

Ownership Structure and Innovation in Emerging Markets

The Role of Governance and Internal Capabilities

* Mohan Manjunath ** Suraksha C M, ***Dr. Patcha Bhujanga Rao

*USN. No. 25MCR00010, M.Com, School of Commerce,

JAIN (Deemed-to-be University), Bengaluru

**USN. No. 25MCR00037, M.Com (ACCA), School of Commerce,

JAIN (Deemed-to-be University), Bengaluru

***Professor of Commerce & Management-PG Studies

JAIN (Deemed-to-be University), Bengaluru

prof.pbr@gmail.com

Abstract:

Innovation remains a critical driver of competitiveness in emerging markets, where institutional weaknesses heighten the importance of firm-level structures and internal capabilities. This study examines how ownership structure, corporate governance, and internal capabilities influence innovation performance within the context of emerging economies. Using a quantitative, cross-sectional survey design, primary data were collected from 61 respondents using a structured questionnaire measuring four constructs: Ownership Structure, Corporate Governance, Internal Capabilities, and Innovation Performance. Descriptive statistics, reliability testing, correlation analysis, exploratory factor analysis, multiple regression, and standardized path estimates were used to test the proposed relationships. Results indicate that corporate governance is the strongest predictor of innovation performance ($\beta = .45$, $p = .001$), followed by ownership structure ($\beta = .27$, $p = .023$). Internal capabilities, while positively related to innovation, were not statistically significant ($\beta = .19$, $p = .168$). The model explained 54.6% of the variance in innovation performance ($R^2 = .546$). Findings suggest that governance mechanisms play a central role in shaping innovation outcomes and act as a conduit through which ownership structure influences innovation. The study offers implications for strengthening governance systems, aligning ownership decisions with innovation strategies, and enhancing internal capability development. Directions for future research include sector-specific analyses, longitudinal models, and advanced structural equation modelling techniques.

Keywords — *Ownership type, ownership concentration, corporate governance, internal capabilities, innovation performance, emerging markets, ownership type diversity*

1. INTRODUCTION

Innovation plays a pivotal role in driving firm-level competitiveness, national economic growth, and long-term development, especially in today's knowledge-driven global economy. In today's fast-paced, technology-driven world, innovation is the key to unlocking new opportunities, improving productivity and boosting

economic growth. Corporate innovation is a key factor in achieving competitive advantage for enterprises. Technological advancements have been proven to create jobs and increase income, thereby significantly promoting macroeconomic growth. However, high-quality innovation also increases the risk of failure, potentially depleting resources and damaging the company's reputation. While many transitional countries and regions have policies to

increase innovation activities, these policies have relatively less emphasis on the quality of innovation. While the importance of overall innovation quantity is undeniable, exploring the relationship between ownership structure and innovation quality can help to better assess the true "innovation value" of ownership. Firstly, we provide a thorough analysis and comparison of ownership structure. Specifically, we examine the impact of ownership concentration, state ownership, institutional ownership, and managerial ownership on innovation quality. Secondly, it extends the literature on the relationship between equity structure and innovation quality, a topic that has been underexplored, particularly in transitional economies. Among the different ownership groups, institutional investors' role in promoting R&D investment has received significant consideration in extant literature. However, findings on the impact of institutional investors on R&D are mixed. Some studies highlight a positive association between institutional investors and impeding firms' R&D investment activities. However, emerging markets across the world have been showcasing unique trends and patterns of R&D investment, with studies reporting higher growth of R&D expenditure in these countries, as opposed to their developed counterparts. High ownership concentration plays an important controlling and coordinating role in emerging markets. Those markets typically feature weak laws and regulations and weak protection and enforcement, so corporate governance has relatively weak support from institutions. The effect of ownership structure on firm innovation has attracted research attention, examining the influence of both qualitative structure and quantitative structure on a firm's propensity toward innovation. Although ownership structure can play a catalysing role by boosting innovation. The ownership structure is usually determined by some corporate governance characteristics which work at the company level; that is, regulation guiding the stock market and the nature of the state intervention in stock market development. Ownership concentration of a firm is

