Srivastava, & Tiwari, 2023). A sustainable business strategy aims to provide long-term value that benefits both businesses and society, in addition to adhering to environmental standards. In the SME sector, previous research has found that a sustainable business strategy influences SME financial performance (Chi, Chi, Xu, & Kennedy, 2022). However, Sousa et al. (2023) found no relationship between sustainable business strategy and SME financial performance. Khan and Haleem (2021) revealed that SMEs tend to choose sustainable business strategies to improve production quality and gain better export access for business sustainability. By partnering, SMEs gain additional knowledge and technology, which is difficult to obtain without a sustainable business strategy (Demirel & Kesidou, 2019). SMEs need to learn from competitors or partners to "go green." By going green, SMEs will improve export financial performance and social image (Huong et al., 2021). Thus, the third hypothesis of this study is as follows:

H₃: A sustainable business strategy positively influences export financial performance.

2.5. Green Product and Sustainable Business Strategy

Green products significantly impact sustainable business strategies. Generally, green products can bring long-term benefits to companies and consumers (Leppelt, Foerstl, Reuter, & Hartmann, 2013). Tariq, Badir, and Chonglertham (2019) stated in their research that the success of green products depends on a sustainable business strategy, which involves collaboration between consumers and producers. Tariq et al. (2017) also stated that green products influence innovation management. Sustainable green products can provide a competitive advantage for companies, requiring a sustainable business strategy to achieve good performance in a sustainable business context (Bubicz et al., 2021). Although some research by Díaz-Gil (2024) states that green-based products do not influence

company management systems, most policy mechanisms enabling green growth aim to identify technological innovations that reduce human environmental impact and address global environmental issues like climate change (Rogerson & Baum, 2020). Thus, the fourth hypothesis of this study is as follows:

H₄: Green products positively influence sustainable business strategies.

2.6. Green Process Innovation and Sustainable Business Strategy

Green process innovation encourages efficient use of raw materials, reduces raw material costs, and can generate additional revenue by developing ways to convert waste into sellable products (Sun & Park, 2018). Based on this, green process innovation can be used as a strategy to improve a company's financial performance and compete globally (Pender et al., 2024). Xie et al. (2022) proved that implementing green process innovation positively influences sustainable business strategy. This result is supported by Christian and Alhazami (2023) who found that green process innovation positively influences company value and sustainable business strategy. Schuler, Rasche, Etzion, and Newton (2017) found that green process innovation positively influences sustainable business strategy. However, some studies did not find the same results; Sousa et al. (2023) found that green process innovation does not influence management strategy. Nettles et al. (2024) also found that green process innovation practices do not relate to sustainable business strategy. However, Sun and Park (2018) revealed a positive relationship between green process innovation and sustainable business strategy. Thus, the fifth hypothesis of this study is as follows:

H₅: Green process innovation positively influences sustainable business strategy.

2.7. Green Product, Export Financial Performance, and Sustainable Business Strategy

The application of sustainable business strategies and corporate innovation (both product and process innovation) is positively and significantly correlated, according to empirical data, and this can enhance a firm's financial performance (Nik Abdullah, Harjito, & Said, 2020). According to these results, a sustainable business plan is a practical and crucial instrument for providing data to attain business financial performance. According to additional empirical data, the relationship between green products and export financial success is mediated by a sustainable company strategy (Ni et al., 2021). According to Weng, Chen, and Chen (2015), green products have an indirect impact on the connection between export financial performance and sustainable company strategy. Hu et al. (2021) discovered that, through the use of sustainable business practices, green products have a statistically significant beneficial impact on export financial performance. A hypothesis demonstrating how green products indirectly affect export financial performance through sustainable business strategy can be derived from prior research. Therefore, the sixth hypothesis of this study is as follows:

H₆: Green products positively influence export financial performance through sustainable business strategies.

2.8. Green Process Innovation, Export Financial Performance, and Sustainable Business Strategy

The Resource-Based View (RBV) theory suggests that companies need different sustainable strategies based on their unique needs. Research shows that green process innovation can improve export financial performance when supported by a strong sustainable business strategy (Sun & Park, 2018). This means companies using eco-friendly strategies tend to perform better financially (Naciti, 2019). Similarly, studies on manufacturing firms confirm that both process innovation and sustainability strategies boost financial success (Haddoud, Nowinski, Jones, & Newbery, 2019). Shi and Tsai (2020), who studied manufacturing company managers, found evidence that sustainable business strategy mediates top management's commitment to choosing green process innovation as a competitive strategy for environmental performance. Chaudhry and Amir (2020), also studying the manufacturing industry, found that sustainable business strategy mediates the influence of product and process innovation on export financial performance. This implies that a sustainable business strategy can mediate the relationship between green process innovation and export financial performance. Therefore, the seventh hypothesis of this study is as follows:

H_7 : Green process innovation positively influences export financial performance through sustainable business strategy.

