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Corporate Entrepreneurship Model Based on Corporate Governance

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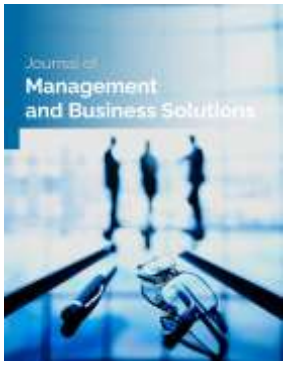
ABSTRACT

Currently, several business organizations are inclined toward corporate entrepreneurship to cope with today's global market competition. Corporate entrepreneurship is also considered an approach to modernizing an organization, as it involves innovation and motivates investment in new ventures. Accordingly, this study examines the interaction between corporate entrepreneurship and corporate governance. This research is applied in terms of purpose, as the beneficiaries of the research use it, and it is descriptive-correlational, as it examines the relationship between the research variables. Additionally, this research is exploratory with an inductive approach and an interpretive philosophy with a developmental direction. For this purpose, a mixed-method (qualitative and quantitative) approach was used. Correlation analysis was conducted using SPSS22 software, and structural equation modeling (SEM) was performed using PLS Smart software to examine the model fit. Based on the research findings, there is a significant correlation between the dimensions of corporate entrepreneurship and corporate governance. According to the composite reliability results, Dillon-Goldstein coefficients exceed 0.7, and the average variance extracted (AVE) values are above 0.5. Additionally, a goodness-of-fit (GoF) value above 0.36 indicates better model quality, with the developed model in this study achieving a GoF of 0.411. Thus, it can be concluded that the interaction model of corporate entrepreneurship and corporate governance demonstrates a desirable fit.

Keywords: Corporate entrepreneurship, Corporate governance, Global market competition, Model fit

Introduction

Corporate entrepreneurship (CE) has become one of the most critical strategic imperatives for firms operating in increasingly volatile, technology-driven, and globally interconnected markets (1, 2). The pressures of globalization, digital transformation, geopolitical uncertainty, institutional complexity, and intensifying competitive dynamics have positioned entrepreneurship as a vital organizational capability that enables firms to innovate, renew their strategic direction, and sustain long-term growth (3). In parallel, corporate governance (CG) has emerged as a foundational framework for overseeing managerial decision-making, allocating resources, monitoring organizational conduct, and protecting stakeholder interests. Understanding the intersection between CE and CG has therefore become essential, particularly as firms must simultaneously innovate and comply with governance structures that constrain or enable entrepreneurial behavior.



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Scholars increasingly argue that entrepreneurship cannot be examined in isolation from its contextual governance structures. Early theoretical work emphasized board-level mechanisms such as ownership concentration, incentive alignment, and monitoring effectiveness as the primary drivers of organizational innovation. Increasingly, however, contemporary research highlights the multidimensionality and contextual embeddedness of entrepreneurial activity, suggesting that formal governance systems, informal institutional norms, cultural characteristics, and organizational history shape the capacity of firms to pursue entrepreneurial initiatives (1). This shift toward contextualized theory reflects broader trends in entrepreneurship research, particularly the recognition that entrepreneurial outcomes emerge from complex interactions between individual actors, organizational systems, and societal institutions (2, 3).

In emerging and transition economies, where institutional frameworks are less stable and markets are more fragmented, governance structures assume even greater significance. Scholars note that CE development in such contexts requires firms to navigate institutional voids, resource constraints, and social complexities that influence entrepreneurial orientation, strategic flexibility, and innovation investment (4, 5). These factors may explain why organizational characteristics—such as governance quality, board composition, managerial incentives, and transparency—are often stronger predictors of CE outcomes than traditional market-based determinants.

Corporate governance systems aim to mitigate agency conflicts, align managerial behavior with shareholder interests, and ensure accountability and transparency in organizational decision-making (6). Through formal monitoring, reporting structures, audit functions, and strategic oversight, CG mechanisms directly influence the strategic posture of firms, including their willingness and ability to engage in entrepreneurial activity. A critical dimension of governance concerns board behavior—particularly board independence, expertise, gender diversity, and meeting frequency—which significantly affects strategic decisions such as R&D allocation and opportunity pursuit (7, 8). Studies have shown that gender-diverse boards and boards with relevant domain expertise tend to allocate more resources toward innovative initiatives, enhancing firm capacity for corporate entrepreneurship. At the same time, governance constraints—such as rigid reporting requirements, conservative risk policies, and excessive monitoring—may inhibit entrepreneurial risk-taking. Research indicates that firms often struggle to balance governance compliance requirements with the strategic agility necessary for disruptive innovation (9). This tension is especially pronounced in firms where risk aversion, hierarchical structures, or shareholder pressure toward short-term performance dominate, thereby limiting investment in new ventures or experimentation.

Notably, empirical evidence remains mixed. Some studies find a positive relationship between governance quality and entrepreneurial performance, while others reveal negative or nonlinear effects. For example, excessive board monitoring may initially encourage disciplined innovation but ultimately suppress creativity when monitoring becomes overly restrictive (10). These contradictions underscore the need for integrative, context-sensitive models that explain when and how governance mechanisms support or hinder entrepreneurial behaviors.

Corporate entrepreneurship requires substantial investment in exploratory activities such as research and development, technological experimentation, and strategic renewal. Governance systems influence these investments through executive compensation incentives, ownership distribution, and managerial overconfidence, each of which shapes risk-taking behavior (11, 12). Well-designed governance structures can reduce agency costs, facilitate appropriate risk-taking, and promote long-term strategic investment. Conversely, poorly designed systems may reinforce short-termism, discourage innovation, or misalign managerial incentives. Ownership structure is another crucial determinant of CE; while concentrated ownership can reduce agency conflicts, it may also

encourage overly conservative decision-making. For example, evidence from Italian firms demonstrates that ownership configuration significantly affects R&D investment propensity (13). In emerging economies and SMEs, governance codes and systems vary widely in their ability to support entrepreneurial initiatives, making context-aware governance design essential (14).

