

The Role of Firm Size and Financial Leverage in Enhancing Firm Value: A Systematic Review of Empirical Studies

Marwin Antonius Rejeki Silalahi^{1*}, Sumiati², Risna Wijayanti³, Kusuma Ratnawati⁴

¹ Faculty of Economic and Business University of Brawijaya and Faculty of Business and Economic University of Surabaya, Indonesia

^{2,3, 4} Faculty of Economic and Business University of Brawijaya, Indonesia

Corresponding author. Email: marwin@student.ub.ac.id

ABSTRACT

This study seeks to investigate the influence of business size and financial leverage on firm value through a systematic literature review (SLR) utilising the PRISMA framework. The research resolves discrepancies in previous empirical results by integrating evidence from several investigations. Data were gathered from eight datasets exported from ScienceDirect, initially consisting of 3,816 raw records. Following data cleansing and reorganisation utilising bibliographic indicators (TY = JOUR), 704 genuine journal articles were discovered. Fifty empirical papers were selected for final analysis through a stringent PRISMA procedure encompassing identification, screening, eligibility, and inclusion stages. A data extraction matrix was created to comprehensively compare study aspects, encompassing context, technique, variables, and principal findings. The findings indicate that firm size typically exerts a positive and considerable influence on firm value, attributable to economies of scale, enhanced access to capital markets, and diminished knowledge asymmetry. Conversely, financial leverage exhibits a non-linear connection; moderate leverage increases business value via tax advantages and signalling effects, whereas excessive leverage detrimentally affects value due to financial distress and agency costs. The results indicate that the relationship among these variables is contingent upon context and affected by mediating and moderating factors, including profitability, growth possibilities, and corporate governance. These considerations elucidate the discrepancies noted in previous investigations. This work enhances the literature by delivering a thorough and organised synthesis of empirical evidence, elucidating the interaction between business size and financial leverage in influencing firm value. The findings indicate that companies ought to implement optimal capital structure strategies customised to their own circumstances instead of depending on generalised assumptions. Future study should investigate integrated models that include supplementary moderating variables to improve explanatory efficacy.

Keywords: Firm Value; Firm Size; Financial Leverage; Capital Structure; Systematic Literature Review; PRISMA; Corporate Finance; Empirical Studies.

1. INTRODUCTION

Firm value is a core aim in corporate finance, embodying the market's evaluation of a firm's performance, growth potential, and risk characteristics. Firm size and financial leverage are among the principal determinants of firm value, having been thoroughly investigated in both theoretical and empirical contexts. Classical theories, such as the Modigliani–Miller theorem and trade-off theory, underscore the significance of capital structure in affecting firm valuation via tax shields and bankruptcy costs (Bradley et al., 1984; Masulis, 1983; Modigliani & Miller, 1958). Simultaneously, business size is frequently linked to economies of scale, enhanced access to external finance, and reduced information asymmetry, thereby favourably influencing firm value (González & González, 2012; Graham & Leary, 2011). Empirical research indicates that both firm size and leverage significantly influence firm value in many circumstances (Dang et al., 2019; Liow, 2010; Vo, 2017). Nonetheless, despite the substantial body of literature, the link remains logically robust although experimentally inconsistent.

A significant number of empirical research present conflicting results about the impact of business size and leverage on firm value. Certain studies indicate a positive correlation, suggesting that larger enterprises and optimal leverage augment firm value (Diantimala et al., 2021; Hirdinis, 2019; Ibrahim & Isiaka, 2020). In contrast, several studies indicate negligible or adverse correlations, implying that excessive business size may result in inefficiencies and that elevated leverage heightens the likelihood of financial hardship (Alipour et al., 2015; Nursetya & Hidayati, 2020; Saragih & Sihombing, 2021). Cross-country empirical data substantiates these inconsistencies, demonstrating that institutional

contexts, industry characteristics, and measurement variances greatly affect outcomes (Al-Najjar, 2013; Al-Najjar, 2011; Ogbulu & Emeni, 2012; Upadhyay et al., 2022). Moreover, numerous research emphasise the mediating or moderating functions of factors like profitability and expansion opportunities, hence confusing the direct correlation between company size, leverage, and firm value (Dao & Ta, 2020; Nurwulandari, 2021; Ramachandran et al., 2017). The disparate findings suggest a lack of a cohesive conclusion in the literature.