3. RESEARCH METHODOLOGY

This study is explanatory, aiming to clarify the positions of the researched variables and their interrelationships. The research was conducted in the natural setting of export-oriented SMEs in Bali. The study population consisted of 452 export-oriented SME units registered with the Bali Industry and Trade Office (Balisatudata.baliprov.go.id). The sampling technique followed (Ketchen, 2013), with the sample size determined proportionally.

$$n = \frac{434.1008}{5.4704} = 79.35 = 80$$

This study employed a sample of 80 export-oriented SMEs in Bali. Primary data were collected through a self-administered survey, with validity tested using Pearson's correlation and reliability assessed via Cronbach's Alpha. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM), which comprises two components: the measurement (outer) model and the structural (inner) model. As an explanatory study, it aims to examine the relationships between variables. The self-administered survey method served as the primary data collection technique.

Table 1. Number of business actors/SMEs receiving export facilitation.

Regency	Number of exporters
Jembrana	11
Tabanan	20
Badung	158
Gianyar	40
Klungkung	2
Bangli	2
Karangasem	4
Buleleng	23
Denpasar	192
Total	452

Source: balisatudata.com (2025).

4. RESULTS AND DISCUSSION

The research instrument, a questionnaire, was tested for feasibility through a pilot test on 30 export-oriented handicraft companies registered with ASEPHI (Indonesian Handicraft Exporters and Producers Association) in Bali Province. The questionnaire was declared valid and reliable. It was sent to all 80 targeted SME samples. The response rate showed that out of 80 targeted samples, 69 responded, all of which could be processed, resulting in an 86% response rate. Nonresponse bias was tested using the Mann-Whitney U test. The criteria used were that if the probability was greater than or equal to the significance level ($\alpha = 5\%$), the two response data groups were not different, indicating no nonresponse bias occurred.

Table 2. Mann-Whitney U test (non-response bias).

Variable	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Green product	1481.000	7476.000	-0.242	0.809
Green process innovation	1425.000	7420.000	-0.540	0.589
Sustainable business strategy	1351.500	7346.500	-0.935	0.350
Export financial performance	1498.000	7493.000	-0.150	0.881

The nonresponse bias test, as presented in Table 2, indicated no significant differences between early and late respondents. This conclusion was supported by the asymptotic significance (2-tailed) values for Green Product (0.809), Green Process Innovation (0.589), Sustainable Business Strategy (0.350), and Export Financial Performance (0.881), all of which exceeded the 5% significance level ($\alpha = 0.05$). Since these probability values were greater than

the threshold, the results confirm the absence of nonresponse bias. Therefore, the data collected before and after the cutoff date were considered comparable and suitable for testing the research hypotheses. This study used respondents from top management levels, as organizational performance is highly determined by the solidity of the top management team (Hambrick, 2018).

Table 3. Respondent profiles by position and tenure.

Tenure	Top management	Other managers	Total
1-5 years	20 (28.99%)	10 (14.49%)	30 (43.48%)
6-10 years	10 (14.49%)	20 (28.99%)	30 (43.48%)
≥ 10 years	6 (8.69%)	3 (4.34%)	9 (13.04%)
Total	36 (52.18%)	33 (47.82%)	69 (100%)

Based on Table 3, the distribution of respondent positions showed that 52.18% were in top management, and 47.82% were other managers. The collected data were analyzed using Partial Least Squares (PLS). Validity was assessed through cross-loading, with the criterion that if the loading factor value for a variable exceeded the correlation of the indicator with other variables, the indicator was considered valid for measuring the corresponding variable.

Table 4. Discriminant validity based on average variance extracted (AVE) values.

Variable	AVE	Green product	Green process innovation	Sustainable business strategy	Export financial performance
Green product	0.707	0.841			
Green process innovation	0.607	0.268	0.779		
Sustainable business strategy	0.623	0.463	0.567	0.789	
Export financial performance	0.609	0.508	0.592	0.654	0.780

Based on Table 4, AVE values greater than 0.50 indicate that discriminant validity was achieved. This suggests that the constructs of green product, green process innovation, sustainable business strategy, and export financial performance demonstrated good discriminant validity. Therefore, the research instruments used to measure all constructs or latent variables in this study satisfied the discriminant validity criteria.

