

Strategic Motives, Proactive Environmental Strategies and Corporate Performance: Role of Business Model Innovation and Competitive Intensity

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Abstract

Rapidly increasing environmental concerns drive corporations to enhance their performance through measures designed to make environmental activities appealing to stakeholders. Therefore, this study investigates the influence of strategic and regulation-based motives on corporate performance and explores the mediating role of proactive environmental strategies, along with the moderating effects of business model innovation and competitive intensity. Quantitative data from the Pakistani manufacturing sector is gathered through a self-administered survey, and the hypotheses are tested using PLS-SEM with SmartPLS 4. The findings indicate that strategic motives indirectly impact corporate performance by adopting PES. Furthermore, the results reveal that business model innovation and competitive intensity influence the relationship between strategic motives and PES. This study has significant implications for managers actively seeking ways to enhance their corporates' performance through proactive environmental strategies. Moreover, policymakers can use these findings to inform the design of policies promoting environmental protection. This study contributes to the Natural Resource-based View (NRBV) and highlights the critical role of PES in enabling corporates to enhance their appeal to stakeholders and ultimately improve their performance.

Keywords: Strategic motives, proactive environmental strategy, corporate performance, business model innovation, competitive intensity, manufacturing sector, Pakistan.

1. Introduction

In today's rapidly evolving corporate landscape, businesses are undergoing a notable shift in their approaches to environmental management. No longer treating it as a case-by-case issue or merely a matter of regulatory compliance, companies now regard ecological considerations as a central element of their overarching business strategy. This transformation has been spurred by heightened global awareness of environmental concerns since the 1960s (Sharma & Aragón-Correa, 2005). Consequently, corporations must adopt strategic measures to meet the evolving sustainability demands. This transformation has given rise to the natural resource-based view of the firm (NRBV), a framework aimed at optimizing corporate performance (Tatoglu et al., 2020). NRBV underscores the significance of proactive environmental strategies (PES) over reactive ones, suggesting that prioritizing eco-conscious practices can lead to superior corporate performance (Hart, 1995; Chan, Lai, & Kim, 2022). Previous studies have identified distinct criteria driving corporate environmental actions, classifying them into performance- and regulation-based factors (Lee, Kim, & Kim, 2018; Chan et al., 2022; Gunarathne, Lee, & Hitigala Kaluarachchilage, 2023). This distinction underscores the benefits of adopting environmentally friendly practices, such as enhancing reputation and gaining a competitive edge (Ullah, Arslan, & Puhakka, 2021). Research shows that businesses embracing strategic motives rooted in sustainable practices can attract investors and consumers, boost market value (Khanifah, 2020), and enhance overall performance (Li et al., 2017). However, despite these advances, existing regulations have influenced corporate environmental initiatives (Mishra & Yadav, 2021). This underscores the need for regulatory frameworks that set minimum requirements for ecological endeavors (Chan et al., 2022). Nonetheless, Chaudhry and Amir (2020) argued that businesses are more likely to embrace green practices when additional regulations incentivize them. Companies that proactively adopt environmental practices gain greater recognition than those that adhere solely to legal obligations (Baah et al., 2020). Scholars focusing on NRBV propose that a company's proactive involvement in pollution prevention operations can address the performance gap in strategic motives through ongoing innovations (Dai, Chan, and Yee (2018), underscoring the significance of emphasizing these activities to enhance corporate performance (Ali, Kausar, & Amir, 2023).

A significant gap emerges in the literature regarding these shifting dynamics. (Kim, 2018) states that there is a lack of comprehensive studies that simultaneously investigate both performance-based motives (PBM) and regulation-based motives (RBM), along with their respective impacts on corporate performance (COP). This gap is particularly noteworthy, given that contemporary businesses increasingly engage in preventive and corrective environmental actions (Baah et al., 2020). Although discussions on this topic abound, empirical studies delving into the effects of these two approaches on performance remain relatively constrained, primarily focusing on operational-level manufacturing firms (Chan

et al., 2022). Furthermore, uncertainties surrounding the NRBV assumption raise questions regarding the consistent adoption of PES (Dixon-Fowler et al., 2013; Chan et al., 2022), warranting further investigation. Research also underscores that in markets characterized by low competitive intensity (CIN), firms may not incur significant losses even if their performance aligns with standards but falls short of client expectations (Feng et al., 2019; Yang, Jiang, & Zhao, 2019; Chan et al., 2022). Conversely, in highly competitive markets, buyers have more flexibility to switch suppliers, prompting firms to tailor their offerings to enhance their performance (Ibrahim & Mahmood, 2022). Interestingly, firms in highly competitive markets tend to outperform those in less competitive environments (Murray, Gao, & Kotabe, 2011). Acknowledging the relevance of Business Model Innovation (BMI), Al-Baghdadi, Alrub, and Rjoub (2021) underscore the need for exploration due to its potential impact on COP.