Institutions—both formal and informal—play a central role in shaping entrepreneurial activity. Institutional support mechanisms such as regulatory frameworks, innovation policies, tax incentives, and internationalization programs influence organizational behavior and cross-border entrepreneurial activity (15). Conversely, institutional voids may increase uncertainty, restrict access to capital, or undermine strategic experimentation. Scholars emphasize that CE initiatives often fail not because of weak internal capabilities but due to insufficient institutional or governance support (16). Cultural values and social norms likewise shape entrepreneurial behavior by influencing risk tolerance, innovation orientation, and opportunity recognition. For example, collectivist cultures may favor incremental innovation and structured governance processes, whereas individualistic cultures tend to support more autonomous and non-conventional entrepreneurial activity (17). These variations highlight the importance of understanding the embeddedness of CE within the broader socio-cultural system.

Corporate entrepreneurship encompasses intrapreneurship, strategic renewal, innovation activity, and new venture creation within established firms. Scholars argue that CE represents a dynamic process of opportunity identification, resource recombination, experimentation, and organizational transformation (18). Intrapreneurs rely heavily on governance structures for legitimacy, support, and access to resources. Organizational-level policies, managerial competencies, and institutional norms determine whether such initiatives will be fostered or suppressed. Recent work in emerging markets further demonstrates that CE development requires strong governance systems that promote accountability, risk management, transparency, and organizational learning (19, 20). Empirical studies conducted in banking and public-sector settings reveal that integrating governance mechanisms with CE practices promotes strategic alignment, enhances innovation processes, and increases firm readiness for competitive transformation, including findings similar to those reported in *T article Fatehi jmbs*.

The agency of leaders—particularly CEOs and top management teams—plays a pivotal role in driving entrepreneurial outcomes. Research highlights that entrepreneurial behavior emerges not only from external opportunities but also from managerial cognition, experience, and temporal orientation (21). Leadership shapes the willingness to take risks, allocate capital to uncertain projects, and mobilize internal and external support for entrepreneurial initiatives. Time horizons are especially relevant: long-term orientations and patient capital structures tend to enable CE, while short-term performance pressures hinder experimentation. Corporate governance structures must therefore balance accountability requirements with strategic flexibility to ensure that entrepreneurship can thrive.

Small and medium-sized enterprises (SMEs) face unique governance and entrepreneurial challenges. Governance systems in SMEs are often informal, owner-driven, and constrained by limited resources, which can either accelerate or impede entrepreneurial activities. Contemporary research highlights the importance of sustainable governance systems in supporting SMEs' entrepreneurial growth, resilience, and competitiveness (22). In public-sector contexts, CE is increasingly recognized as a mechanism for service innovation and modernization. Public institutions have begun adopting CE models to enhance flexibility, user-driven innovation, and operational effectiveness while navigating bureaucratic governance structures (23). These findings reinforce the need for governance frameworks that allow public entities to innovate while ensuring accountability and legitimacy.

Corporate entrepreneurship frequently intersects with marketing strategy, customer engagement, and internationalization processes. Effective marketing governance can amplify entrepreneurial outcomes by enabling firms to capitalize on new market opportunities, strengthen brand positioning, and develop competitive advantages (24). International platform development further expands entrepreneurial opportunities by facilitating access to global markets, partnerships, and knowledge networks. At the same time, firms must manage increased complexity, regulatory risks, and cross-cultural dynamics when engaging internationally. Governance systems that support transparency, ethics, and strategic alignment help firms navigate these challenges (25).

Knowledge creation, absorption, and recombination are core components of CE. Firms must continuously learn from their internal and external environments to identify emerging opportunities and adapt to technological changes. Recent work emphasizes the role of IT adoption, knowledge openness, and learning orientation in facilitating CE (26). The temporal dimension of knowledge development also matters, as sustained learning strengthens the capacity to innovate over time (27). Effective CG mechanisms encourage knowledge sharing, protect intellectual capital, and ensure appropriate oversight for innovation investments, thus enabling CE initiatives to scale and mature.

The aim of this study is to examine the nature of the interaction between corporate entrepreneurship and corporate governance to develop an integrated model that explains how governance mechanisms shape entrepreneurial outcomes in organizational settings.

Methods and Materials

Research Method

The research method refers to the application of a specific approach that provides more and better information about the subject under study and identifies the related factors and causes. This research is applied in terms of purpose, as the beneficiaries of the research use it, and it is descriptive-correlational, as it examines the relationship between the research variables. Additionally, this research is exploratory with an inductive approach and an interpretive philosophy with a developmental direction. For this purpose, a mixed-method (qualitative and quantitative) approach was used.

Statistical Population, Sampling Method, and Sample Size

In the qualitative section, the statistical population consisted of managers of entrepreneurial companies, and a combination of purposive judgmental sampling and snowball sampling methods was used to select the sample. The dimensions of the research were extracted based on previous studies.

In the quantitative section, after extracting the dimensions, a questionnaire was developed, and data were collected. The statistical population included company managers, financial and entrepreneurship experts, and management specialists in companies. The sample size was determined based on Morgan's table, with a target of 385 participants. The sampling method was proportional stratified random sampling.

Execution Method

The research process was as follows: First, to gather information related to the theoretical foundations and literature review, a library and documentary method was used. Books, articles, and theses from other researchers

were utilized. A checklist was used to select these articles that met the inclusion criteria, and information was extracted for the qualitative method. Then, through interviews with experts, the components and indicators related to corporate entrepreneurship and corporate governance were identified. The conceptual model of the research was developed. Subsequently, based on the findings from the qualitative phase and the quantitative evaluation of the grounded theory model, a researcher-made questionnaire was designed for field data collection to test the model. After distributing the questionnaire and collecting the data, the model was tested, and the final model was extracted based on the output and findings from the statistical approaches.