Table 5. Reliability test results.

Variable	Cronbach's alpha	Composite reliability	Result
Green product	0.962	0.967	Reliable
Green process innovation	0.979	0.980	Reliable
Sustainable business strategy	0.945	0.952	Reliable
Export financial performance	0.986	0.986	Reliable

Based on Table 5, the composite reliability and Cronbach's alpha values for the latent variables were above 0.700, indicating that the constructs and instruments were reliable. Therefore, all instruments used in this study met the criteria and were suitable for measuring all latent variables. The evaluation results of convergent validity, discriminant validity, composite reliability, and Cronbach's alpha for indicators or variables concluded that the indicators for each variable were valid and reliable measures. In the structural equation model, model fit or goodness of fit was tested using predictive relevance (Q^2), calculated based on the coefficient of determination (R^2). The Q^2 value ranges between 0 and 1, with values closer to 1 indicating a better fit. The structural model equations were as follows:

1. $Y_1 = 0.403 X_1 + 0.285 X_2 + e_1; R^2 = 0.225.$
2. $Y_2 = 0.219 X_1 + 0.204 X_2 + 0.501 Y_1 + e_2; R^2 = 0.469.$

Tests for the inner model included the coefficient of determination (R^2), predictive relevance (Q^2), and Goodness of Fit Index (GoF).

Table 6. Coefficient of determination (R^2).

Model	Influence	R^2
1	$X_1, X_2 \rightarrow Y_1$	0.225
2	$X_1, X_2, Y_1 \rightarrow Y_2$	0.469

Based on Table 6, the coefficient of determination (R^2) for Model 1, which examines the influence of green product and green process innovation on sustainable business strategy, was 0.225. This indicates that these variables contributed 22.5% to sustainable business strategy. For Model 2, the influence of green product, green process innovation, and sustainable business strategy on export financial performance was 0.469, representing a 46.9% contribution. Based on the coefficient of determination, R^2 (for Equation 1) was 0.225, and R^2 (for Equation 2) was 0.469. The total data variance explained by the model was calculated as:

$$Q^2 = 1 - [(1 - R_1^2) \times (1 - R_2^2)] \quad (1)$$

$$Q^2 = 1 - [(1 - 0.225) \times (1 - 0.469)] = 0.777 \quad (2)$$

The Q^2 value of 0.777 indicates that the model explains 77.7% of the variance in export financial performance. This suggests that green products, green process innovation, and sustainable business strategies (both directly and indirectly) contribute 77.7% to export financial performance, while the remaining 22.3% is influenced by other external factors.

$$GoF = \sum \sqrt{AVE \times R^2}$$

$$GoF = \sum \sqrt{AVE \times R^2}$$

$$GoF = \sqrt{\left(\frac{0.612 + 0.639}{2}\right) \times \left(\frac{0.225 + 0.469}{2}\right)} = 0.569$$

The GoF value of 0.569 indicates a strong model fit (exceeding the 0.36 threshold), validating the model's suitability for hypothesis testing. Regarding direct effect analysis, a statistically significant positive influence is established when two conditions are met: (1) the path coefficient is positive, and (2) the t-statistic exceeds the critical value of 1.96 (at $\alpha = 0.05$). These criteria confirm the significant predictive relationship between exogenous and endogenous variables.

Table 7. Direct influence hypothesis testing results.

Influence	Path coefficient	T-statistic	p-value	Result
$X_1 \rightarrow Y_1$	0.403	6.261	0.000	Significant
$X_2 \rightarrow Y_1$	0.285	4.618	0.000	Significant
$X_1 \rightarrow Y_2$	0.219	3.626	0.000	Significant
$X_2 \rightarrow Y_2$	0.204	1.834	0.067	Not Significant
$Y_1 \rightarrow Y_2$	0.501	7.161	0.000	Significant

Based on Table 7, green product positively and significantly influenced sustainable business strategy, with a t-statistic > t-table ($6.261 > 1.96$) and p-value < α ($0.000 < 0.05$). The positive coefficient indicates that increasing green product usage enhances a sustainable business strategy. Green process innovation also positively and significantly influenced sustainable business strategy ($t = 4.618 > 1.96$; $p = 0.000 < 0.05$). Green product positively and significantly influenced export financial performance ($t = 3.626 > 1.96$; $p = 0.000 < 0.05$). However, green process innovation did not significantly influence export financial performance ($t = 1.834 < 1.96$; $p = 0.067 > 0.05$).