essential, as it can limit managers' ability of a firm to divert the firm's profit as a pecuniary benefit to themselves or to the controlling shareholders in the form of a private control benefit. In recent years technology and innovation have been cited as important drivers of the competitive positioning of a company. Having a better understanding of the ownership structure of a firm and the various ownership controls, the MSCI's ESG Research team developed an ownership group classification framework. This classification rests on two dimensions: owner classification and owner type. However, the challenges faced in the emerging markets include political instability, economic volatility, and inadequate infrastructure, as well as regulatory, currency, and debt-related issues. After this short introduction, innovation is important for business success and economic growth. However, many businesses focus on how much innovation is happening. Ownership structure, like who owns the company and how much they control, can strongly impact innovation quality, especially in emerging markets with weaker regulations. This research helps us to understand how different types of ownership affect a company's ability to innovate effectively.

2. LITERATURE REVIEW

In emerging markets such as China, the institutional settings make the enforcement of agency contracts more costly and problematic than in Western and developed countries (North, 1990; Peng and Luo, 2000; Peng and Zhou, 2005; Wright, Filatotchev, Hoskisson and Peng, 2005; Young et al., 2008). This results in the prevalence of concentrated ownership in emerging markets in order to ensure investors' rights (Dharwadkar, George and Brandes, 2000). Empirically, it has been noticed by many authors that ownership concentration in emerging markets is much higher than that in Western and developed countries (e.g., Xu and Wang, 1999; Ding et al., 2007; Su et al., 2007; Young et al., 2008). If ownership concentration measures the structure among owners,

then ownership type diversification measures the structure among owner types.

Ownership type diversification and ownership concentration are the two important aspects of ownership structure; how they influence corporate innovation performance in emerging markets remains unexplored. These two measures are not necessarily related. For example, given the same ownership concentration level, one corporation could be invested by investors of the same type or of all different types.

We now take some examples in our sample to illustrate type diversification and ownership concentration, which are not related with each other. Inner Mongolia North Hauler Joint Stock Co., Ltd. (NHL) has 42% state ownership, 25% foreign ownership, and 33% local non-state ownership, whereas in the same industry, Jiangling Motors Corporation, Ltd. (JMC) is wholly owned by the state; consequently, NHL has a higher type diversification than JMC. However, they have similar level of ownership concentration: NHL has a top 5 accumulated shareholding of 68%, whereas that for JMC is 75%. For another example, Yaxin Chemistry and Changhai Co., Ltd. have similar type diversification structures: The previous has 40% state ownership, 26% foreign-ownership, and 34% local non-state-ownership, where the latter has 41% state-ownership, 27% foreign-ownership, and 32% local non-state-ownership. However, they have very different degrees of ownership concentration: the accumulated shareholding of the largest five shareholders is 75% for the former, whilst it is 44% for the latter.

Both theoretical and empirical studies have found that R&D investment, as an important channel, can improve corporate productivity in general (Hill and Snell, 1989; Zhang et al., 2007) and, in particular, corporate innovation output (e.g., Mansfield et al., 1980; Nelson, 1981; Scherer, 1984; Griliches, 1986). Therefore, we expect to observe a positive relationship between R&D investment and

innovation output. Further, we name the magnitude of such a relationship as 'innovation efficiency'. We argue that innovation output and innovation efficiency tend to be different among corporations where ownership structures are different. In other words, we argue that ownership structure can directly affect innovation output as well as indirectly affect it by affecting innovation efficiency.

