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Sustainable corporate performance through corporate social responsibility in the printing sector: The mediating role of green product innovation and green supply chain

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Abstract: The study investigates the impact of corporate social responsibility (CSR) on sustainable corporate performance (SCP). Specifically, the study examines the mediating role of green product innovation (GPI) and green supply chain (GSC) in this relationship. A quantitative method was employed and used Smart PLS SEM to analyze the data collected from 418 respondents from managers and senior managers in small and medium sized enterprises (SMEs) from the printing industry in Vietnam. This study shows that there is positive impact from CSR to SCP. More importantly, the study has investigated the existence of the mediating role of GPI and GSC in the mechanism of these relationships. Through the analysis, the study brings about valued implications to managers and senior managers in printing companies so as to achieve sustainable performance. This study has highlighted the contributions of CSR, GPI and GSC in sustainability in Vietnamese SMEs. The research will also help SMEs conduct their operational and strategic plans with a positive influence on the environment, society, and the economy.

Keywords: Corporate social responsibility, green product innovation, green supply chain, sustainable corporate performance.

1. Introduction

Continuous performance stands as the ultimate goal for every organization, for it is through consistent performance that organizations can expand and advance (Gavrea, Ilies & Stegerean, 2011). With the dawn of globalization, the demand for corporate sustainability has surged significantly (Hansen & Schaltegger, 2016). Companies are now focusing not only on economic benefits but also on environmental concerns (Svensson et al., 2010). However, maintaining a competitive edge in this context has become an increasingly daunting challenge (Cancino et al., 2018). This approach emphasizes the equal importance of

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each pillar – environmental, economic, and social – in sustainability, leading to the emergence of an integrative sustainability theory (Tseng et al., 2015). Sustainable development, as defined by the World Commission on Environment and Development on 1987, signifies meeting the present generation's needs without compromising the ability of future generations to meet their own. Sustainable development encompasses economic, environmental, and social (EES) performance. The achievement of corporate sustainability lies in the harmonious integration of these three components, fostering efficiency, sustainable growth, and shareholder value.

CSR stands as a strategic instrument, enabling businesses to forge a competitive edge geared towards sustainable development (Abdelhalim & Amani, 2019), setting them apart from competitors (EI-Garaihy et al., 2014). Over recent decades, CSR has become integral to managerial and administrative sciences (Pino et al., 2016), emerging as a focal point in both academic research and managerial practices (Youn et al., 2018). Stakeholders' interest in CSR has risen substantially, drawing attention from researchers and practitioners alike, as noted by Ghaderi et al., (2019) and Maqbool and Zameer (2018). CSR significantly influences a firm's success (Maqbool & Zameer, 2018) by enhancing consumer perceptions, establishing brand recognition, augmenting brand value, reducing advertising and operational costs, and attracting talent and investors (Li et al., 2015). Consequently, CSR offers a multitude of benefits to companies, fostering increased loyalty, trust, positive brand sentiment, and the ability to counter adverse publicity (Sen et al., 2006).

Seuring (2004) characterizes "environmental supply chain management" as the strategic coordination of material and information flows across the supply chain. This integration aims to meet customer demand for eco-friendly products and services manufactured through environmentally responsible processes. Key business functions, such as purchasing, manufacturing, marketing, logistics, and information systems, need to be harmonized. Strategic alignment is crucial, encompassing customer focus, efficiency, quality, responsiveness (Zelbst et al., 2010), and, more recently, environmental sustainability. In the face of supply chain competition and evolving customer needs, practices that confer competitive advantages must be identified and embraced at the supply chain level. These practices, as highlighted by Green et al. (2008), necessitate collaboration between manufacturers, suppliers, and customers to enhance environmental sustainability. The implementation of these green supply chain management (GSCM) practices is anticipated to lead to enhanced environmental performance, indicated by reduced air emissions, effluent waste, solid waste, and the use of toxic materials.