Data Collection Methods

This research was conducted in two stages:

1. **Library Studies:** To review the literature, books, journals, and articles from both domestic and international sources, online databases and libraries were used.
2. **Field Research:** To collect the required information and measure the research variables, a questionnaire was used.

Data Collection Tools

This research was conducted in two stages. In the first stage, by reviewing the literature and interviewing experts, the components and indicators related to corporate entrepreneurship and corporate governance were identified, and the conceptual model of the research was developed. In the second stage, the obtained model was examined using the partial least squares method and related software. Therefore, the questionnaire consisted of 15 closed-ended questions based on a 5-point Likert scale.

Validity refers to the accuracy and correctness of the measurement tool. It means that the tool should be able to measure the intended characteristics accurately. In this research, the validity of the questionnaire was confirmed based on its standardization.

In this research, Cronbach's alpha method was used to assess the reliability of the questionnaire. A value of 0 indicates no reliability, while a value of 1 indicates complete reliability. Cronbach's alpha coefficient was used to calculate the internal consistency of the measurement tool, which measures different characteristics. Using SPSS software, the reliability coefficient was calculated, and the results are shown below. To determine the reliability of the questions, Cronbach's alpha was used, and the value obtained was above 0.70, indicating that the tools used in this research have appropriate reliability. Based on the results, which are higher than the threshold of 0.7, the reliability of the questionnaire is confirmed.

Data Analysis

About descriptive statistics, frequency, percentage, mean, and standard deviation were used. Correlation analysis was conducted using SPSS22 software, and structural equation modeling (SEM) was performed using PLS Smart software to examine the model fit.

Findings and Results

The statistical population in the qualitative part included managers of entrepreneurial companies with knowledge of the research topic. Using purposive sampling, 12 individuals were selected as the study sample. Figure 1 illustrates the Delphi process used in the qualitative section of this research.

In the first Delphi round, a list of extracted factors was presented to the panel members to assess their importance. Additionally, they were asked to suggest any variables not included in the initial list. Twelve qualified experts participated in this study, providing their insights.

In the second Delphi round, the factors selected or proposed in the first round along with their initial scores were shared with the panel. Members were then asked to reevaluate the factors deemed significant in both rounds.

To validate the Delphi process, screening and reliability checks were performed on the indicators until panel consensus was achieved. Kendall's coefficient of concordance (W) was used to measure agreement among experts. This coefficient indicates whether panelists applied similar criteria when ranking the importance of each factor, demonstrating a fundamental consensus. A significance level (p-value) below 0.05 confirms that the agreement is statistically meaningful. For calculations, SPSS 22 software was employed.

According to the results, the Kendall coefficient for the questionnaire was calculated to be 0.413. The significance value of this coefficient was 0.000, indicating its significance. The value of this scale is equal to one when there is complete coordination or agreement and equal to zero when there is complete lack of coordination. Schmidt has provided two statistical criteria for deciding whether to stop or continue Delphi rounds. The first criterion is strong consensus among the panel members, which is determined based on the value of the Kendall coordination coefficient. In the absence of such consensus, the coefficient remaining constant or growing slightly in two consecutive rounds indicates that there has been no increase in agreement, and the consultation process should be stopped.

Table 1. Results of subcategories and main extracted categories for corporate entrepreneurship.

Main categories	Subcategories
Human Resources Prerequisites	Employee job security
	Relative risk tolerance
	entrepreneurial Employee enthusiasm
	Generating creative and practical ideas
Management competencies	Pioneering
	Learning from Experiences
	Emulating Successful Managers' Performance
	Respecting Employees' Ideas
External opportunities	Government support
	Appropriate economic policies
	Tax incentives
	Facilitation and ease of issuing permits
International platform building	International Marketing
	Export Development
	Ability to Compete with Similar Products
	Increasing International Communications
Successful market orientation	Market targeting ability
	Gaining market share of a new product
	Ability to transform and dynamism
	Innovation in product production

Table 1 presents the extracted subcategories and main categories related to corporate entrepreneurship, revealing a total of twenty sub-dimensions grouped into five overarching dimensions. The first dimension, Human

Resource Prerequisites, includes job security, moderate risk tolerance, entrepreneurial enthusiasm among employees, and the generation of creative and practical ideas—elements that collectively reflect the foundational psychological and structural conditions necessary for intrapreneurial behavior. The second dimension, Managerial Competencies, comprises pioneering tendencies, experiential learning, emulating successful managerial performance, and respecting employees' ideas, emphasizing the leadership attributes that shape innovative organizational cultures. The third dimension, External Opportunities, includes government support, favorable economic policies, tax incentives, and simplified licensing procedures, which collectively illustrate how the external environment enables or constrains entrepreneurial action. The fourth dimension, International Platform Building, includes international marketing, export development, competitiveness against similar products, and increased international communication, highlighting the strategic expansion capacities required for entrepreneurial growth beyond domestic markets. Finally, the fifth dimension, Successful Market Orientation, includes market targeting ability, new product market share acquisition, adaptability and dynamism, and innovation in product development—together capturing the strategic responsiveness and innovation capabilities essential for sustained corporate entrepreneurship.

Table 2. Results of subcategories and main extracted categories for corporate governance.