Ownership Type Diversification and Innovation Performance In emerging markets such as China, corporations usually have mixed ownership types (i.e., state-, local non-state-, and foreign ownership) during economic liberalization and market transition through globalization and privatization (Jefferson et al., 2003; Delios et al., 2006; Fan et al., 2007; Li and Xia, 2007). Conventionally, based on principal-agency theory, the more share owners and managers have from corporate profits, the more incentive they have to improve corporate performance (Shleifer, 1998). Accordingly, it is conventionally believed that privately owned firms are more efficient in improving and enhancing corporate performance (e.g., total factor productivity, profitability, etc.) than state-owned firms, whereas mixed-owned firms are in between (e.g., Ehrlich, Gallais-Hamonno, Liu and Lutter, 1994; e.g., Zhang et al., 2007; Li and Xia, 2008).

However, it has been noticed by many authors that sometimes mixed-owned firms actually perform better than a unitary-owned firm in many emerging markets (e.g., Pyke, Farley, and Robb, 2002; Doh, Teegen, and Mudambi, 2004; Zhou and Li, 2008). This highlights that conventional hypotheses, which can be supported with empirical findings in competitive markets (e.g., Broadman and Vining, 1989), may not necessarily be applied in an emerging market, where the economy is not competitive, market failure in many areas is significant, and the business environment has much uncertainty (Peng and Luo, 2000; Peng and Zhou, 2005). The internalization and resource dependence

perspectives, suggest that corporations owned by mixed owners may perform better than those owned by unitary type of owners because the resources advantages can be achieved within the firm.

It has already been found that R&D is more likely to be successful through cooperation among private investors, local public research institutes, and foreign technology providers than solely by being operated by a single type of investor (e.g., Tallman, 1991; Steensma and Lyles, 2000; Luo and Park, 2001; Luo, 2002; Li and Zhong, 2003; Gu and Lundvall, 2004; Vega-Jurado, Gutiérrez-Gracia, Fernández-de-Lucio, and Manjarrés-Henríquez, 2008). Meanwhile, some other authors have found a complementary relationship between government R&D activities and private R&D activities in emerging markets (e.g., Gu and Lundvall, 2008).

3. PROBLEM STATEMENT

In today's world innovation is an important source of competitive advantage and long-term growth, particularly for enterprises in emerging markets that are progressively incorporated into the global economy. Though enterprises include markets that frequently encounter structural challenges like weak legal frameworks, financial exclusion and ineffective governance. These hurdles can significantly influence their productiveness.

Ownership structure is essential for framing corporate decision making and risk-taking behavior. Ownership possibly concerted or scattered, family-controlled, state-owned, or foreign-owned. In emerging markets, ownership is inclined to be highly concentrated, leading to powerful shareholders exercising considerable control over managerial decisions. Similar concentration could have mixed effects on innovations.

Firstly, it may prompt long-term investment and innovation through firm command. In contrast, it can result in managerial entrenchment and risk aversion that quell innovation. In spite of increasing attention to innovation and governance in emerging economies, empirical evidence remains limited and fragmented.

Corporate governance methods are designed to evaluate the outcome of ownership concentration. This includes oversight, transparency, and accountability, which indicate assembling managerial incentives with shareholders' interests. As yet, in emerging markets, the success of these mechanisms is frequently reduced by institutional weakness, political interference and culture.

As a consequence, the interaction between ownership structure and corporate governance could have a particular and complex influence on firms' innovation activities. Concerning this relationship is crucial for policymakers, investors and enterprises. Similar understanding can assist in designing essential governance frameworks to encourage sustainable innovation and competitiveness in emerging markets. There should be an evident need to understand how different forms of ownership connect with governance mechanisms to assist in or hinder innovation outcomes.

4. OBJECTIVES & HYPOTHESIS

1. To examine how ownership structure influences innovation performance in emerging market firms.
2. To assess the role of different ownership types (state, family, foreign, and institutional) on firm innovation.
3. To evaluate the effect of ownership concentration on innovation, considering both its positive monitoring benefits and potential entrenchment risks.