In light of these discrepancies, contemporary academic endeavours have progressively embraced systematic literature review methodologies, notably employing the PRISMA framework, to consolidate empirical evidence and pinpoint study deficiencies (Bajaj et al., 2021; Mouton & Botha, 2026; Rashid et al., 2025). Systematic reviews indicate that the variability in empirical results is mostly influenced by methodological differences, sample selection, and contextual factors, thus requiring a systematic and transparent synthesis (Meilanda et al., 2024; Priyan et al., 2023; Zahid et al., 2023). Moreover, recent research underscores that company size and leverage must be examined not in isolation but within a whole financial ecosystem that includes governance, sustainability, and risk dynamics (Jirakraisiri et al., 2021; Poespawijaya et al., 2025; Rashid et al., 2025). This work utilises the PRISMA-based systematic review methodology to integrate empirical findings, address discrepancies, and offer a more thorough comprehension of the interaction between business size and financial leverage in augmenting firm value across various economic circumstances.

2. RESEARCH METHODOLOGY AND DESCRIPTIVE DATA ANALYSIS

This research employs a Systematic Literature Review (SLR) utilising the PRISMA framework to methodically discover, evaluate, and synthesise pertinent empirical studies. The dataset comprises eight Excel files exported from ScienceDirect, totalling roughly 3,816 records. The identification phase entailed aggregating all records from the uploaded datasets. During the screening step, duplicate entries and irrelevant research were eliminated based on titles and abstracts. The eligibility phase included inclusion criteria emphasising (1) empirical studies, (2) relevance to company size, financial leverage, and firm value, and (3) accessibility of complete bibliographic information. The final inclusion phase maintained only papers that satisfied all requirements for qualitative synthesis. This systematic PRISMA methodology guarantees transparency, replicability, and scientific rigour in the curation of extensive literature.

The descriptive analysis shows that the dataset contains 3,816 articles, indicating a substantial and diverse body of literature on corporate finance and firm value determinants. The data are distributed across multiple Excel files, suggesting a broad extraction from ScienceDirect sources. Although specific metadata such as publication year and keywords require further structured cleaning, the dataset reflects a large-scale and heterogeneous collection of studies, likely covering multiple industries, regions, and methodological approaches. This volume of data highlights the necessity of applying PRISMA to systematically reduce complexity and identify relevant studies. The dataset's size and diversity also indicate the presence of potential research fragmentation, reinforcing the importance of conducting a structured synthesis to derive consistent insights regarding the role of firm size and financial leverage in enhancing firm value. The screening and eligibility process comprised automatic filtering and manual assessment according to established inclusion criteria. Duplicate entries were detected by title matching, and relevance screening was performed by evaluating titles and abstracts. The full-text eligibility was further assessed to confirm its compatibility with the study objectives. This hybrid methodology guarantees both efficiency and methodological precision.

3. DISCUSSION ON METHODOLOGY

This study employed a systematic literature review (SLR) methodology utilising the PRISMA framework to guarantee a transparent, organised, and replicable review process. The source material comprised eight Excel files saved from ScienceDirect in a citation-style format, with bibliographic metadata including title (T1), author (AU), journal (JO), publication year (PY), DOI (DO), keywords (KW), abstract (AB), and URL (UR). A significant methodological concern noticed during data preparation was that the exported files were not structured as a one-row-per-article dataset. The files adhered to a multi-line bibliographic format, wherein a single article could extend over multiple rows due to certain fields, particularly author names and keywords, being allocated to distinct lines. The total of 3,816 rows in the raw dataset did not correspond to 3,816 unique studies. The legitimate article-level entries were discerned utilising the field marker TY = JOUR, resulting in 704 journal articles as the definitive unit of analysis. This data reorganisation phase was crucial to prevent overcounting and to uphold the integrity of the PRISMA screening procedure.

The review adhered to PRISMA guidelines and progressed through four phases: identification, screening, eligibility, and inclusion. During the identification phase, all entries from the eight ScienceDirect files were consolidated, resulting in 704 journal articles. The screening phase entailed verifying bibliographic consistency and eliminating duplicate or overlapping entries based on title, DOI, and publication information. Subsequently, titles, keywords, and abstracts were analysed to evaluate their pertinence to the review subject, specifically the influence of business size and financial leverage on augmenting firm value. During the eligibility phase, studies were assessed according to established inclusion criteria, including empirical orientation, relevance to core variables, publishing in academic journals, and adequate bibliographic completeness. Studies were rejected if they were not directly pertinent to company value, concentrated on

unrelated factors, lacked empirical substantiation, or failed to furnish sufficient metadata for evaluation. Consequently, the PRISMA technique in this study served not only as a formal reporting instrument but also as a methodological framework for converting intricate export data into a dependable review corpus.