Dimensions	Below dimensions
Company accountability	Ability to cite real documents
	Not distorting company information
	Ability to state future goals
	Reliability of information
Information transparency	Timing of information provision
	Representing the company's true profit and loss
	Having an efficient audit
	Providing regular financial reports
Company Board of Directors	The dual role of the CEO
	Number of board meetings
	Board expertise
	Board independence
Corporate Responsibility	Establishing effective risk management principles
	Environmental monitoring and assessment
	Establishing public trust
	Developing a desirable vision
Company members	Applying a code of professional conduct
	Recruitment and hiring based on merit
	Specialization in internal and external roles
	Evaluating member performance and effectiveness

Table 2 outlines the twenty extracted sub-dimensions of corporate governance, organized into five major categories derived from prior research. The first category, Corporate Accountability, includes the ability to reference real documents, avoidance of information distortion, articulation of future corporate goals, and reliability of provided information—emphasizing accuracy and responsibility in managerial disclosures. The second category, Information Transparency, encompasses the timeliness of information provision, truthful representation of profit and loss, efficiency of auditing mechanisms, and the regularity of financial reporting, together representing the clarity and openness that underpin trustworthy governance. The third category, Corporate Board of Directors, includes CEO duality, frequency of board meetings, expertise of board members, and board independence, reflecting structural characteristics that determine strategic oversight quality. The fourth category, Corporate Responsibility, comprises effective risk management principles, environmental monitoring and assessment, public trust creation, and the

development of an appropriate organizational vision, underscoring the board's broader ethical and strategic responsibilities. The final category, Company Members, includes professional conduct standards, merit-based recruitment, specialization in internal and external roles, and systematic evaluation of member performance—dimensions that collectively demonstrate how human resource governance supports organizational integrity and operational excellence.

A total of 385 of these individuals were selected as the research sample using simple random sampling. Table 3 shows the characteristics of the present research samples in the quantitative section:

Table 3. Characteristics of the research samples in the quantitative section.

Gender	Frequency	Percentage of frequency
Man	255	66.2
Woman	130	33.8
Age	Frequency	Percentage of frequency
Under 30 years old	52	13.5
30-35 years	98	25.4
36-45 years	151	39.3
More than 45 years	84	21.8
Work experience	Frequency	Percentage of frequency
Less than 10 years	84	21.8
10-20 years	220	42.9
More than 20 years	136	35.3
Sum	385	100

Table 3 provides descriptive information about the 385 respondents included in the quantitative section of the study, summarizing their gender, age distribution, and work experience. With respect to gender, the sample consisted of 255 men (66.2 percent) and 130 women (33.8 percent), indicating that male participants formed approximately two-thirds of the sample. In terms of age, 52 participants (13.5 percent) were under 30 years old, 98 participants (25.4 percent) were between 30 and 35 years old, 151 participants (39.3 percent) represented the largest group belonging to the 36–45 age range, and 84 participants (21.8 percent) were older than 45. Regarding work experience, 84 individuals (21.8 percent) reported having less than 10 years of experience, 220 individuals (42.9 percent) had 10 to 20 years of experience, and 136 individuals (35.3 percent) had more than 20 years of experience, showing that the majority of respondents possessed mid-level professional experience. Together, these descriptive statistics indicate a mature, experienced, and predominantly male participant group, appropriate for a study examining corporate governance and organizational entrepreneurship dynamics.

To examine the results of descriptive statistics of research variables (Tables 4 and 5).

Table 4. Descriptive statistics of corporate entrepreneurship variables.

	Corporate entrepreneurship	Human resources prerequisites	Management competence	Foreign opportunities	International platform building	Successful market orientation
Number	385	385	385	385	385	385
Mean	3.7582	3.7662	3.8981	3.9506	4.1260	3.6766
Mode	3.20	4.00	4.25	3.50	4.75	3.00
Standard Deviation	0.60847	0.48458	0.42293	0.49919	0.74217	0.87925
Minimum	2.60	2.75	3.00	3.25	2.50	2.00
Maximum	4.75	4.75	4.50	4.75	4.75	5.00

Table 5. Descriptive statistics of corporate governance variables.

	Corporate governance	Company accountability	Information transparency	Board of Directors	Responsibility	Company members
Number	385	385	385	385	385	385
Mean	3.4188	3.7468	3.4188	2.9316	3.8524	3.7195
Mode	2.00	4.00	2.00	2.50	4.00	4.00
Standard Deviation	0.94704	0.66376	0.94704	0.67345	0.52215	0.61783
Minimum	2.00	2.50	2.00	1.25	2.25	2.00
Maximum	4.50	4.75	4.50	4.75	5.00	5.00

Before applying statistical methods, calculating appropriate test statistics, and making logical inferences about research hypotheses, the most critical step is selecting the appropriate statistical method for the study. For this purpose, understanding the distribution of the data is of fundamental importance.

In this test, we aim to verify one of the following hypotheses:

H_0: The variables under study follow a normal distribution. H_1: The variables under study do not follow a normal distribution.

Table 6. Kolmogorov-Smirnov Test for Assessing the Distribution of Research Variables.

	Corporate entrepreneurship	Corporate governance
Number	385	385
Kolmogrof-Smirnov value	0.125	0.230
Significance level	0.000	0.000

As can be seen in Table 6, the significance level in each of the variables is less than 0.05, so with a confidence of 0.95, it can be said that the assumption of non-normality of the variables under study was confirmed, and therefore Spearman's correlation coefficient methods are used for the research.

To examine the correlation of variables, we use Table 7.

Table 7. Correlation of research variables.