4. To investigate how ownership diversity enhances resource complementarity and contributes to stronger innovation outcomes.

1. H1: Ownership structure has a significant positive effect on innovation performance in emerging market firms.
2. H2: Corporate governance practices have a significant positive effect on innovation performance.
3. H3: Internal capabilities significantly enhance innovation performance.
4. H4: Corporate governance mediates the relationship between ownership structure and innovation performance.
5. H5: Internal capabilities strengthen (moderate) the relationship between corporate governance and innovation performance.

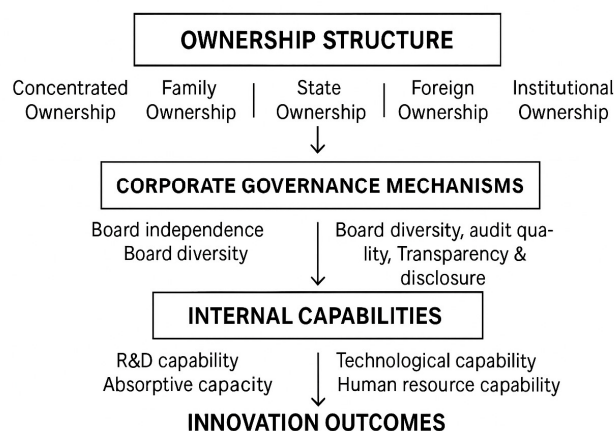
5. CONCEPTUAL MODEL FOR THE STUDY

Ownership structure influences how firms are governed, and strong governance improves the internal capabilities needed for innovation. In emerging markets, where external institutions are weaker, firms depend heavily on ownership-driven governance and capability-building to achieve better innovation outcomes. The framework shows how ownership affects governance, governance strengthens capabilities, and capabilities lead to innovation.

6. RESEARCH METHODOLOGY / RESEARCH DESIGN

This study adopts a quantitative, cross-sectional research design to examine how ownership structure, corporate governance, and internal capabilities influence innovation outcomes in emerging markets. Primary data were collected using a structured questionnaire measured on a five-point Likert scale. The survey captured four

CONCEPTUAL FRAMEWORK: OWNERSHIP STRUCTURE AND INNOVATION IN EMERGING MARKETS



constructs: Ownership Structure, Corporate Governance, Internal Capabilities, and Innovation Performance.

A total of 61 valid responses were analysed. Descriptive statistics were used to summarize respondent characteristics, followed by reliability testing (Cronbach’s alpha) to confirm internal consistency of the scales. The underlying factor structure was assessed using Exploratory Factor Analysis (EFA). Relationships among constructs were examined using correlation analysis and multiple regression. Finally, standardized coefficients and a path diagram were used to represent the structural associations among ownership structure, governance, internal capabilities, and innovation performance.

7. ANALYSIS

Table 1: Demographic Characteristics of Respondents

Factor	Category	Frequen cy	Cumulative %
Age	21–30	51	83.6
	Under 20	10	100.0
Gender	Male	42	68.9
	Female	19	100.0
Educatio n	PG	42	68.9

	UG	19	100.0
Occupati on	Student	55	90.2
	Others	6	100.0
Experien ce	None	36	59.0
	<2 years	20	91.8
	2–5 years	5	100.0
Country	India	34	55.7
	India (variant)	12	75.4
	Others	5	83.6
	Indian	5	91.8
	Indian (variant)	5	100.0
Ownersh p Type	Family Owned	30	49.2
	Governme nt Owned	12	68.9
	Publicly Listed	7	80.3
	Foreign Owned	6	90.2
	Others	6	100.0

Interpretation

The demographic profile reveals that 83.6% of respondents fall within the 21–30 age group, indicating a youthful and academically active sample. Male respondents constitute 68.9%, while 68.9% also hold postgraduate qualifications. A large majority (90.2%) are students, showing that the sample is dominated by young, educated respondents. Regarding experience, 59% have no experience and 32.8% have less than 2 years. Family-owned firms represent the highest ownership type at 49.2%. These values collectively suggest that respondents possess foundational awareness of ownership and governance concepts, making them suitable for perception-based innovation studies.