The motivation for this study stems from the urgency to address these critical gaps in the existing literature. Based on these observations, the current research explores the influence of strategic motives (performance- and regulation-based) on the COP. Furthermore, this study delves into the mediating role of PES and the moderating effects of BMI and CIN. By examining how competitive intensity and BMI shape the relationship among strategic motives, PES, and COP, this study comprehensively explains these variables and their complex interactions. This theoretical framework lays the groundwork for future research and offers valuable insights for businesses striving to enhance COP through sustainability-focused strategies. By scrutinizing moderating effects and proposing an integrated theoretical model, this study contributes significantly to NRBV theory and provides actionable insights into strategies for performance enhancement.

Moreover, this study offers substantial contributions across multiple dimensions beyond bridging gaps in the current knowledge landscape. First, simultaneously investigating proactive and reactive environmental strategies, rather than focusing solely on PES, offers a more holistic perspective, aligning with the contemporary need for businesses to undertake various ecological activities (Kim, 2018; Baah et al., 2020). Second, while prior research has sought to identify the motives driving environmental engagement (Tatoglu et al., 2020; Chan et al., 2022), the intricate relationship between these motives and distinct ecological strategies has rarely been explored. This exploration is pivotal for comprehending the mechanisms that drive firms' strategic responsiveness to environmental concerns, enabling researchers, practitioners, and policymakers to formulate tailored measures at both organizational and societal levels.

The subsequent sections of this study comprise a comprehensive review of the relevant literature and formulation of the hypotheses. The adopted methodology and empirical findings are subsequently presented in detail, followed by an in-depth discussion of the implications of the empirical results. The concluding remarks concisely encapsulate the study's significant contributions and implications for theory and practice.

2. Literature Review and Theoretical Framework

In the next section, we discuss the theoretical perspective of the study in the context of NRBV theory and formulate the research hypotheses based on insights from previous studies.

2.1 Underlying Theory

This study is based on the NRBV perspective, which asserts that firms can direct their corporate efforts to modify or change their operational processes and offerings to manage environmental impacts (Hart, 1995). In this case, a company's performance- and regulation-based efforts can activate fundamental transformations in its operations. Furthermore, when firms integrate environmental considerations into their strategic planning, they will likely build valuable and dynamic competitive capabilities that contribute to nurturing pro-environmental cultures and improving corporate performance (Chan *et al.*, 2022). Hence, this study uses strategic motives and PES constructs to test their effects on COP, which echoes the NRBV theory.

2.2 Strategic Motives and Corporate Performance

Strategic motives encompass both performance- and regulation-based elements and are posited as pivotal drivers that foster long-term corporate success and bolster competitive standing (Bansal & Roth, 2000; Simons, Dewitte, & Lens, 2004). Notably, businesses guided by these motives exhibit a distinct tendency to engage in in-depth cost-benefit analyses concerning their ecological responses (Khanifah, 2020). This analytical orientation serves not only to enhance environmental responsiveness but also reflects a strategic consideration of the financial implications of sustainable practices. Furthermore, aligning businesses with these motives underscores the global consciousness surrounding the escalating environmental degradation. This awareness compels these entities to cater to the environmental requirements of critical external stakeholders, including prominent customers and investors, thereby securing enduring advantages in the marketplace (Walsh & Dodds, 2017). This implies that the strategic orientation toward sustainability is not solely an ethical choice but a strategic move toward market resilience and performance growth. However, the landscape of strategic motives reveals a duality of perspective. Corporations propelled by performance motives view environmental regulations not as stifling constraints but as gateways for potential expansion (Hirunyawipada & Xiong, 2018). This proactive perspective spurs them to continually benchmark industry peers, prioritizing essential enhancements to their products and processes to cultivate corporate sustainability (Potrich, Cortimiglia, & de Medeiros, 2019). The nuanced analysis reveals a strategic imperative for innovation, positioning these businesses to thrive in a competitive ecosystem. Nevertheless, pursuing strategic motives concurrently introduces companies to the intricate domain of corporate environmental legitimacy. This dynamic is central to understanding how a more substantial reputation and enhanced performance are achieved

(Kim, 2018; Chan et al., 2022; Ali et al., 2023). This indicates that these strategic motives are significantly related to improved corporate performance. Therefore, the following hypothesis is proposed:

- H₁: Strategic motives significantly and positively influence corporate performance.