CSR has been viewed as a driver for GSC, which in turn affects SCP and can be a mediator for the relationship between CSR and SCP. According to Quarshie et al. (2016), companies that commit to social responsibility tend to include managing their supply chain partners. Further, GSC management and business performance are significantly and favorably correlated (Wang et al., 2020). Also, by triggering space for innovation, CSR can be an influence for GPI (McWilliams & Siegel, 2000). The pursuit of GPI can bring a company competitive advantages (Al-Abdallah & Al-Salim, 2021), thus suggesting that GPI could mediate the influence of CSR on SCP.

Even though SCP is gaining significant attention alongside its response to CSR initiatives and other factors of adding "greeness" within a firm's operation, literature on the relationship between GPI and GSC on SCP remains scarce. Also, the roles of GPI and GSC as mediators in the relationship between CSR and SCP are still vague. Thus, this lack in the literature raises the following research questions:

RQ1: How do CSR, GPI, and GSC engage in boosting SCP?

RQ2: Does GPI and GSC contribute as mediating roles in the relationship between CSR and SCP?

This study investigates the impact of CSR, GSM, and GPI on SCP in Vietnam and hence adds to the scholarly conversation. Additionally, the study intends to demonstrate the major contribution of CSR to improving SCP by revealing an indirect association between CSR and SCP that is mediated through GPI and GSM. This academic project complements Stakeholder Theory, supports the Resource-Based View theory, and supports the

Knowledge-Based View, adding to the field's academic framework. This study also provides corporate leaders with insights into a comprehensive strategy that integrates CSR, GSM, GPI, and SCP for long-term success. The report emphasizes the significance for company executives and managers to integrate sustainable practices into every aspect of their businesses, underlining that achieving SCP is an extended effort that calls for an all-encompassing strategy.

2. Literature review and hypothesis development

2.1. Theoretical underpinnings

According to Freeman's (1984) stakeholder theory, an organization consists of different stakeholders, meaning people who draw impacts and who can be impacted by the operation of the firm. These stakeholders have different interests; thus, it is necessary that the organization understands its stakeholders thoroughly in order to achieve superior performance. The stakeholder-based approach is critical for firms that aim to achieve sustainable performance for many reasons, one of which is that the more a firm promotes a positive relationship with its stakeholders, the higher the level of synergy it will establish. The stakeholder-based approach also pushes managers towards striving for not only financial values but also social responsibility (Fauzi et al., 2010).

The Resource-Based View (RBV) theory has emerged as a cornerstone in strategic management literature, offering valuable insights into how organizations can attain and sustain competitive advantages through their unique resource endowments. Barney (1991) stated that any assets, skills, organizational procedures, information, expertise, etc. that firms control are referred to as resources and emphasized the importance of four critical attributes of resources – value, rarity, inimitability, and non-substitutability (VRIN) – in determining their potential to create sustainable competitive advantages. Additionaly, Barney (1991) formulated the notion of combining RBV and stakeholder theory, citing the possibility for an effective approach to assist with managerial problems.

Grant's (1996) Knowledge-Based View (KBV) argues that in addition to traditional tangible resources, knowledge is a distinct and critical strategic resource for firms. He posits that firms gain and sustain competitive advantages by effectively managing and leveraging their knowledge assets. According to Grant (1996), there are two kinds of knowledge: tacit and explicit knowledge, in which, tacit knowledge is personal and context-specific, residing in the minds of individuals, while explicit knowledge is codified and can be documented. Firms need to manage both forms of knowledge effectively. The knowledge-based view (KBV) posits that the core competence of a corporation comes from its tacit knowledge. Companies integrate and innovate internal personal knowledge to create new valuable expertise while also effectively obtaining external knowledge to enhance their competitive advantage.

2.2. The nexus between CSR and GPI

Numerous studies have demonstrated how CSR may open the door to innovation by utilizing social, environmental, or sustainability factors to develop innovative business frameworks, potential markets, and novel products, services, and processes (Wagner, 2010; Guoyou et al., 2013). Businesses with a particular CSR focus can improve their capacity for innovation (Bocquet et al., 2013; Marin et al., 2017). The possibility to improve sustainability management performance while fulfilling natural preservation regulations is perhaps where the value of green innovation lies. According to many researches, there is a link connecting CSR and innovation (McWilliams & Siegel, 2000). As businesses realize that green innovation greatly enhances the preservation of the environment and sustainable commercial development, green innovation has grown into an important component of CSR strategy. Thus, based on the above discussion, the hypothesis is suggested as below:

H1: CSR has a significant impact on GPI.