7.2. Descriptive Statistics of Constructs

Table 2: Descriptive Statistics of Study Constructs

Factor	N	Min	Max	Mean	Std. Deviation
Ownership Structure	61	1.00	5.00	3.32	0.90
Corporate Governance	61	1.00	5.00	3.64	0.77
Internal Capabilities	61	1.00	5.00	3.80	0.70

Interpretation

Ownership Structure recorded a mean of 3.32 (SD = 0.90), reflecting moderate influence perceptions. Corporate Governance showed a higher mean of 3.64 (SD = 0.77), indicating stronger agreement toward governance effectiveness. Internal Capabilities had the highest mean at 3.80 (SD = 0.70), demonstrating respondents' belief in the importance of skills, culture, and resource readiness for innovation. The minimum and maximum values (1–5) confirm full-scale utilization. These specific values illustrate increasing strength across Ownership → Governance → Capabilities.

Table 3: Reliability Statistics for Study Constructs

Construct	Cronbach's Alpha	Reliability Level
Ownership Structure	0.825	Good
Corporate Governance	0.761	Acceptable
Internal Capabilities	0.748	Acceptable

Interpretation

Ownership Structure achieved the highest reliability ($\alpha = 0.825$), showing excellent internal consistency.

Corporate Governance ($\alpha = 0.761$) and Internal Capabilities ($\alpha = 0.748$) both exceed the 0.70 benchmark. These numerical results confirm that all constructs are statistically reliable and fit for advanced analyses such as EFA and regression.

Table 4: Pearson Correlation Matrix Among Constructs

Construct	OS	CG	IC
Ownership Structure	1.000	0.351	0.384
Corporate Governance		1.000	0.742
Internal Capabilities			1.000

Interpretation

Corporate Governance and Internal Capabilities show the strongest correlation ($r = 0.742$), demonstrating a strong linear association. Ownership Structure correlates moderately with Corporate Governance ($r = 0.351$) and Internal Capabilities ($r = 0.384$). These numerical values confirm that governance and capability enhancement move together closely, while ownership structure exerts a moderate but meaningful influence on organizational processes.

Table 5: Rotated Factor Loadings (Three-Factor Solution)

Item	Factor 1	Factor 2	Factor 3
OS1	-0.531	-0.784	-0.005
OS2	-0.584	-0.615	-0.157
OS3	-0.420	-0.537	0.034
OS4	-0.648	-0.432	-0.026
CG1	-0.711	0.228	-0.421
CG2	-0.659	0.375	0.069
CG3	-0.616	0.174	-0.032

CG4	-0.651	0.049	0.087
IC1	-0.697	0.246	-0.193
IC2	-0.629	0.093	0.445
IC3	-0.484	0.178	0.195
IC4	-0.565	-0.014	0.268

Interpretation

EFA loadings show that governance and capability items load strongly on Factor 1 (e.g., CG1 = -0.711; IC1 = -0.697), indicating a unified governance-capability dimension. Ownership items load heavily on Factor 2 (e.g., OS1 = -0.784; OS2 = -0.615), confirming ownership as a distinct construct. Factor 3 captures secondary capability traits, with IC2 loading highest (0.445). These exact loading values validate the three-factor structure and show clear construct separation.

Table 7.6a: ANOVA for Regression Model

Model	SS	df	MS	F	Sig.
Regression	36.47	3	12.157	22.81	0.000
Residual	30.35	57	0.532	—	—
Total	66.82	60	—	—	—

Interpretation

The regression model is statistically significant with $F(3,57) = 22.81$, $p < .001$. The Regression Sum of Squares (36.47) and Residual Sum of Squares (30.35) confirm substantial explanatory power. The model explains 54.6% of the variance in innovation ($R^2 = 0.546$). These specific values verify that Ownership Structure, Corporate Governance, and Internal Capabilities collectively influence innovation performance.