2.3 Strategic Motives, Proactive Environmental Strategies, and Corporate Performance

Conventional end-of-pipe remedies, often associated with mitigating pollution, have emerged as a preference for businesses embedded in regulatory-based environmental practices (Chan et al., 2022). Their focal point primarily concerns upholding compliance with established environmental regulations, serving as a preemptive measure against legal repercussions, such as fines and litigations (Baah et al., 2021). In a strategic maneuver to balance the costs of adopting sustainable practices and the inherent monitoring risks associated with environmental transgressions, certain corporations strive to meet regulatory requirements without fundamentally altering their operational frameworks (Betts, Wiengarten, & Tadisina, 2015). This approach aims to secure operating licenses by reacting to external constraints, thereby averting environmental breaches, and is distinguished by its focus on attaining only the minimum stipulated regulatory standards (Kim, 2018). This reactive inclination, centered around avoiding regulatory non-compliance, often leads to what is termed the ‘not doing more than necessary’ rationale, which prioritizes adherence to regulatory mandates over surpassing them (Bansal & Roth, 2000; Ortiz-de-Mandojana & Bansal, 2016; Li et al., 2023). Consequently, businesses gravitate towards adopting reactive environmental strategies, typically involving installing outcome-control measures to address pollutants after their generation (Reid & Toffel, 2009; Chan et al., 2022). This reactive stance is based on the premise that regulatory requirements drive environmental decisions, overshadowing the potential benefits of a more proactive approach. Given these dynamics, corporate environmental legitimacy has emerged as a pivotal determinant. Corporations that use regulatory-based strategies tend to garner high levels of corporate environmental legitimacy, effectively insulating themselves from rigorous stakeholder scrutiny while enhancing their market acceptance (Chan & Ma, 2016; Chan et al., 2022). The confluence of these advantages significantly contributes to improved corporate market performance (Naidoo & Gasparatos, 2018; Li, Liao, & Ma, 2022), underscoring the symbiotic relationship between corporate environmental legitimacy and performance. Through a comprehensive examination of prior research, we lay the foundation for our hypotheses. We propose that both performance- and regulation-based strategic motives can stimulate PES adoption, thereby catalyzing higher corporate performance. Additionally, we posit a mediation effect of PES on the relationship between strategic motives and COP. Thus, the following hypotheses are proposed:

- H₂: Strategic motives significantly and positively influence PES.
- H₃: PES significantly and positively influences corporate performance.
- H₄: PES significantly mediates strategic motives and corporate performance.

2.4 Moderating Role of Competitive Intensity

CIN denotes an operational environment characterized by intense competition due to a multitude of competitors and limited growth opportunities (Nwachukwu & Vu, 2022). This observation underscores that businesses within highly competitive industries are compelled to adhere to these standards (Feng et al., 2019). The availability of comparable products that compete with one another indicates a highly competitive industry (Chan et al., 2022). CIN has been widely recognized as a significant factor influencing the dynamics of the operational business environment. Previous studies have often regarded this as a contextual variable influencing the interactions between various elements in the strategic decision-making process (Zahra & Garvis, 2000). In other words, in a business environment with high levels of competition, rivals work for human, financial, and technological resources to support their strategic goals, which helps improve their performance (Brammer, Hojmosse, & Marchant, 2012; Malik et al., 2021; Chan et al., 2022). As a result, businesses operating in such a fiercely competitive environment would experience more severe resource shortages, which would hinder their capacity to obtain the resources needed to implement their strategies, including those that are pro-environmental (Aragòn-Correa, Marcus, & Vogel, 2020). However, studies show that CIN significantly moderates how strategic motives correlate with environment-based strategies, firms' financial returns, and corporate performance (Dixon-Fowler et al., 2013; Chan et al., 2022). Hence, this study formulated the following two hypotheses.

- H5: CIN significantly moderates strategic motives and PES relationship.
- H6: CIN significantly moderates PES and COP relationship.

2.5 The Moderating Role of Business Model Innovation

Corporate sustainability is attained through BMI rather than technology, products, or services (Sousa-Zomer & Miguel, 2018). Consequently, Veronica et al. suggested a "system-based strategy," a business model analysis that considers the socio-technical context to provide a fresh perspective on managing dynamism and sustainability transitions (Al-Baghdadi et al., 2021). The systems are formed based on dynamic co-evolutionary principles, which affect the interactions between various institutions, stakeholders, and infrastructures, leading to systemic changes (Rantala et al., 2018). Qi et al. (2010) showed that the ability of an organization to change with the environment is essential to its success. Hence, studies show that BMI might help a company adapt to novel external circumstances to positively enhance its interaction with the organizational structure (Sousa-Zomer & Miguel, 2018; Al-Baghdadi et al., 2021). Hence, BMI may moderate the association between strategic motives and COP, and the following hypothesis is proposed:

- H7: BMI significantly moderates the relationship between strategic motives and the COP.

Figure 1 presents the theoretical framework of our study, analyzing how strategic motives affect COP mediated by PES and moderated by BMI and CIN. The framework illustrates the relationships between performance- and regulation-based strategic motives, PES, and COP. It also emphasizes the moderating roles of CIN and BMI in these relationships and shows the hypotheses' standing.