2.3. The nexus between CSR and GSC

By engaging in and expanding environmentally friendly technologies to

generate and convey ecological products, assess the sustainability of the products, and complete their CSR with regard to environmental responsibility, manufacturers make significant endeavors to supply green products (Hong & Guo, 2018). In improving the "greenness" the supply chain would entail a set of principles and practices that take into account both internal and external stakeholders throughout the entire manufacturing flow. CSR is viewed as the internal effects that are connected to the unforced active techniques that achieve an edge over competitors and greater purchasing power, optimize corporate image and brand, fulfil the anticipated social responsibility, and attract consideration from environmentally conscious customers. Organizations embracing social responsibility are now expanding their CSR operations to encompass controlling of their supply chain partners with the goal to achieve harmonization (Quarshie et al., 2016). Thus, based on the above discussion, the hypothesis is suggested as below:

H2: CSR has a significant impact on GSC.

2.4. The nexus between GPI and SCP

By possibly mitigating the adverse impacts of environmental weaknesses with a positive influence on the world as a whole, eco-innovation boosts the competitive edge of SMEs (Ifrim et al., 2018). As a result, the research suggests that developing green products can give an organization a competitive edge (Al-Abdallah & Al-Salim, 2021). GPI has gained prominence in recent years as one of the most important elements in achieving economic expansion and preservation of the environment (Dangelico & Pujari, 2010). According to research by Carrillo-Hermosilla et al. (2010), eco-innovations have the potential to open up new commercial prospects. In order to investigate the impact of competitive pressure on business investments in environmentally friendly production, Yalabik and Fairchild (2011) created an economic analysis. Their findings demonstrated that competition for customers who care about the environment can increase the efficacy of environmental advances. According to the findings of Pujari's (2006) assessment on environmental new product development initiatives in North America, eco-innovation activities have a favorable effect on market outcomes. Thus, based on the above discussion, the hypothesis is proposed as below:

H3: GPI has a significant impact on SCP.

2.5. The nexus between GSC and SCP

Large organizations can afford to purchase and carry out environmental systems like contamination preventive measures and reverse logistics programs because they have the financial and human resources to do so. This positively affects their corporate performance outcomes. (Younis & Sundarakani, 2019) GSC management adoption enhances operational efficiency for big and medium-sized organizations, according to research by Vijayvargy et al. (2017). According to Wang et al. (2020), there is a positive and substantial correlation between GSC management and company performance. According to Luthra et al. (2016), increasing market share and profitability for businesses is seen as a key approach for boosting their overall success. Nejati et al. (2017) and Zaid et al. (2018) have also demonstrated that GSC management increases operational effectiveness with a cost-cutting focus. By incorporating green initiatives and green practices into SCP, businesses throughout the whole supply chain increase corporate performance for sustainability and boost environmental performance (Zaid et al., 2018).

H4: GSC has a significant impact on SCP.

2.6. The nexus between CSR and SCP

Corporate Social Responsibility (CSR) wields an impact on both financial and non-financial performance indicators, while some research indicates that CSR initiatives can enhance economic outcomes and performance (Javed & Husain, 2021; Malesios et al., 2021). Depending on the context, CSR can influence social welfare and emissions (Fukuda & Ouchida, 2020). Furthermore, CSR efforts can bolster consumer perceptions and enhance employee satisfaction (Brunton et al., 2017; Fatima & Elbanna, 2020), both of which are non-financial facets of performance. Considering that CSR can also foster improved relationships with stakeholders, employee motivation, productivity, and corporate reputation, the following hypothesis is posited:

H5: CSR has a significant impact on SCP.