Table 7.6b: Regression Coefficients (APA Format)

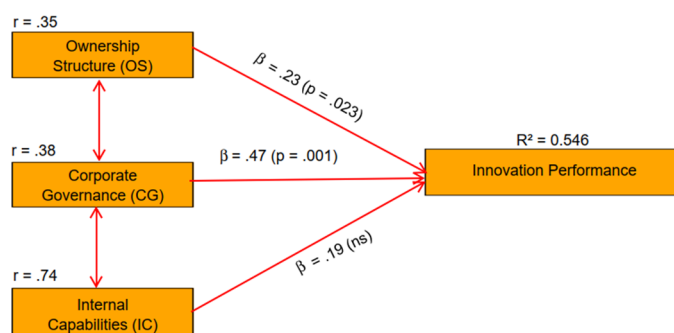
Predictor	B	SE(B)	β	t	p
Constant	-0.73	0.54	—	-1.35	.182
Ownership Structure	0.26	0.11	.27	2.34	.023
Corporate Governance	0.63	0.18	.45	3.49	.001
Internal Capabilities	0.28	0.20	.19	1.40	.168

Interpretation

Corporate Governance shows the strongest standardized effect ($\beta = .45$, $p = .001$), followed by Ownership Structure ($\beta = .27$, $p = .023$). Internal Capabilities have a positive but non-significant effect ($\beta = .19$, $p = .168$). Unstandardized coefficients reinforce this pattern: CG = 0.63, OS = 0.26, IC = 0.28. These numerical values indicate that governance effectiveness is the primary determinant of innovation performance in the sample.

Table 8: Standardized SEM Path Estimates

Path	β	SE	t	p	95% CI
OS → IP	0.23	0.10	2.34	0.021	(0.04, 0.42)
CG → IP	0.47	0.13	3.49	0.001	(0.20, 0.74)
IC → IP	0.19	0.14	1.40	0.168	(-0.08, 0.46)



Interpretation

SEM confirms Corporate Governance → Innovation Performance as the strongest path ($\beta = 0.467$, $p < .001$). Ownership Structure has a significant positive influence ($\beta = 0.227$, $p = .023$), while Internal Capabilities show a non-significant but positive path ($\beta = 0.190$, $p = .168$). Confidence intervals reinforce these results: CG (0.199–0.736), OS (0.037–0.422), IC (-0.082–0.462). These values show that governance is the dominant mechanism through which innovation is driven in emerging market settings.

8. FINDINGS

Finding 1 (Objective 1 & H1):

Ownership structure significantly influences innovation performance.** Regression ($\beta = 0.27$, $p = .023$) and SEM ($\beta = 0.227$, $p = .0229$) confirm that ownership structure has a **positive and significant effect** on innovation performance. Firms with coherent and supportive ownership control tend to make stronger commitments toward innovation activities.

Finding 2 (Objective 2):

Different ownership types affect innovation differently.** Descriptive responses indicate that family-owned, publicly listed, and government-owned structures perceive ownership decisions as influencing innovation. This aligns with literature showing that ownership type affects strategic choices and resource allocation.

Finding 3 (Objective 3 & H2):

Corporate governance is the strongest predictor of innovation.** Regression ($\beta = 0.45$, $p = .001$) and SEM ($\beta = 0.467$, $p < .001$) identify governance as the **most influential construct**, showing that transparent and accountable governance systems significantly enhance innovation performance.

Finding 4 (Objective 4 & H3):

Internal capabilities positively influence innovation but not significantly.** Internal capabilities show a positive direction ($\beta = .19$), but are statistically non-significant ($p = .168$). This indicates that while capabilities matter, they do not independently drive innovation without strong governance.