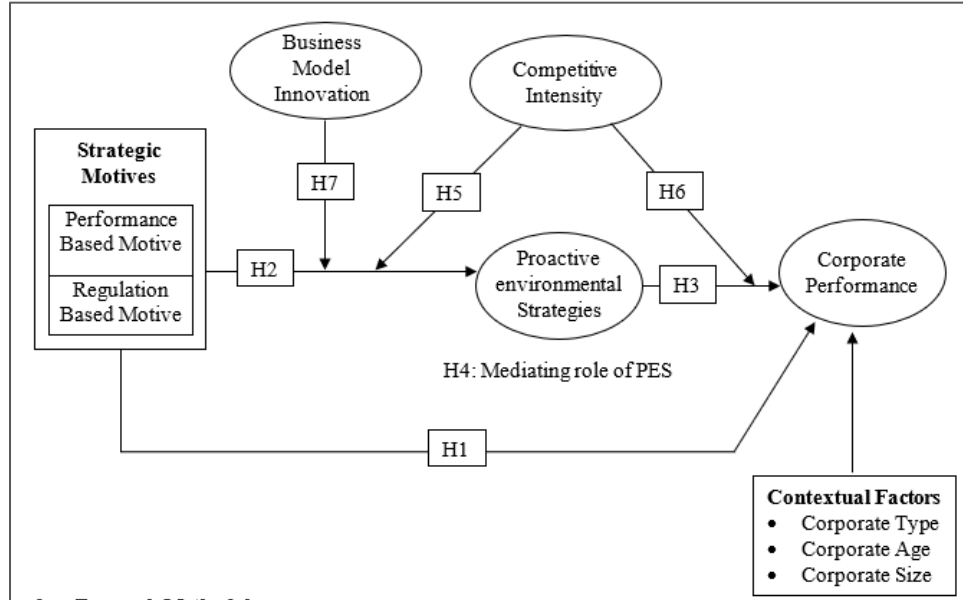


Figure 1: Study Framework

3. Research Methodology

This study adopts an explanatory research design along with a deductive approach. This approach holds particular significance because the theoretical framework expands the exploration of strategic motives and the effects of PES on COP while also incorporating the roles of CIN and BMI. We employed a quantitative method and a survey strategy to analyze the relationships between the study variables. This strategy involved collecting numerical data using a questionnaire. To establish the research scope, our target population comprised manufacturing firms operating in Pakistan. Our sample selection followed a purposive sampling approach chosen for its suitability in addressing the complexities of COP within the manufacturing domain. This approach aligns with Hair's (2011) recommendations for non-probability techniques considering the unavailability of an exact number of managers in Pakistan's manufacturing sector. Thus, purposive sampling ensured the focus and relevance of our study. Using the sampling software 'G*power,' our sample

size determination indicates a minimum of 138 based on study predictors, and we make it double for generalizability yields 276, which is then rounded up to 300.

Our data collection involved a survey technique in which we administered 300 questionnaires to maximize response rates and ensure clarity. After meticulous scrutiny, we established a final sample size of 287 patients. Subsequently, the data underwent a comprehensive analysis encompassing descriptive assessment, normality checks via SPSS, reliability and validity evaluations, model fitness examination via SmartPLS 4, and hypothesis testing employing PLS-SEM. It is well-suited for studies involving complex models, smaller sample sizes, and explanatory objectives (Hair, Black, et al., 2019). Given the intricate interplay between strategic motives, PES, and COP, PLS-SEM accommodates these complexities. Furthermore, PLS-SEM enables the estimation of formative and reflective constructs, facilitating a thorough analysis of the multifaceted relationships within our theoretical framework, such as strategic motives. Thus, PLS-SEM is appropriately aligned with the intricacies and objectives of our research.

3.1 Measuring Instruments

A self-administered questionnaire consisting of three main sections was used. The first section serves as an introduction, the second gathers demographic information, and the third presents statements regarding the study's variables. The questionnaire included 24 items reflecting the constructs of the study. Specifically, Performance and regulation-based strategic motives are assessed through four items each, resulting in eight items. Additionally, a PES was evaluated using five items. BMI, competitive intensity, and corporate performance were gauged using two, five, and four items. These items were sourced from established and validated scales, as indicated in the table below.

Table 1: Scale Measures

Name of variable	Number of items	Scale
Strategic motives	8	(Bansal & Roth, 2000)
Proactive environmental strategies	5	(Amores-Salvadó et al., 2021)
Business model innovation	2	(Sousa-Zomer & Miguel, 2018)
Competitive intensity	5	(Jaworski & Kohli, 1993)
Corporate performance	4	(Nguyen & Adomako, 2021)

4. Empirical Results

The demographic information presented in the study reveals the composition of the participants, thus providing insights into the study's representation and significance. The study's importance lies in its ability to capture a diverse range of respondents and firms, thus enhancing the reliability and applicability of its findings. Table 2 shows that 52.6% of

the participants were male, while the remaining 47.4% were female. This distribution indicates a balanced representation of both genders and that the sample was not skewed toward any particular gender. Among the respondents, 37 held graduate degrees, while 124 had postgraduate degrees. Most 102 respondents had master's degrees, whereas a smaller number (25 individuals) had other degrees. This highlights the higher prevalence of postgraduate education among the participants.