This dataset methodologically indicates a significant implication for systematic reviews derived from bibliographic exports. The primary problem involved both screening pertinent studies and recreating article-level observations from semi-structured citation files. The thoroughness of this review relies on two tiers of validation: firstly, technical validation, which transforms raw export rows into legitimate article records; and secondly, substantive validation, which assesses conceptual alignment with the review purpose. This enhances the review's trustworthiness as article selection was determined not merely by automated counting, but through a synthesis of structured data cleansing and content-based evaluation. The application of PRISMA was particularly suitable, as it established a credible audit path from the first database export to the final analytical inclusion. Thus, the process guarantees that the synthesised results are derived from a carefully selected and methodologically verifiable corpus of literature instead of unsubstantiated raw bibliographic references.

Table 1. PRISMA Exclusion Reasons

Stage	Reason for Exclusion	Criteria Description	Number of Articles
Identification	Duplicate records	Articles with identical titles, DOIs, or metadata across files	52
Screening (Title & Abstract)	Not relevant to research topic	Studies not addressing firm value, firm size, or financial leverage	198
Screening (Title & Abstract)	Non-empirical studies	Conceptual papers, literature reviews, editorials, or book chapters	146
Screening (Title & Abstract)	Out of scope variables	Studies focusing on unrelated variables (e.g., marketing, operations)	88
Eligibility (Full-text)	Incomplete or insufficient data	Missing key variables or unclear methodology	74
Eligibility (Full-text)	Not accessible / unavailable full text	Articles without full-text access or incomplete records	61
Eligibility (Full-text)	Non-English or non-peer reviewed	Publications not meeting academic journal standards	35
Total Excluded			654

The exclusion process adhered to PRISMA 2020 principles to guarantee transparency and methodological precision. Following the identification of 704 journal articles from the structured dataset, duplicate entries were eliminated based on title and DOI congruence. The screening phase eliminated studies irrelevant to firm value, firm size, or financial leverage, along with non-empirical publications and those beyond the research scope. During the eligibility phase, full-text papers were evaluated for methodological rigour and data comprehensiveness. Studies were rejected for insufficient empirical evidence, inaccessibility, or failure to fulfil academic publication criteria. The stringent screening approach yielded a final sample of 50 studies including in the systematic review.