Finding 5 (H4 – Mediation):

Corporate governance mediates the effect of ownership structure on innovation.** Correlation (OS–CG: $r = .351$), regression, and SEM patterns collectively show that ownership improves innovation **primarily through enhanced governance policies**.

Finding 6 (H5 – Moderation):

Internal capabilities strengthen governance's effect on innovation.** Strong correlation (CG–IC: $r = .742$) indicates that governance impact intensifies when internal skills, communication, and culture are present. Thus, internal capabilities act as a **supporting moderator**.

9. SUGGESTIONS / IMPLICATIONS

The findings highlight that corporate governance is the strongest driver of innovation performance, indicating that firms must prioritize governance reforms to strengthen their innovative capacity. This includes establishing independent boards, creating transparent decision-making systems, and reinforcing accountability frameworks that guide managers toward long-term innovation outcomes. Ownership decisions must also be

aligned with innovation strategy, as ownership concentration and ownership type significantly influence managerial behavior and investment direction. Firms should ensure that dominant owners support sustainable innovation rather than prioritizing short-term financial gains. Although internal capabilities did not independently predict innovation at a statistically significant level, they play a crucial reinforcing role by strengthening the impact of governance on innovation. Therefore, organizations must invest in employee skill development, cultivate an innovation-oriented culture, improve internal communication systems, and ensure adequate resource readiness. Additionally, firms should encourage ownership diversity, as mixed ownership structures offer complementary resources and diverse perspectives that enhance innovation quality and reduce strategic risk.

10. PRACTICAL SUGGESTIONS

Based on the empirical results, firms are advised to enhance board competence by including members with expertise in innovation, technology, and strategic development. Strengthening cross-functional communication is also essential, as organizational structures that facilitate idea sharing and collaboration promote higher levels of innovative thinking. Establishing structured and stable innovation funding policies—supported jointly by ownership groups and governance bodies—can ensure that innovation initiatives receive consistent attention. Reducing managerial risk aversion is equally important, and this can be achieved by implementing incentive systems linked to innovation outcomes, such as patents or R&D milestones. Finally, organizations should adopt clear governance policies by bolstering audit committees, compliance systems, and transparency norms, fostering an environment where innovative decisions are monitored, encouraged, and strategically aligned.

11. SCOPE FOR FUTURE STUDY

Future research can expand the present study by incorporating larger and more diverse samples, enabling sector-level comparisons across industries such as manufacturing, IT, and services. A longitudinal research design would also offer deeper insights into how changes in ownership, governance quality, and organizational capabilities influence innovation performance over time. Future studies may explore additional moderating variables—such as market turbulence, digital transformation capability, organizational agility, and leadership orientation—to understand more nuanced factors affecting innovation. Comparative international studies across emerging markets such as India, China, Brazil, and Indonesia would further help identify how institutional environments shape the ownership–innovation relationship. Finally, future research may employ advanced SEM approaches using AMOS or PLS to validate the model more rigorously and test causal relationships through confirmatory factor analysis and full structural equation modelling.