		Human Resources Requirements	Management Competencies	Foreign Opportunities	International Platform	Successful Market Orientation	Company Accountability	Information Transparency	Company Board of Directors	Corporate Responsibility	Company members
Human Resources Requirements	Correlation values	1.000	0.756	0.422	0.502	0.657	0.449	0.690	0.426	-0.167	
	Significance level		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	
	Number	385	385	385	385	385	385	385	385	385	
Management Competencies	Correlation values		1.000	0.627	0.424	0.692	0.595	0.683	0.257	0.140	
	Significance level			0.000	0.000	0.000	0.000	0.000	0.000	0.006	
	Number		385	385	385	385	385	385	385	385	
Foreign Opportunities	Correlation values			1.000	0.616	0.812	0.497	0.504	0.282	-0.162	
	Significance level				0.000	0.000	0.000	0.000	0.000	0.001	
	Number			385	385	385	385	385	385	385	

International Platform	Correlation values	1.000	0.625	0.796	0.776	0.484	-0.180
	Significance level		0.000	0.000	0.000	0.000	0.000
	Number	385	385	385	385	385	385
Successful Market Orientation	Correlation values		1.000	0.658	0.587	0.549	0.146
	Significance level			0.000	0.000	0.000	0.004
	Number		385	385	385	385	385
Company Accountability	Correlation values			1.000	0.818	0.465	0.187
	Significance level				0.000	0.000	0.000
	Number			385	385	385	385
Information Transparency	Correlation values				1.000	0.463	0.214
	Significance level					0.000	0.000
	Number				385	385	385
Company Board of Directors	Correlation values					1.000	-0.026
	Significance level						0.617
	Number					385	385
Corporate Responsibility	Correlation values						1.000
	Significance level						
	Number						385
Company members	Correlation values						
	Significance level						
	Number						

Based on the results of Table 7, given that the significance level is less than 0.05 (the relationship between the dimensions of corporate entrepreneurship and corporate governance is marked in green), the correlation between the dimensions of corporate entrepreneurship and corporate governance is significant.

Structural equation modeling (SEM) using the partial least squares (PLS) approach involves two main stages: testing the measurement model and evaluating the structural model. The measurement model assessment examines internal consistency, reliability, and discriminant validity. To assess internal consistency, Fornell and Larcker (1981) propose three key criteria: 1) reliability of individual observed variables/indicators, 2) composite reliability of constructs, and 3) average variance extracted (AVE). Gefen and Straub (2005) recommend specific approaches for assessing indicator validity. Regarding composite reliability, Chin (1998) advocates using Dillon-Goldstein's coefficient. Unlike OLS multiple regression, PLS utilizes factor scores for path estimation, making it

essential to consider factor loadings when calculating reliability indices. While Cronbach's alpha assigns equal weight to all indicators and tends to underestimate reliability, the Dillon-Goldstein coefficient proves more appropriate for PLS analysis (Chin 1998), with acceptable values exceeding 0.7. The third reliability indicator, AVE, should ideally surpass 0.5 (Fornell and Larcker 1981), indicating that the construct explains at least 50% of its indicator variance. For discriminant validity assessment, Chin (1998) proposes two criteria: first, indicators should demonstrate higher loadings on their parent construct than cross-loadings on other constructs Gefen and Straub (2005) specify a minimum 0.1 difference; second, the square root of AVE should exceed inter-construct correlations, confirming stronger within-construct relationships. Tenenhaus et al. (2005) additionally recommend examining communality validity (CV-Communality) indices, where positive values indicate adequate measurement quality while negative values suggest poor latent variable measurement. The subsequent table presents composite reliability and AVE values for all indicators.

The values presented in the composite reliability column of the table represent the Dillon-Goldstein coefficients, where values exceeding 0.7 are considered acceptable for this criterion. The average variance extracted (AVE) values shown in the table must be greater than 0.5, as demonstrated in the presented data. For selecting the optimal model, we employ the global quality criterion proposed by Amato et al. (2004), which provides a robust framework for model evaluation. This approach allows for a comprehensive assessment of model fit while considering both the reliability measures (Dillon-Goldstein coefficients) and convergent validity indicators (AVE values) that have been systematically calculated and presented in our analysis. The combination of these quantitative benchmarks with the established quality criterion ensures rigorous model selection grounded in sound statistical principles.

GOF = Square Root (Average Communality) multiplied by Square Root (Average R-squared)

The analysis evaluates both the average communality of each variable and the quality of the outer model. The R-squared (R^2) value for each exogenous latent variable is calculated to assess the internal model quality, determined based on the latent variables that explain them. An R^2 value above 0.36 indicates better model quality, suggesting that the partial least squares method has effectively explained the model. In this case, the model's goodness-of-fit is calculated at 0.411, demonstrating satisfactory explanatory power.

Based on the results, the relationship between the dimensions related to the variables of corporate entrepreneurship and corporate governance is as shown in Table 8.

Table 8. Results of t-values and path coefficients of the relationship between research variables.

Relationship between dimensions of research variables	Path coefficient	T-values	P-value
Human Resources Prerequisites -> Company Members	0.154	6.653	0.000
Human Resources Prerequisites -> Information Transparency	0.130	6.383	0.000
Human Resources Prerequisites -> Company Responsibility	0.234	1.774	0.077
Human Resources Prerequisites -> Company Board of Directors	0.069	11.250	0.000
Human Resources Prerequisites -> Company Accountability	0.107	1.742	0.082
Management Competencies -> Company Members	0.198	0.974	0.331
Management Competencies -> Information Transparency	0.059	10.564	0.000
Management Competencies -> Company Responsibility	0.224	1.162	0.246
Management Competencies -> Company Board of Directors	0.123	4.687	0.000
Management Competencies -> Company Accountability	0.149	8.228	0.000
External Opportunities -> Company Members	0.153	9.057	0.000
External Opportunities -> Information Transparency	0.199	3.729	0.000
External Opportunities -> Company Responsibility	0.175	0.013	0.990
External Opportunities -> Company Board of Directors	0.073	11.416	0.000
External Opportunities -> Company Accountability	0.190	4.556	0.000
International Platform -> Company Members	0.113	3.878	0.000
International Platform -> Information Transparency	0.085	12.607	0.000

International Platform -> Company Responsibility	0.152	0.664	0.507
International Platform -> Company Board of Directors	0.109	3.132	0.002
International Platform -> Company Accountability	0.122	11.308	0.000
Successful market orientation -> Company members	0.167	1.594	0.112
Successful market orientation -> Information transparency	0.068	9.950	0.000
Successful market orientation -> Company responsibility	0.196	0.583	0.560
Successful market orientation -> Company board of directors	0.121	7.877	0.000
Successful market orientation -> Company accountability	0.125	6.341	0.000

Based on Table 8, the results show that most of the t-values for the relationship between the dimensions related to the research variables are greater than 1.96 and have a significance level of less than 0.05 (marked in green font in the original), which indicates an interactive relationship between the dimensions of corporate entrepreneurship variables and corporate governance in entrepreneurial companies.