Sustainable business strategy positively and significantly influenced export financial performance ($t = 7.161 > 1.96$; $p = 0.000 < 0.05$). Indirect influence hypothesis testing aimed to examine the indirect effect of exogenous variables on endogenous variables through intervening variables.

Table 8. Results of hypothesis testing on indirect influence.

Endogenous variable	Intervening variable	Exogenous variable	Coefficient	T-statistic	p-value	Result
Export financial performance	Sustainable business strategy	Green product	0.236	4.291	0.000	Significant
Export financial performance	Sustainable business strategy	Green process innovation	0.195	4.105	0.000	Significant

Based on Table 8, the indirect influence of green products on export financial performance through sustainable business strategy was significant ($p = 0.000 < 0.05$). Therefore, sustainable business strategy mediated the relationship between green products and export financial performance. Similarly, the indirect influence of green process innovation on export financial performance through sustainable business strategy was significant ($p = 0.000 < 0.05$), confirming sustainable business strategy as a mediator.

The first hypothesis, stating that green products positively influence export financial performance, was supported. This aligns with Alhadid and As'ad (2014); Li et al. (2016) and Tariq et al. (2019) also found significant positive effects. Green products are no longer just a moral obligation but a competitive advantage, as per RBV theory, Christian and Alhazami (2023). The second hypothesis, that green process innovation positively influences export financial performance, was not supported. Wu, Wei, Wang, McDonald, and Han (2022), who discovered beneficial benefits, are in conflict with this. SMEs in Bali concentrate on green technology that is accepted by the government, certification authorities, and customers (Qing, Chun, Dagestani, & Li, 2022). Cost-effective and distinctive innovations, such as sandals made from dried grass weaving and clothing hangers made from sawdust (Arfi, Hikkerova, & Sahut, 2018), result in savings and export success.

The third hypothesis, which proposed a positive relationship between sustainable company strategy and export financial performance, was confirmed. SMEs in Bali are increasingly adopting sustainable practices such as sourcing eco-friendly materials, improving waste management, and involving local communities to enhance their competitiveness in global markets. The fourth hypothesis, suggesting that green products positively influence sustainable company strategy, also received support. Drawing on Huang and Li (2018) Resource-Based View (RBV) theory, green products serve as strategic assets that help firms gain a competitive advantage. Similarly, the fifth hypothesis, linking green process innovation to sustainable strategy, was upheld. As Cop, Alola, and Alola (2020) highlight, RBV theory positions eco-friendly technologies and processes as key strategic resources. The sixth hypothesis, indicating that green products indirectly enhance export financial performance through sustainable business strategies, was validated. Adu, Flynn, and Grey (2022) emphasize the mediating role of sustainability in this relationship. Likewise, the seventh hypothesis, which proposed that green process innovation indirectly boosts export performance via sustainable strategy was supported. As Utami, Dhewanto, and Lestari (2023) note, Balinese SMEs recognize that integrating sustainability into their operations is crucial for improving financial outcomes.

5. CONCLUSION

The findings demonstrate that adopting sustainable business strategies and developing green products significantly enhance the export financial performance of SMEs in Bali. A strong positive correlation exists between eco-friendly product offerings and financial success, indicating that increased production of sustainable goods leads to better economic outcomes. Additionally, sustainable business practices directly and positively influence export performance. These results highlight the critical role of environmental responsibility and strategic sustainability in driving financial growth for Balinese SMEs in international markets. Green products had a positive and significant

indirect impact on export financial performance through sustainable business strategy, validating the strategy's mediating function. Green process innovation, however, has a considerable indirect impact through sustainable company strategy but has little direct impact on export financial performance. This study provides an initial analysis of green products, green process innovation, and sustainable business strategy in relation to export financial performance. The model adopted from previous research has limitations, such as focusing only on two independent variables. Future research could expand the analysis by including additional variables. Practical implications suggest that SME managers adopt sustainable business strategies. The study contributes to RBV theory by highlighting those resources supporting sustainability, such as green technologies and ethical management practices, provide long-term competitive advantages.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Data Availability Statement: Upon a reasonable request, the supporting data of this study can be provided by the corresponding author.

Competing Interests: The authors declare that they have no competing interests.

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