Table 2: Summary of Respondents

Respondents Profile		N	%
Respondent Gender	Male	151	52.6%
	Female	136	47.4%
Respondent Education	Graduation	37	12.9%
	Post-Graduation	124	43.2%
	Masters	102	35.5%
	Others	24	8.4%
Respondent Age	21-30 years	59	20.6%
	31-40 years	82	28.6%
	41-50 years	97	33.8%
	50+ years	49	17.1%
Corporate Profile		N	%
Corporate Type	IT/electronics	21	7.3%
	Plastics	47	16.4%
	Food processing	30	10.5%
	Textile and apparel	123	42.9%
	Other	66	23.0%
Corporate Age	Less Than 10 years	155	54.0%
	11 to 20 years	53	18.5%
	More Than 20 years	79	27.5%
Corporate Size	Less Than 50 Emp	20	7.0%
	51 to 100 Emp	53	18.5%
	101 to 200 Emp	88	30.7%
	More Than 200 Emp	126	43.9%

The most significant proportion (33.8%) fell within the 41–50-year age group. The second group (28.6%) was in the age range of 31–40 years. A smaller percentage of respondents (less than 30 years old) were under 30, and an even smaller proportion were above 50. This demonstrates a diverse age distribution among the respondents. The study included firms from various sectors, focusing on IT/electronics, plastics-food processing, textiles, and apparel. IT/electronics was the least represented sector among the participating firms, accounting for 7.3% of the sample. Plastics manufacturing firms comprised 16.4% of the sample, while the majority (42.9%) were from the textile and apparel sectors. Additionally, 23% of the firms belonged to other sectors, showcasing the diversity of industries in the

study. Firm age was classified into three categories: less than ten years, 11-20 years, and more than 20 years. Most firms (54 %) were relatively young and had operated for less than ten years. The next largest category was firms with over 20 years of operations, indicating their maturity and stability. A smaller proportion (18.5%) fell within the 11-20-year range. The number of employees measured the firm size. Only 7% of the firms were categorized as small, with fewer than 50 employees. Fifty-three firms had 51 to 100 employees, 31% had 100 to 200 employees, and the largest group (126 firms) had more than 200 employees. This reveals a wide range of firm sizes, with a substantial number of large firms participating in the study.

4.1 Description and Normalcy of the Data

Understanding the state of the study is crucial for obtaining accurate results. Normality in statistical analysis refers to data distribution with deviations that affect validity. The VIF measures multicollinearity in the regression analysis to ensure the accuracy and reliability of the results (Ringle, Wende, & Becker, 2022). Additionally, the loading of items in a factor analysis can impact the validity and reliability of the statistical analysis results (Hair, Risher, et al., 2019). Table 3 presents the descriptive values and normality through skewness, factor loadings of items, rating scale, and minimum value of each item response, along with the Variance Inflation factor (VIF).

Table 3: Description and Normalcy

Constructs	Items	Mean	Scale min	Scale max	Skewness	Loadings	VIF
Performance Based Motive	PBM1	3.56	1.00	5.00	-0.68	0.85	2.33
	PBM2	3.60	1.00	5.00	-0.68	0.91	3.27
	PBM3	3.55	1.00	5.00	-0.71	0.90	3.14
	PBM4	3.61	1.00	5.00	-0.74	0.88	2.77
Regulation Based Motive	RBM1	3.65	1.00	5.00	-0.65	0.91	3.45
	RBM2	3.62	1.00	5.00	-0.72	0.93	4.34
	RBM3	3.57	1.00	5.00	-0.68	0.92	3.83
	RBM4	3.55	1.00	5.00	-0.64	0.90	3.29
Proactive environmental Strategies	PES1	3.57	1.00	5.00	-0.78	0.91	3.93
	PES2	3.62	1.00	5.00	-0.70	0.91	3.89
	PES3	3.67	1.00	5.00	-0.74	0.90	3.83
	PES4	3.60	1.00	5.00	-0.69	0.90	3.49
	PES5	3.62	1.00	5.00	-0.78	0.87	2.86
Competitive Intensity	CIN1	3.75	1.00	5.00	-0.74	0.87	2.92
	CIN2	3.55	1.00	5.00	-0.66	0.89	3.54
	CIN3	3.60	1.00	5.00	-0.74	0.88	3.15
	CIN4	3.51	1.00	5.00	-0.66	0.89	3.65
	CIN5	3.66	1.00	5.00	-0.73	0.88	3.20
Business Model Innovation	BMI1	2.54	1.00	5.00	1.36	0.89	1.63
	BMI2	2.43	1.00	5.00	0.68	0.92	1.63
Corporate Performance	COP1	3.40	1.00	5.00	-0.53	0.88	2.71
	COP2	3.39	1.00	5.00	-0.52	0.89	2.89
	COP3	3.42	1.00	5.00	-0.55	0.89	3.12
	COP4	3.45	1.00	5.00	-0.61	0.92	3.82

The tabulated data revealed that the mean score of each item across all variables was approximately 3, indicating general agreement among respondents with the statements. These parameters' minimum and maximum values were 1 and 5, respectively. Furthermore, the skewness values of the data were within the acceptable range of ± 3 , indicating normal skewness for each item. The factor loadings for all sample items were higher than 0.5, demonstrating a significant level of variance explained by these items. Consequently, all these items were deemed suitable for further analysis. Additionally, VIF was used to address multicollinearity among the items, thereby ensuring the validity and reliability of the results.

4.2 Common Method Bias

This study utilized Harman's test to check whether common method variance (CMV) bias affected the study (Podsakoff & Organ, 1986). The results showed that only 36.56% of the

variance was explained by a single factor, below the recommended threshold of 50 %. Another test using a marker variable unrelated to the study was also performed to be more certain (Lindell & Whitney, 2001). This marker variable had a very low correlation with other variables. Even after adjusting for this, the results did not change significantly. These tests suggest that CMV bias was not a significant issue in this study.