2.7. The mediating role of GPI and GSC in the relationship between CSR and SCP

Empirical studies have shown that CSR practices can influence a firm's GPI and GSC as a firm's increased level of CSR can enhance its innovation capability and also its proactivity in managing its environmental impacts (Bocquet et al., 2013; Marin et al., 2017; Huang et al. 2021). Moreover, studies have also suggested that GPI has a significant relationship with SCP (Al-Abdallah & Al-Salim, 2021) and GSC management has a positive and significant relationship with SCP. Thus, based on the above discussion, the hypotheses are proposed as below:

H6: GPI mediates the relationship between CSR and SCP.

H7: GSC mediates the relationship between CSR and SCP.

2.8. Proposed research model

Considering the presented empirical data and the hypothesis put forward, the research model shall be structured with 4 variables: 1 independent variable (CSR), 2 mediating variables (GPI and GSC) and 1 dependent variable (SCP).

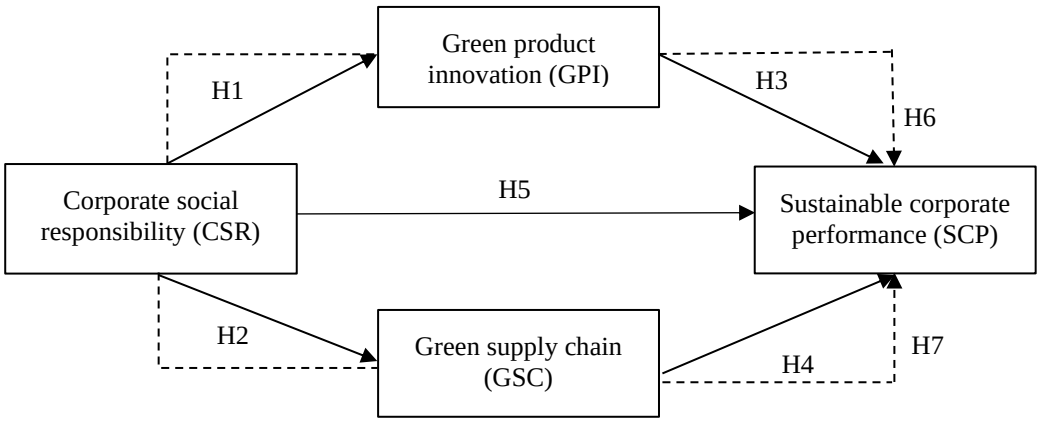

Figure 1: Proposed research model
Source: Author.

3. Research methodology

3.1. Target population, sample procedure

The target population of this research includes printing companies in the South East of Vietnam. The targeted respondents will be middle to senior-level managers. The key criteria applied to identify the size of business is the total number of employees, according to OECD (2021). Following this standard, enterprises with 10 to 49 employees are defined as small businesses, and with 50 to 249 employees are medium-sized enterprises.

3.2. Survey instrument and measures

Data collection primarily relies on a meticulously designed questionnaire, structured around the variables outlined in Table 1. The questionnaire underwent a rigorous validation process, including expert review and pilot testing. It is divided into two sections: Section 1 captures demographic information, while Section 2 comprises open-ended questions related to CSR, GPI, GSC, and SCP within the context of SMEs in Vietnamese printing companies. Participants provide their responses on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Detailed descriptions for each variable can be found in Table 1.

4. Results

4.1. Sample characteristics

There were 575 questionnaires with an open letter to emphasise the seriousness and practical orientation of this study. At the end of the survey, 426 responses were collected, which accounted for a 74% response rate. After filtering out invalid response sheets (incomplete

answers), there were 418 valid sheets remaining, accounting for a final response rate of 72.7%. The sample characteristics are presented in Table 2.