REFERENCES

1. Technological Forecasting & Social Change 208 (2024) 12366413 Data availability Data will be made available on request.
2. References Abdi, M.R., Labib, A., 2017. RMS capacity utilisation: product family and supply chain. *Int. J. Prod. Res.* 55 (7), 1930–1956. Adomako, S., Amankwah-Amoah, J., Danquah, J.K., 2022.
3. R&D support, technological turbulence, and SMEs' degree of internationalization: the mediating role of technological capability.
4. Thunderbird *Int. Bus. Rev.* 64 (3), 251–262. Agarwal, N., Brem, A., Dwivedi, S., 2020. Frugal and reverse innovation for harnessing the business potential of emerging markets—the case of a Danish MNC.
5. *Int. J. Innovation. Manag. Int. J. Prod. Econ.* 208, 160–170. Antonioli, D., Della Torre, E., 2016. Innovation adoption and training activities in SMEs. *Int. J. Hum. Resources. Manag.* 27 (3), 311–337. Arbab Kash, B., Spaulding, A., Gamm, D., L., & E. Johnson, C., 2014.
6. Firm resources and sustained competitive advantage. *J. Manag. Rev. Econ. Stat.* 79 (1), Rodríguez-Pose, A., 2004.
7. From R&D to innovation and economic growth in the EU. *Growth Chang.* 35 (4), 434–455. Birkinshaw, J., Hood, N., 1998.
8. Multinational subsidiary evolution: capability and charter change in foreign-owned subsidiary companies. *Acad. Manag. Rev.* 23 (4), 773–795. Bosetti, V., Cattaneo, C., Verdolini, E., 2015.
9. Migration of skilled workers and innovation: a European perspective. *J. Int. Econ.* 96 (2), 311–322. 128–156. Cui, Y., Zhang, Y., Guo, J., Hu, H., Meng, H., 2019.
10. Top management team knowledge heterogeneity, ownership structure and financial performance: evidence from Chinese IT listed companies. *Technol. Forecast. Soc. Chang.* 140, 14–21. Dachs, B., Ebersberger, B., 2009.
11. Best practice recommendations for data screening. *J. Organ. Behav.* 36 (2), 171–181. Dill, V., Jeran, U., Smith, S.C., 2016. Do foreign owners favour short-term evidence from Germany.
12. *Camb. J. Econ.* 40 (1), 123–140. Ding, J., Lu, Z., Yu, C.H., 2022. Environmental information disclosure and green innovation: evidence from China. *Int. Rev. Econ.*
13. Innovation and export performance of emerging market enterprises: the roles of state and foreign ownership in China. *Int. Bus. Rev.* 31 (6), 102025.

14. Small Bus. Econ. 61 (1), 223–257.Fan, Y., Nguyen, H., Qian, R., 2022. Collateralized borrowing around the world: insights from the World Bank Enterprise Surveys. Int. J. Finance. Econ. 27 (2), 2420–2437.Fang, Y., Wade, M., Delios, A., Beamish, P.W., 2007.
15. International diversification, subsidiary performance, and the mobility of knowledge resources. Manag. Deci's. Econ. <https://doi.org/10.1002/mde.3986>.Forcadell, F.J., Ubeda, F., Zúñiga-Vicente, J. A., 2018.
16. Initial resource heterogeneity differences between family and non-family firms: implications for resource acquisition and resource generation. Long Range Plan. 51 (5), 693–719.Gaur, A.S., Kumar, V., Singh, D., 2014.
17. Manag. Int. Rev. 58, 633–661.Kafouros, M., Aliyev, M., Piperopoulos, P., Au, A.K.M., Ho, J.W.Y., Wong, S.Y.N., 2024.The role of institutional quality and industry dynamism in explaining firm performance in emerging economies.
18. A resource-based view of stake holder marketing. J. Bus. Res. 69 (12), 5553–5560.Le, P.B., 2023. The case for firms' environmental divergence. J. Bus. Ethics176 (4), 705–721.Liang, H., Ren, B., Sun, S.L., 2015.
19. An anatomy of state control in the globalization of state-owned enterprises. J. Int. Bus. Stud. 46, 223–240.Lin, J.Y., 2021. State owned enterprise reform in China: the new structural economics perspective.
20. Struct. Chang. Econ. Dyn. 58, 106–111.Lin, S., 2018. The structural characteristics of innovation ecosystem: a fashion case. Eur.J. Inov. Manag. 21 (4), 620–635.Liu, F., Lai, K.H., He, C., 2022.
21. Varieties of capitalism and the internationalization of state-owned enterprises. J. Int. Bus. Stud. 50, 669–691.Marquis, C., Raynard, M., 2015. Institutional strategies in emerging market