4.3 Reliability, Validity, and Model Fitness

Table 4 presents the statistics for the internal consistency reliability using Cronbach's alpha. Moreover, it shows the value of Composite Reliability (CR) and Average Variance Extracted (AVE) to determine convergent validity. Inter-construct correlations, given in the table, can be used to confirm discriminant validity. As the CR values in the table are greater than 0.7, these scales are considered highly reliable. Next, all CR values for the scales were higher than 0.7, which, according to the criteria of Hair *et al.* (2019), indicates that these scales possess good composite reliability. In this table, the AVE values are greater than 0.5. As the CR values are above 0.7 and the AVE is more than 0.5, this confirms that the study scales are highly convergent and valid. Moreover, the inter-construct correlations were less than the square root of the AVE. The results indicate that the scales used in this study had a high level of discriminant validity, which aligns with the criteria established by Fornell and Larcker (1981). It suggests that the scales effectively measure distinct constructs and do not overlap, thereby contributing to the overall reliability and validity of the study's findings.

Table 4: Discriminant and Convergent (HTMT) Validity

Constructs	Alpha	CR (rho_a)	AVE	BMI	CIN	COP	PBM	PES	RBM
BMI	0.766	0.777	0.810	-					
CIN	0.929	0.930	0.779	0.604	-				
COP	0.920	0.921	0.807	0.780	0.560	-			
PBM	0.909	0.912	0.787	0.559	0.603	0.491	-		
PES	0.940	0.940	0.806	0.842	0.594	0.684	0.570	-	
RBM	0.935	0.936	0.837	0.579	0.615	0.511	0.662	0.640	-

The standardized root mean square residual (SRMR) is a widely used measure in SmartPLS to assess the degree of discrepancy between a model's observed and predicted values. Another commonly used measure is the normed fit index (NFI), which evaluates the overall fit of a model by comparing the model's chi-square value to that of the null model. Moreover, Hair, Risher, *et al.* (2019) suggest that the evaluation of model fitness in SmartPLS should also consider the path coefficient significance levels and the overall significance of the model. Therefore, an SRMR value of 0.039 suggests a relatively small degree of discrepancy between the observed and predicted values of the model.

Additionally, an NFI value of 0.921 indicated an excellent overall fit of the model in the current study.

4.4 Hypotheses Testing and Discussion on Results

Table 5 presents the results of PLS-SEM for hypothesis testing using effect size and p-value, based on which we can accept or reject the hypothesis stating the relationship between the study variables. The structural model is illustrated in Figure 2. The results of the study showed acceptance of five of the seven hypotheses. H1 suggests that strategic motives (PBM and RBM) positively impact the COP. However, $p=0.289 > 0.05$ contradicts previous studies (Naidoo & Gasparatos, 2018; Chan et al., 2022). The p-value of 0.289 rejects this hypothesis; it is more significant than the conventional significance level of 0.05, suggesting that the observed relationship between strategic motives and COP might be due to chance variations in the data. Consequently, we cannot confidently conclude that strategic motives have a significant direct impact on COP. This finding implies that factors beyond strategic motives might play a more dominant role in influencing the COP.

Table 5: Hypothesis Testing (using PLS-SEM)

Hypothetical Path	Effect	SE	t-value	p-value	Hypothesis	Decision
STM -> COP	0.073	0.069	1.060	0.289	H1	Rejected
STM -> PES	0.261	0.080	3.281	0.001	H2	Accepted
PES -> COP	0.419	0.084	4.976	0.000	H3	Accepted
STM -> PES -> COP	0.110	0.038	2.887	0.004	H4	Accepted
CIN x STM -> PES	0.167	0.054	3.123	0.002	H5	Accepted
CIN x PES -> COP	-0.060	0.049	1.233	0.217	H6	Rejected
BMI x STM -> PES	0.192	0.058	3.329	0.001	H7	Accepted
C-Age -> COP	0.103	0.041	2.536	0.011	Significant Effect	
C-Size -> COP	-0.046	0.047	0.960	0.337	No Significant Effect	
C-Type -> COP/	0.246	0.062	3.980	0.000	Significant Effect	

H2 shows that strategic motives significantly impact PES ($p < 0.05$), which is supported by earlier work (Steg et al., 2014; Chan et al., 2022). This finding suggests that strategic motives have a significant influence on PES. Given the significance of this relationship, it can be inferred that organizations with higher levels of strategic motives are more likely to exhibit positive environmental behaviors, which subsequently affect their environmental performance and positively influence COP. H3 confirmed a positive PES-COP linkage ($p=0.000$) and aligned with the findings of (Chan et al., 2022; Guan et al., 2022; Ibrahim & Mahmood, 2022). This underscores the notion that organizations prioritizing environmental initiatives tend to achieve better performance outcomes. This relationship's strength and statistical significance lend credibility to the idea that environmental strategies

positively impact performance. H4 was accepted, aligning with (Dai et al., 2018; Chan et al., 2022; Khaw et al., 2022), and affirmed strategic motives that positively impact COP via PES mediation. This finding aligns with the theoretical expectation that organizations focusing on sustainability practices will achieve better performance. The consistency of this result with previous research by Chan et al. (2022) further substantiates the notion that strategic motives are an influential predictor of an improved COP.