Table 1: Variables and construct of items

Variables	Items	Description	Source
CSR	CSR1	Our company values the expectations of our customers when it comes to improving and evolving our products.	Singh and Misra, 2022; Kamran et al., 2021; Dawit et al., 2021, David et al., 2019
	CSR2	Our company prioritizes the interests of our stakeholders in relation to our business methods and strategic planning.	
	CSR3	Our company provides a balanced work environment that integrates professional responsibilities, natural surroundings, and personal life.	
	CSR4	Our company invests in the continuous education and training of our staff to enhance their skills and awareness of environmental and societal issues	
	CSR5	Our company consistently refines our processes to improve product quality, conserve resources, enhance efficiency, and minimize emissions and pollution.	
GPI	GPI1	Modifying product designs to eliminate pollutants or harmful substances in manufacturing processes.	Amores-Salvadó et al. (2014); Chiou et al. (2011); Kam-Sing Wong (2012)
	GPI2	Enhancing and creating eco-friendly packaging for both existing and new products.	
	GPI3	Implementing product design alterations to enhance energy efficiency during product usage.	
GSC	GSC1	We utilize a sustainable marketing and distribution plan.	Sharma et al. (2017); Wibowo (2018)
	GSC2	For parties to collaborate effectively in recycling, we have established standard operating procedures and systems.	
	GSC3	To help the stakeholders adopt GSC management, we have professional assets, evaluation instruments, and procedures.	
	GSC4	With many stakeholders, we employ cutting-edge contact and project administration instruments to keep a tight relationship going.	
SCP	SCP1	Our primary goal for the next five years is to increase our market share.	Seman et al., 2019; Wang and Huang (2022)
	SCP2	Over the past five years, there has been a consistent enhancement in customer satisfaction.	
	SCP3	Employee satisfaction has shown consistent improvement over the last five years.	
	SCP4	Our company adheres to environmental regulations in both our business operations and strategies.	
	SCP5	Our company proactively takes measures to prevent and address environmental crises in our business operations and strategic planning.	

Source: Author.

Table 2: Descriptions of sample characteristics

Demographic variables		N = 418	Percent (%)
Gender	Male	210	50.2
	Female	208	49.8
Age ranges (years old)	30-39	123	29.4
	40-49	141	33.7
	50-59	106	25.4
	Above 60	48	11.5
Job positions	Middle level manager	308	73.7
	Senior level manager	110	26.3
Working experience	Under 5 years	82	19.6
	5-10 years	126	30.1
	10-15 years	98	23.4
	Above 15 years	112	26.8
Company size	Small business (10-49 employees)	108	65.9
	Medium business (50-249 employees)	56	34.1

Source: Author.

4.2. Measurement model assessment

The appraisal of the measurement model was conducted utilizing a range of indices, including factor loading, Composite Reliability (CR), Cronbach's Alpha, Average Variance Extract (AVE), Variance Inflation Factor (VIF), and the Heterotrait-Monotrait Ratio (HTMT) of correlations. These indices served as instrumental metrics in ascertaining the model's reliability and validity. As depicted in Table 3, the scale's reliability was confirmed with Cronbach's Alpha exceeding 0.7 and CR surpassing 0.3 (Hair et al., 2019). Convergent validity was supported by AVE values above 0.5 (Hulland, 1999). Therefore, the scale's reliability is affirmed to be satisfactory and up to standard.

Table 3: Scale's reliability, convergent, discriminant validity

Variables	Items	VIF of items	Cronbach's Alpha	AVE	CR
CSR	CSR1	2.056	0.881	0.676	0.913
	CSR2	2.151			
	CSR3	2.157			
	CSR4	2.035			
	CSR5	1.909			
GPI	GPI1	1.892	0.824	0.739	0.895
	GPI2	2.115			
	GPI3	1.712			
GSC	GSC1	2.094	0.855	0.697	0.902
	GSC2	1.943			
	GSC3	1.899			
	GSC4	2.014			
SCP	SCP1	2.247	0.862	0.645	0.901
	SCP2	2.119			
	SCP3	1.997			
	SCP4	1.812			
	SCP5	1.680			

Source: Author.

4.3. Discriminant validity

As shown in Table 4, the validation of discriminant validity was substantiated through the appraisal of HTMT. HTMT values, all of which are less than 0.85, provide additional support for the constructs' discriminant validity (Henseler et al., 2016).

Table 4. Heterotrait-Monotrait results

	CSR	GPI	GSC	SCP
CSR				
GPI	0.580			
GSC	0.632	0.627		
SCP	0.686	0.707	0.769	

Source: Author.