Discussion and Conclusion

The purpose of this study was to investigate the interactive relationship between the dimensions of corporate entrepreneurship and corporate governance in entrepreneurial companies, with an emphasis on how organizational, managerial, and institutional characteristics influence entrepreneurial outcomes. The findings from both qualitative and quantitative analyses demonstrate a strong, multidimensional, and statistically significant relationship between the two constructs, confirming that corporate entrepreneurship is not an isolated managerial practice but an outcome shaped by governance structures, leadership conditions, transparency mechanisms, and institutional expectations. The PLS-SEM results revealed that most paths between the five dimensions of corporate entrepreneurship and the five dimensions of corporate governance yielded significant t-values, reinforcing the argument that governance mechanisms systematically shape entrepreneurial readiness, opportunity pursuit, and innovation capacity. These results are consistent with the growing body of research that views entrepreneurship as an institutionalized organizational process embedded in governance arrangements (1).

The study's findings show that human resource prerequisites—such as job security, risk tolerance, enthusiasm for entrepreneurial activity, and creative idea generation—are significantly related to governance elements including transparency, board structure, and member performance. This aligns with prior work emphasizing that organizations must cultivate psychological safety, structural empowerment, and learning environments to stimulate entrepreneurial behavior (18). The positive paths from human resource prerequisites to board of directors' effectiveness and information transparency indicate that entrepreneurial activity relies on trust-building, reliable communication channels, and clearly articulated governance responsibilities. Similar results appear in empirical studies demonstrating that strong governance systems encourage intrapreneurial engagement by fostering trust, procedural fairness, and clarity in decision-making (25, 28). The results also confirm that effective governance systems reduce the ambiguity that often deters employees from presenting creative ideas, thereby legitimizing entrepreneurial participation across organizational levels.

Management competencies—such as pioneering leadership, experiential learning, emulation of best practices, and respect for employee input—showed significant positive relationships with governance indicators, particularly information transparency, board functionality, and accountability. These findings reflect the theoretical view that corporate entrepreneurship is deeply linked to the cognitive and behavioral attributes of leaders, whose strategic actions are shaped by governance frameworks (21). By demonstrating that management competencies significantly

enhance transparency and board interactions, the study supports the proposition that entrepreneurial leadership is not merely a stylistic characteristic but a governance outcome. This is consistent with research showing that boards with strong monitoring capability and high expertise encourage proactive, opportunity-oriented managerial behavior (29). Moreover, the alignment with prior studies that highlight the moderating role of governance in shaping executive decision-making (11) further validates the significance of managerial competencies in entrepreneurial settings.

External opportunities—including government support, economic policies, tax incentives, and ease of licensing—were found to be strongly correlated with multiple dimensions of governance. The positive relationship between external opportunities and transparency as well as board effectiveness suggests that firms respond to institutional incentives more effectively when governance systems are robust and well-structured. Such findings align with institutional theory, which highlights the importance of institutional frameworks in shaping entrepreneurial ecosystems (4). The results also correspond to recent work emphasizing that institutional support significantly enhances international and domestic entrepreneurial activity by reducing uncertainty, facilitating knowledge acquisition, and legitimizing venture creation (15). The significant path coefficients observed in this study reinforce the argument that firms embedded in supportive institutional environments benefit more from entrepreneurial initiatives when governance mechanisms are strong enough to absorb and respond to external opportunity signals.

International platform building—a dimension including export development, competitiveness, and international communication—also demonstrated significant relationships with governance variables. In particular, its strong associations with information transparency, accountability, and board effectiveness underscore the importance of governance in global entrepreneurial strategy. Prior studies have similarly shown that international entrepreneurship requires governance structures that reduce information asymmetry, enhance cross-border legitimacy, and coordinate complex international operations (8, 9). The results of this study also parallel findings that international entrepreneurial activities are more successful when governed by boards with diverse expertise and strategic vision (7). These outcomes collectively suggest that governance systems must evolve alongside internationalization efforts to sustain entrepreneurial competitiveness in global markets.

Successful market orientation—comprised of market-targeting capability, adaptability, and product innovation—was positively associated with governance constructs regarding transparency, board structure, and accountability. These findings affirm the strategic entrepreneurship literature, which emphasizes that entrepreneurial market orientation depends on the firm's ability to interpret data, align with market signals, and strategically allocate resources under governance oversight (30). Market-oriented entrepreneurial firms require strong governance systems to ensure that innovation efforts are customer-driven, strategically relevant, and financially justified. Studies in emerging markets highlight similar findings: firms with transparent governance and well-structured boards achieve higher innovation performance and market expansion outcomes (24, 31). The results of the present study thus extend prior research by demonstrating that market orientation is not only a strategic choice but also a governance-dependent capability.