H5 established CIN's moderation of CIN in strategic motives and PES ($p=0.002 < 0.05$). Diverging from (Aragón-Correa et al., 2020; Chan et al., 2022), our study finds CIN moderates strategic motives and PES, contrary to the negative moderation observed. It implies that the influence of strategic motives on PES is contingent on the CIN level. Organizations operating in environments characterized by higher levels of CIN may experience varying impacts of strategic motives on their environmental behavior. This result emphasizes the importance of considering contextual factors to understand the relationship between strategic motives and PES. Accepting H5 and CIN moderates the PES-COP (weak, negative, $p>0.05$), whereas H6 is rejected. Chan et al. (2022) confirm CIN's role in PES and COP relationship. Although the p-value for the moderation effect of CIN on the PES-COP relationship is statistically insignificant, it is essential to note that the weak, negative moderation effect suggests that CIN might dampen the positive relationship between PES and COP to some extent. The absence of a substantial moderating role for CIN on the PES-COP link implies that other factors could be more influential in this relationship. H7 indicates a positive moderating role between strategic motives and PES; this hypothesis is accepted as the p-value falls within the significance criteria (less than 0.05). Although the moderation effect is weak, its statistical significance indicates that BMI influences the relationship between strategic motives and PES. This finding aligns with those of (Latifi & Bowman, 2018; Clauss et al., 2019; Moradi et al., 2021), who observed similar patterns. In this case, we hypothesized the positive effects of BMI on COP, which was corroborated by the observed positive moderating effect of BMI. Furthermore, Figure 2 illustrates the hypothesized relationships between the variables in the theoretical framework, as discussed and interpreted in detail.

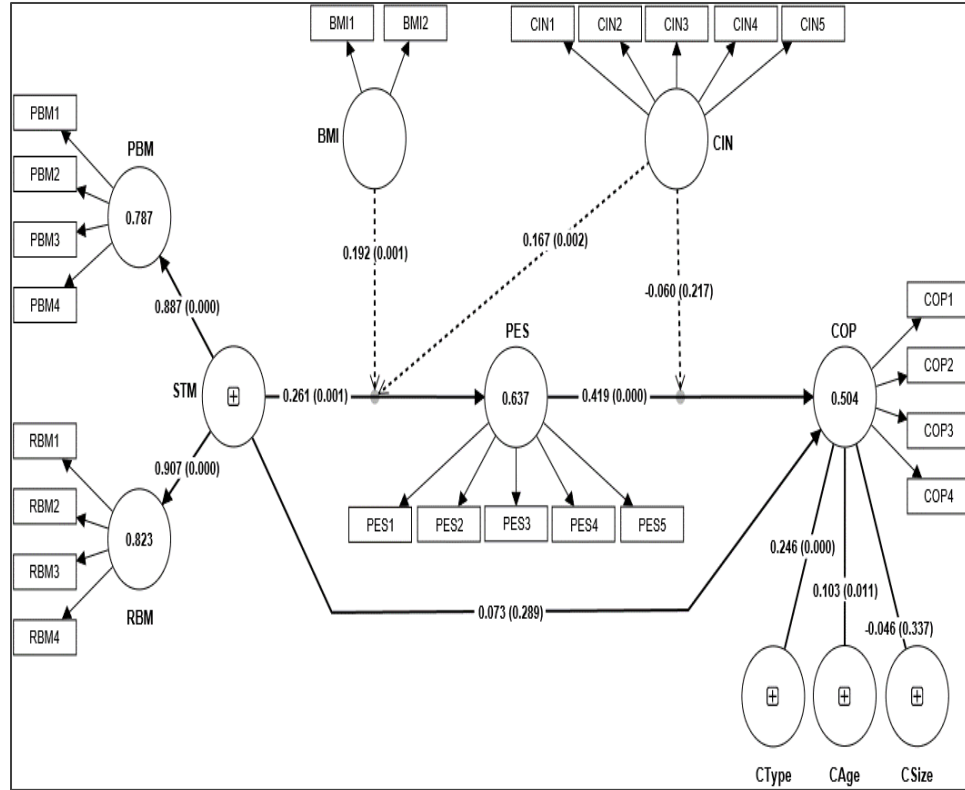


Figure 2. Structural Model

5. Research Implications

This study’s findings have significant theoretical implications across multiple dimensions. First, it contributes substantially to the field of NRBV by empirically interpreting the driving process behind the crucial factors and outcomes in both PBM and RBM strategic goals. Our results align with this perspective by shedding light on the intricate processes underlying these strategic goals' primary drivers and consequences. This correspondence strengthens the NRBV proposition that utilizing distinct internal resources can endure a competitive advantage. Second, this study enriches the existing literature on environmental strategy by exploring its association with strategic motives and their impact on performance outcomes. It underscores the significance of external networks, relationships, and contextual factors in shaping a firm's competitive advantage. This interplay between internal elements and external dynamics highlights the importance of incorporating external contexts into the NRBV framework. Third, this study provides insights into the strategic processes that facilitate the implementation of performance-enhancing, pro-environmental initiatives within the market. Fourth, this study expands the horizons of

NRBV research by examining the moderating influence of CIN and BMI on strategic motives and COP. Finally, through an analysis of the contextual aspects of CIN, this study offers valuable insights into the limitations and underlying mechanisms that either bolster or impede the effective conversion of environmental incentives and practices into favorable market performance. By bridging the gaps between these perspectives, our study presents a more comprehensive understanding of how internal resources, external networks, and strategic environmental considerations intersect to shape firm success.