4.4. Common bias method

VIF was used to assess common method bias and multicollinearity in the structural model (Hair et al., 2019). VIF values, all below 3 (Table 3), indicate no issues with multicollinearity or common method bias. Furthermore, the Harman single-factor test results demonstrated no evidence of methodological bias, with 4 factors converging to one factor with an AVE of 43.657%, less than the 50% threshold (Podsakoff & Organ, 1986).

4.5. Assessment of structural model

The R^2 for GPI, GSC, and SCP were 0.253, 0.306 and 0.566 respectively, and the adjusted R^2 for these three are 0.251, 0.305 and 0.563, respectively, all surpassing 0.1 (Falk & Miller, 1992), indicating that the structural model employed is satisfactory. NFI is 0.746, which is greater than 0.08 and smaller than 0.9, indicating a near-optimal fit (Forza & Filippini, 1998). The SRMR of 0.058 (< 0.08) (Hu and Bentler, 1999), confirms that the model has a good fit and is valid for research.

Table 5 shows the results of the bootstrapping method performed as part of SEM

analysis. The findings indicate that all p-values are 0, which is below the acceptance threshold of 0.05, verifying that 7 hypothesized relationships are significant with a 95% reliability rate. All original sample values are positive, meaning that all 7 proposed relationships are positively correlated. The influences of mediating variables of the SEM model show that all mediating relationships are significant with p-values below the acceptance threshold of 0.05 with all effect coefficients being positive. Figure 2 illustrates the SEM analysis, including relationships between variables.

The results illustrated in Table 5 supported all 7 hypostheses. CSR exhibits a positive and statistically critical association with GPI (β = 0.503, t = 14.178, p = 0.000 < 0.001), which confirms H1. CSR also exhibits a positive and statistically critical association with GSC (β = 0.553, t = 13.604, p = 0.000 < 0.001), which confirms H2. H3 is supported because CSR positively affects SCP (β = 0.258, t = 5.525, p = 0.000 < 0.001). GPI has a positive impact on SCP (β = 0.270, t = 5.459, p = 0.000 < 0.001), and GSC positively affects SCP (β = 0.376, t = 6.990, p = 0.000 < 0.001), thus supporting H4 and H5. In Table 5, the result of the direct effect of CSR -> SCP is 0.258; the indirect effect of CSR -> GPI -> SCP is 0.136. The total effect is 0.394. From this result, the VAF is calculated by 0.136/0.394 = 34.5% meeting the range between 20% and 80%. This result proved that the GPI is a partial mediator in the relationship between CSR and SCP. In addition, H6 is supported (β = 0.136, t = 5.188, p = 0.000 < 0.001, and 20% ≤ VAF = 34.5% ≤ 80%). Similarly, the result of the direct effect of CSR -> SCP is 0.258; the indirect effect of CSR -> GSC -> SCP is 0.208. The total effect is 0.466. From this result, the VAF is calculated by 0.208/0.466 = 44.6% meeting the range between 20% and 80%. This result proved that the GSC is a partial mediator in the relationship between CSR and SCP the result supports H7 (β = 0.208, t = 5.684, p = 0.000 < 0.001, 20% ≤ VAF = 44.6% ≤ 80%).

Table 5: Boostrapping results

Hypotheses	Paths	Co-efficient	T-statistics	P-value	Confidence interval		VAF%
					2.5%	97.5%	
H1	CSR -> GPI	0.503	14.178	0.000	0.432	0.568	N/A
H2	CSR -> GSC	0.553	13.604	0.000	0.470	0.630	N/A
H3	CSR -> SCP	0.258	5.525	0.000	0.167	0.351	N/A
H4	GPI – SCP	0.270	5.459	0.000	0.171	0.365	N/A
H5	GSC – SCP	0.376	6.990	0.000	0.269	0.482	N/A
H6	CSR -> GPI -> SCP	0.136	5.188	0.000	0.084	0.185	34.5%
H7	CSR -> GSC -> SCP	0.208	5.684	0.000	0.140	0.284	44.6%

Source: Author.