Across the dimensions, the structural equation modeling results showed high composite reliability, acceptable AVE values, and a goodness-of-fit (GoF) value exceeding 0.36, indicating that the model presents a strong explanatory framework. This analytical validation supports the conceptual assumption that corporate entrepreneurship and corporate governance are not independent constructs but components of an integrated organizational system. Similar claims appear in existing studies arguing that governance mechanisms such as

board independence, diversity, and monitoring capabilities influence entrepreneurial resource allocation and innovation intensity (10, 32). The high significance levels observed in the study's path coefficients further underscore the interdependence between governance effectiveness and entrepreneurial dynamism.

The findings also illuminate the nuanced nature of governance's influence on entrepreneurship. Not all governance components had strong or significant effects on all entrepreneurial dimensions. For example, corporate responsibility showed weaker relationships in some paths, suggesting that ethical frameworks, environmental monitoring, and risk management practices may influence CE indirectly through cultural or long-term strategic mechanisms. These results echo studies that describe corporate responsibility as a "slow-impact" governance dimension, where effects appear over extended time horizons or through stakeholder trust mechanisms rather than immediate entrepreneurial outputs (33). This nuanced finding highlights the need for firms to differentiate between governance mechanisms that produce rapid strategic effects and those that operate through incremental institutionalization.

Another important implication relates to board composition and structure. The results demonstrated consistently strong effects of board-related governance dimensions across entrepreneurial variables, confirming the central role of the board as an entrepreneurial catalyst. Board independence, gender diversity, and expertise have been shown to enhance innovation investment and strategic renewal (7, 8). These findings align with the present study's results, which indicate that board structure influences both internal entrepreneurial dynamics and external opportunity orientation. Similarly, the literature suggests that boards capable of balancing monitoring and strategic support enable more effective entrepreneurial experimentation (14).

Finally, the study contributes to the broader theoretical discourse by integrating insights from organizational behavior, institutional economics, entrepreneurship theory, and governance research. The results reinforce the perspective that entrepreneurship in organizations is a multi-layered phenomenon shaped by governance conditions, managerial cognition, institutional context, and cultural norms (3, 17). By empirically linking CE and CG dimensions, this study advances a holistic view of entrepreneurial organization building and provides evidence for designing governance systems that both constrain and enable entrepreneurial behavior.

This study, while comprehensive, has several limitations. The cross-sectional design limits the ability to infer causality between governance mechanisms and entrepreneurial outcomes, suggesting that longitudinal designs would provide deeper insights. The reliance on self-reported data introduces the possibility of response bias, especially regarding governance perceptions and entrepreneurial behaviors. The study was conducted within a specific national and organizational context, which may limit the generalizability of its findings to other cultural or institutional environments. Additionally, although the model incorporated numerous dimensions, it could not fully capture all contextual variables—such as informal norms, industry structure, or macroeconomic shocks—that may influence the CE–CG relationship.

Future research should employ longitudinal and experimental designs to examine dynamic changes in governance structures and their long-term effects on entrepreneurship. Comparative cross-country studies would add clarity to how institutional environments moderate these relationships. Researchers could expand the model by incorporating additional variables such as digital transformation readiness, ESG governance, cultural leadership styles, or market turbulence. Moreover, qualitative case studies may provide deeper insights into micro-level mechanisms through which governance practices foster or inhibit entrepreneurial action. Finally, future research

should explore non-linear or curvilinear effects, given that some governance mechanisms may enhance entrepreneurship up to a threshold and then produce diminishing or negative returns.

Organizations should align governance mechanisms with entrepreneurial strategy by strengthening transparency, board expertise, and participatory leadership practices. Firms should cultivate internal cultures that support intrapreneurship while ensuring adequate governance controls to manage risk. Policymakers and regulators should design governance frameworks that encourage innovation without imposing excessive administrative burdens. Managers should prioritize continuous learning, cross-functional collaboration, and market responsiveness to capitalize on emerging opportunities effectively.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adheried in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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References

1. Zahra SA. Contextualizing theory building in entrepreneurship research. Journal of Business Venturing. 2007;22(3):443-52. doi: 10.1016/j.jbusvent.2006.04.007.

2. Welter F, Baker T, Wirsching K. Three waves and counting: The rising tide of contextualization in entrepreneurship research. Small Business Economics. 2019;52(2):319-30. doi: 10.1007/s11187-018-0094-5.

3. Wadhwani RD, Kirsch D, Welter F, Gartner WB, Jones GG. Context, time, and change: Historical approaches to entrepreneurship research. Strategic Entrepreneurship Journal. 2020;14(1):3-19. doi: 10.1002/sej.1346.

4. Urbano D, Aparicio S, Audretsch D. Twenty-five years of research on institutions, entrepreneurship, and economic growth: What has been learned? Small Business Economics. 2019;53(1):21-49. doi: 10.1007/s11187-018-0038-0.

5. Nakara WA, Messeghem K, Ramaroson A. Innovation and entrepreneurship in a context of poverty: A multilevel approach. Small Business Economics. 2019;56(4):1601-17. doi: 10.1007/s11187-019-00281-3.

6. Muhammad H, Migliori S, Consorti A. Corporate governance and RandD investment: does firm size matter? Technology Analysis and Strategic Management. 2024;36(3):518-32. doi: 10.1080/09537325.2022.2042508.

7. Yakubu IN, Oumarou S. Boardroom dynamics: The power of board composition and gender diversity in shaping capital structure. Cogent Business and Management. 2023;10(2):2236836. doi: 10.1080/23311975.2023.2236836.

8. Almor T, Bazel-Shoham O, Lee SM. The dual effect of board gender diversity on RandD investments. Long Range Planning. 2019. doi: 10.2139/ssrn.3240783.

9. Göcke L, Hülsebusch K, Menter M. The legitimacy of corporate entrepreneurship: a structured literature review. Management Review Quarterly. 2022;72(2):385-416. doi: 10.1007/s11301-021-00246-5.