5.2 Practical Implications

The present study has significant practical implications as it sheds light on how manufacturing companies can attain a competitive edge by focusing on their environment, which includes stakeholder demands and customer needs, while also considering potential partnerships. Therefore, managers are encouraged to promote knowledge acquisition among their staff regarding stakeholders' current and future demands within and outside the company. Furthermore, managers must strive for excellence in performance to meet the needs of customers and stakeholders while maintaining a balanced approach to short- and long-term goals. Overall, the results of this study provide valuable insights into the role of CIN in promoting proactive involvement in COP. Specifically, as competition increases, companies looking to improve their performance may be dissuaded from implementing environmental strategies because of resource constraints. However, they may also be incentivized to pursue PES to benefit from a better COP.

Consequently, this study's findings have broad applicability in the business world, where companies frequently undertake a range of environmental operations that include both proactive and reactive elements, leading to improved financial viability, brand recognition, and market acceptance. Furthermore, these findings demonstrate the competitive advantages that businesses can gain by proactively addressing environmental challenges in strategic planning. Moreover, BMI can enhance the strategic motives for environmental strategies, leading to improved lead firm performance. Corporates who wish to take advantage of these benefits should focus on developing innovative business models, aligning their environmental strategies with their overall strategic plans, collaborating with stakeholders, and investing in measuring and reporting on their environmental and economic performance.

5.3 Policy Implications

This study provides valuable policy recommendations for policymakers, aligning with understanding the mechanisms that support enterprises' strategic responsiveness in dealing with globalization to achieve higher performance. With the insights gained from this study, practitioners and policymakers can develop effective facilitative and command-and-control mechanisms to steer firms' environmental behaviors at both corporate and national levels. These ideas are crucial for nations to safeguard their ecological surroundings while thriving

in a business landscape. To influence businesses to adopt strong pro-environmental policies, governments should continue to educate and incentivize environmentally conscious corporations and investors, as supported by the study's conclusions. Regulatory stakeholders, such as environmental agencies, should also consider the study's recommendations when formulating rules that rely heavily on environmental strategies. While it is essential to have basic environmental regulations in place to ensure that firms fulfill their minimum environmental responsibilities, they should be designed to avoid excessive regulation, as this can hinder firms' proactive management of environmental issues.

6. Conclusion

This study empirically examines whether strategic motives directly or indirectly affect PES and COP from the perspective of both performance and regulation-based motives. Moreover, it tested whether PES and COP were related and examined the moderating influence of CIN on the relationship between STN, PES, and COP. In addition, the moderating effect of BMI on the relationship between strategic motives and proactive environmental strategies is assessed. The results revealed that both CIN and BMI significantly moderated the association between strategic motives and PES, whereas CIN did not have a moderating effect between PES and COP. However, the present study yielded different results. We test the effect of the control variables: corporate age, size, and type. Corporate size does not significantly affect COP, while corporate age and type significantly influence COP. The results of this study, which used data from manufacturing companies, showed that PES and strategic motives are likely to increase COP and that progress is much more noticeable in a highly competitive operating environment. It has also been discovered that businesses using innovative business models are better able to use environmental strategies. Notably, this research contributes to a better understanding of the complex and contingent processes that underlie the primary causes and effects of preventive and curative environmental measures. This study not only contributes to the existing knowledge regarding the drivers and performance implications of environmental strategies characterized by different levels of reactivity but also offers policymakers and practitioners valuable insights on how to enhance these strategies.

6.1 Limitations and Directions for Future Research

Although this study offers valuable practical implications, it is essential to acknowledge its inherent limitations. First, reliance on cross-sectional survey data introduces a potential constraint in establishing definitive causal relationships among all dimensions proposed within the model. Future research should incorporate longitudinal data in subsequent experiments to overcome this constraint. Doing so can strengthen the ability to infer causal relationships, providing a more robust foundation for the proposed model. Notably, this study's scope is confined to industrial companies exclusively within Pakistan. The thoroughness of investigations and bolstering of external validity could be enhanced through future research that broadens the geographic and business scope. As businesses across diverse industries and regions grapple with the challenges affecting their operational

performance, investigating these issues in various settings could strengthen the applicability of the model's findings. Moreover, incorporating novel constructs can enhance the explanatory power of the model. Concepts such as 'green mindfulness' or 'top management attitude' have the potential to provide deeper insights into sustainable development strategies. Integrating these constructs within the research framework could shed light on previously unexplored dimensions and ultimately contribute to a more holistic understanding of the factors influencing sustainable development.

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