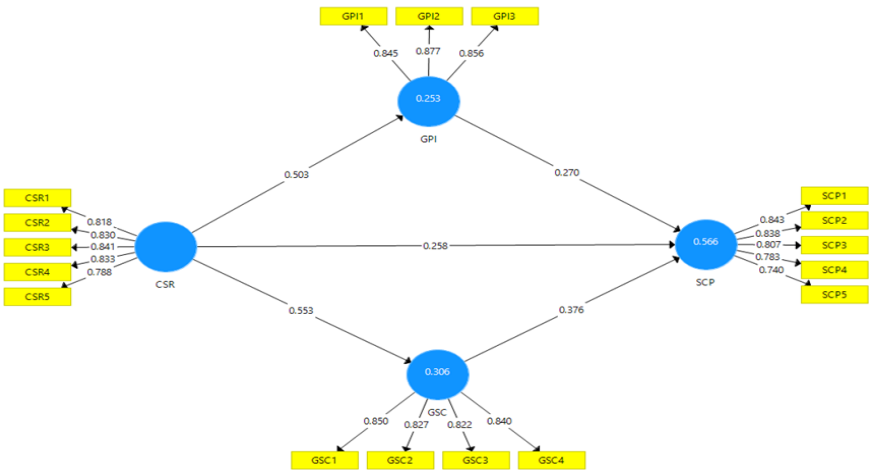

Figure 2: SEM analysis result.
Source: Author.

4.6. Multi-group comparisons analysis

The results of multi-group analysis comparison between small businesses and medium businesses show that the P-value in the relationships CSR -> GPI, CSR -> GSC has a P-value less than 0.05. Thus, there is a difference between small businesses and medium businesses when evaluating these relationships. Specifically, in the regression the difference between small businesses and medium businesses (Path Coefficients-diff (small business – medium business)) is negative, which shows that medium businesses have a stronger relationship than small businesses as in Table 6.

Table 6: Multi-group analyis comparisons for company size

Relations	Path Coefficients-diff (Small business – Medium business)	p-Value original 1-tailed (Small business vs Medium business)	p-Value new (Small business vs Medium business)
CSR -> GPI	-0.210	0.999	0.002
CSR -> GSC	-0.235	0.999	0.002
CSR -> SCP	-0.033	0.635	0.730
GPI -> SCP	0.121	0.115	0.229
GSC -> SCP	-0.162	0.942	0.117
Relations	Specific Indirect Effects-diff (Small business – Medium business)	p-Value original 1-tailed (Small business vs Medium business)	p-Value new (Small business vs Medium business)
CSR -> GPI -> SCP	0.004	0.469	0.937
CSR -> GSC -> SCP	-0.180	0.996	0.008

Source: Author.

Analyzing the mediate relationship for the two groups of small businesses and medium businesses shows that the relation of CSR -> GSC -> SCP has p-Value (small businesses vs medium businesses) both smaller than 0.05. This shows a difference between small businesses and medium businesses. Specifically, in the indirect regression (Specific Indirect Effects-diff (small enterprises – medium enterprises)) it has a negative sign, meaning that medium businesses are rated higher than small businesses as in Table 6.

5. Discussion and implications

5.1. Discussion

A positive relationship is also found between CSR and SCP, both directly and indirectly, with GPI and GSC playing the mediating roles in this relationship. The findings on the relationship between CSR and GPI align with the ideas of Wagner (2010) and Guoyou et al. (2013), stating that innovative company frameworks, potential markets, and new goods, services, and procedures can all be developed through CSR by utilizing social, environmental, or sustainable variables. Furthermore, results from this research also add to the empirical body of studies, suggesting that CSR has a positive impact on GPI, because manufacturers make great efforts to provide green products by utilizing and developing eco-friendly technology to produce and transport ecological goods, evaluating the products' sustainability, and fulfilling their corporate social responsibility obligations concerning the environment (Hong & Guo, 2018). Thus, it can be implied that a company's initiatives in enhancing CSR, managing its environmental impacts, human relationships and profit generation can be beneficial to its long-term growth. The study also continues to align with previous studies in strengthening the evidence for the relationship between GPI and SCP, proving that developing green products can give an organization a competitive edge (Al-Abdallah & Al-Salim, 2021). Likewise, is the influence of GSC on SCP stated by Nejati et al. (2017) and Zaid et al. (2018), enhancing efficiency in operation with cost reduction benefits. Besides, managing product innovation in a green manner and managing the supply chain to match environmental needs and to respond to environmental crises can be influential to CSR strategy, which in turn will be crucial for driving SCP. Moreover, GPI and GSC were found to be

able to enhance SCP individually, aligning with previous studies (Al-Abdallah & Al-Salim, 2021; Younis & Sundarakani, 2019). These influences signify that the more a firm concentrates on the "greenness" of its product innovation and supply chain, the more competitive it will be in terms of sustainable growth.