10. Guldiken O, Darendeli IS. Too much of a good thing: Board monitoring and RandD investments. Journal of Business Research. 2016;69(8):2931-8. doi: 10.1016/j.jbusres.2015.12.062.

11. Lu X, Sheng Y, Wang J. The influence of executive compensation incentives on RandD investment: the moderating effect of executive overconfidence. Technology Analysis and Strategic Management. 2020;32(10):1169-81. doi: 10.1080/09537325.2020.1748184.

12. Zona F. Agency models in different stages of CEO tenure: The effects of stock options and board independence on RandD investment. Research Policy. 2016;45(2):560-75. doi: 10.1016/j.respol.2015.10.012.

13. Rossi F, Cebula RJ. Ownership structure and RandD: an empirical analysis of Italian listed companies. PSL Quarterly Review. 2015;68:275.

14. Areneke G, Khlif W, Kimani D, Soobaroyen T. Do corporate governance codes matter in Africa? In: Marnet O, editor. Research Handbook on Corporate Board Decision-Making2022. p. 273-301.

15. Zhou F, Li X, Han C, Zhang L, Gupta BB. Unpacking the effect of institutional support on international corporate entrepreneurship in entrepreneurial support systems. International Entrepreneurship and Management Journal. 2023:1-30. doi: 10.1007/s11365-023-00861-6.

16. Danso A, Fosu S, Owusu-Agyei S, Ntim CG, Adegbite E. Capital structure revisited. Do crisis and competition matter in a Keiretsu corporate structure? International Journal of Finance and Economics. 2022;26(4):5073-92. doi: 10.1002/ijfe.2055.

17. Morales C, Holtschlag C, Masuda AD, Marquina P. In which cultural contexts do individual values explain entrepreneurship? An integrative values framework using Schwartz's theories. International Small Business Journal. 2019;37(3):241-67. doi: 10.1177/0266242618811890.

18. Ma H, Liu TQ, Karri R. Internal corporate venturing: intrapreneurs, institutions, and initiatives. Organizational Dynamics. 2016;45(2):114-23. doi: 10.1016/j.orgdyn.2016.02.005.

19. Torabi MH, Sakhdari K, Azizi M, Mousakhani M. Presenting an Organizational Entrepreneurship Model in Intra-Organizational Businesses Based on Corporate Governance in Iran. Journal of Development and Transformation Management. 2022;49:11-20.

20. Foruzanfar H, Musakhani M, Alvani SM, Kazemi A. Presenting a Model of Organizational Entrepreneurship Based on Corporate Governance in the Banking Industry. Journal of Development and Transformation Management. 2022;15(53):1-13.

21. McMullen JS, Ingram KM, Adams J. What makes an entrepreneurship study entrepreneurial? Toward a unified theory of entrepreneurial agency. Entrepreneurship Theory and Practice. 2020:1042258720922460. doi: 10.1177/1042258720922460.

22. Akomea-Frimpong I, Asogwa IE, Tenakwah EJ. Systematic Review of Sustainable Corporate Governance of SMEs: Conceptualisation and Propositions. Corporate Ownership and Control. 2022;19(3):74-91. doi: 10.22495/cocv19i3art5.

23. Funko IS, Vlačić B, Dabić M. Corporate entrepreneurship in public sector: A systematic literature review and research agenda. Journal of Innovation and Knowledge. 2023;8(2):100343. doi: 10.1016/j.jik.2023.100343.

24. Jain A, Jain P. Effective Marketing and Corporate Governance Contribute to Entrepreneurial Success: Case Study of India's Most Trusted Diagnostics-Healthians. Indian Journal of Corporate Governance. 2022;15(2):321-44. doi: 10.1177/09746862221142332.

25. Ho M, Teo STT. Activating collective agency in disrupted contexts: The social-cognitive context of ad hoc organising in a small and medium-sized enterprise. International Small Business Journal. 2022;40(2):273-304. doi: 10.1177/02662426211049503.

26. Cao C, Chen M, Tang X, Liu H. Linking information technology use with corporate entrepreneurship: The mediation role of openness to external knowledge. Information Systems Journal. 2025;35(1):71-96. doi: 10.1111/isj.12529.

27. Snehvrat S, Dutta SK. Building Organizational Knowledge in Corporate Entrepreneurship: Role of Time and Commonality. International Journal of Organizational Analysis. 2025;33(8):2626-48. doi: 10.1108/ijoa-04-2024-4419.

28. Nason RS, McKelvie A, Lumpkin GT. The role of organizational size in the heterogeneous nature of corporate entrepreneurship. Small Business Economics. 2015;45(2):279-304. doi: 10.1007/s11187-015-9632-6.

29. Smith E, Collin SO. Corporate governance and corporate entrepreneurship in different organizational forms. In: Gabrielsson J, editor. Handbook of Research on Corporate Governance and Entrepreneurship2017. p. 369-96.

30. Wang T, Thornhill S, DeCastro SO. Entrepreneurial orientation, legitimation, and new venture performance. The Strategic Entrepreneurship Journal. 2017;11:373-92. doi: 10.1002/sej.1246.

31. Rasouli K, Cheraghali M, Gorji M, Saeidi P. Identifying the Dimensions and Components of Corporate Governance with an Organizational Entrepreneurship Development Approach in Bank Keshavarzi. Business Management. 2020;47:455-74.

32. Honoré F, Munari F, de La Potterie BVP. Corporate governance practices and companies' RandD intensity: Evidence from European countries. Research Policy. 2015;44(2):533-43. doi: 10.1016/j.respol.2014.10.016.

33. Welter F, Xheneti M. Value for whom? Exploring the value of informal entrepreneurial activities in postsocialist contexts. Exploring criminal and illegal enterprise: new perspectives on research, policy and practice2015. p. 253-75.