5.2. Managerial implications

This research offers significant insights into managerial implications. The primary contribution is the elucidation of how SCP can be enhanced through substantial investment in a firm's commitment to society. This study brings an informative motivation to organizations embracing sustainable performance in generating practical measures that optimize processes and offerings in order to mitigate environmental impacts, thus achieving business strategies and creating premium value for stakeholders. Not only does CSR contribute value to internal stakeholders but also generates positive effects of a given company that drive toward the well-being of ecological, social, and economic environments. Enhancing CSR is seen as one of the most essential movements for enterprises to foster longevity in the market. Thus, business managers should acknowledge the importance of CSR in enhancing long term development.

Second, GPI and GSC have also been proved to mediate the influential impact of CSR on promoting the level of SCP. Business leaders are strongly encouraged to put a tremendous effort into implementing GPI and GSC initiatives in a prolonged perspective.

Third, this study provides a well-rounded view of how an organization can achieve SCP and thrive in the long term. SCP requires a well-rounded strategy consisting of organizational environmental initiatives, stakeholders' relationship and profit management. Organizations that have already obtained a high level of SCP will draw attention to developing a balanced strategy that fulfills all the dimensions with the aim of sustaining and thriving in the long term. For organizations that still do not reach the high level of SCP, this study highly encourages business leaders and managers to employ sustainable practices and consider responsibility towards stakeholders and the wider society in every aspect of their organizations.

Finally, the study shows that there is a difference between small businesses and medium businesses in the relationships of CSR -> GPI, CSR -> GSC and CSR -> GSC -> SCP. Thus, managers at medium-sized businesses need to maintain and encourage employees to put a tremendous effort into implementing GPI and GSC initiatives in a prolonged perspective. Besides, for managers or leaders at small businesses the importance of CSR, GPI and GSC in enhancing long term development are also acknowledged.

6. Conclusion, limitations for future scope of study

6.1. Conclusion

This study embarks on the indications of RBV, viewing CSR, GPI and GSC as valuable resources that help increase SCP for firms. The study indicates that initiatives in GPI and GSC can significantly drive the influence of CSR on SCP, thus enhancing a corporate's ability to gain competitiveness from its environmental iniatives. Findings from this research confirm the existence of a positive and substantial connection between CSR, GPI, GSC and SCP. The study also found positive relationships between these variables and SCP. Additionally, the research sheds light on how GPI and GSC influence the link between CSR and SCP as mediators. The outcomes suggest both theoretical and practical implications. Theoretically, the study enriches the existing body of knowledge on sustainable development by presenting empirical evidence elucidating the interrelationships between CSR, GPI, GSC and SCP. Managerially, the findings of the study can be used by managers of SMEs to develop and implement sustainable practices. The study found that CSR, GPI, GSC are all important factors contributing to SCP. Therefore, managers should focus on these factors to improve businesses' sustainability.

6.2. Limitations for future scope of study

This study remains to be limited to certain gaps that can suggest pathways for future study. Firstly, the sample of this study captured data of

respondents working in various sectors. Respondents' opinions toward CRS may vary depending on how the company affects society. Therefore, in order to gain a greater understanding of firms' awareness and involvement with CSR, future research may focus on businesses from a certain segment.

Second, this study was based in Vietnam, thus, it would be useful for future studies for to broaden the geographical scope, thus enrich the culture sensitivity of research. Third, this study focused on SMEs, without covering companies with wider scopes. Therefore, future research could expand their scope of study to reach to companies of bigger sizes. Finally, this study surveyed only management personnel in companies, so for future research to expand, they should focus on other targets of employees to enrich bodies of studies.

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