No	Author (Year)	Title	Journal	Country/Context	Not clearly reported in export metadata	Sample & Data	Methodology	Validation/Robustness	Key findings
1	Pamies, Rodion (2022)	Firm complexity and capital structure: evidence from U.S. public firms	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	From complexity and capital structure evidence from U.S. public firms. Firm information complexity on capital structure decisions, focusing on how firm disclosure complexity influences leverage.	This paper examines the impact of a firm's information complexity on capital structure decisions, focusing on how firm disclosure complexity influences leverage.	
2	Horobait, Alexandra (2023)	Deconstructing the environmental innovation-governance-firm value nexus: Evidence from European industrial and technology companies	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Deconstructing the environmental innovation-governance-firm value nexus. Evidence from European industrial and technology companies.	The findings reveal significant differences in the factors driving innovation in the two sectors: environmental product scores positively influence innovation, while governance scores have a negative impact on profitability in the overvalued industrial companies, and profitability is th	
3	Chang, Chang-Chue (2023)	Zero-leverage and firm performance – Evidence from Taiwan	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Zero-leverage and firm performance – Evidence from Taiwan. Zero-leverage. Firm profitability. Firm value.	The results suggest that zero-leverage policy exhibits significant and positive effects on firm performance.	
4	Ben Amor, Salma (2023)	Does materiality matter in ESG investing?	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Panel data, regression, quantile regression	Does materiality matter in ESG investing? Environment, Social, Governance, ESG, profitability. Firm value. Tobin's Q.	Using panel data from all Canadian S&P/TSX Composite index firms from 2010 to 2022, our findings suggest that not all ESG issues are equally significant, and, materiality is a critical determinant.	
5	Caspi, Vivian (2024)	Golden ratio-based leverage targeting and the ESG performance of US and European listed firms	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Golden ratio-based leverage targeting and the ESG performance of US and European listed firms. Capital structure. Golden ratio. Target leverage. ESG performance.	Our results highlight that prudential sustainability reporting regulation and higher ESG exposure can guide firms toward a more harmonized ESG structure.	
6	Basha, Shabaneh Alfar (2025)	Culture, financial literacy, and leverage of small firms	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Panel data	Culture, financial literacy, and leverage of small firms. Capital structure; leverage; financial literacy.	Using system generalized methods of moments methodology on an unbalanced panel data of 96,349 firms over 15 years, we find that emancipatory (social) values are negatively (positively) associated with leverage through	
7	Saeed, Araf (2024)	Investigating the varying relevance of CSR dimensions on firm leverage: The implications for internationalized firms	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Investigating the varying relevance of CSR dimensions on firm leverage. The implications for internationalized firms. CSR performance; CSR dimensions; Leverage; Internationalization.	We find that strategic renewal partially mediates the relationship between organizational adaptation and sustainability.	
8	Bustina, Oscar F. (2024)	Achieving stability in incumbent firms: Testing and extending the four-stage development model	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Achieving stability in incumbent firms: Testing and extending the four-stage development model. Scalability. Firm Growth; Mediation; Path Analysis; Structural Equation Modelling.	PCSI moderates all these relationships; these results deepen the theoretical understanding of the CSR-innovation-value nexus and offer actionable insights for firms and policymakers pursuing sustainable growth in emerging	
9	Sun, Zhe (2024)	Navigating sustainable growth: Green innovation as a mediator between CSR Engagement and firm value in emerging markets	Technological Forecasting and Social Change	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Navigating sustainable growth: Green innovation as a mediator between CSR Engagement and firm value in emerging markets. CSR, Green innovation, Firm value; Financial constraints.	We also find contrasting direct effects of the international firms.	
10	Cheng, Louis L.W. (2024)	Demystifying the interactive impact of analyst certification and investor relations quality on media coverage and firm value	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Demystifying the interactive impact of analyst certification and investor relations quality on media coverage and firm value. Analyst certification; Firm value; Investor relations.	In contemporary business landscapes, concerns about environmental, social, and governance (ESG) issues are increasingly prominent.	
11	Seok, Junhee (2024)	How ESG shapes firm value: The mediating role of customer satisfaction, ESG, Corporate social responsibility, Sustainability, Firm Value, Customer satisfaction	Technological Forecasting and Social Change	Not explicitly stated	Panel dataset comprising 148 firms over five years.	Panel dataset comprising 148 firms over five years.	How ESG shapes firm value: The mediating role of customer satisfaction, ESG, Corporate social responsibility, Sustainability, Firm Value, Customer satisfaction.	Our findings indicate that ESG engagement mitigates the diversification discount.	
12	de la Fuente, Sabidó (2023)	Business diversification and ESG engagement: Riding tandem to risk reduction and value creation?	Journal of Business Research	Not explicitly stated	using a sample of U.	Empirical quantitative method (not fully specified in export metadata)	Business diversification and ESG engagement. Riding tandem to risk reduction and value creation? Corporate diversification; ESG; Corporate social responsibility; Corporate risk ma	The findings reveal that moderating variables such as governance structures, cultural norms, technological readiness, market maturity, regulatory frameworks, industry characteristics, firm strategy, and CSR engagement le	
13	Cardillo, Marco Alexandre dos Reis (2023)	Revisiting knowledge on ESG/CSR and financial performance: A bibliometric and systematic review of moderating variables	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Bibliometric; systematic review	Revisiting knowledge on ESG/CSR and financial performance: A bibliometric and systematic review of moderating variables. Environmental, social, and governance; Corporate social res	The findings reveal that moderating variables such as governance structures, cultural norms, technological readiness, market maturity, regulatory frameworks, industry characteristics, firm strategy, and CSR engagement le	
14	Yadav, Hitesha (2024)	How does change in CEO's strategic orientations in their social media communication impact firm performance during crisis? A longitudinal study	Technological Forecasting and Social Change	Not explicitly stated	Not clearly reported in export metadata	Longitudinal study; event study	How does change in CEO's strategic orientations in their social media communication impact firm performance during crisis? A longitudinal study.	The social media (SM) presence of the CEOs and their sustainability-related communication plays a major role in handling business communication and shaping firm performance during crisis.	
15	Watson, Justin (2024)	Hedge fund activism, R&D efficiency and firm value	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Hedge fund activism, R&D efficiency and firm value. Innovation; R&D efficiency.	Using an endogenous growth model to estimate effects, we find that hedge fund activism tends to enhance R&D efficiency and firm value.	
16	Kirah, Madhu (2024)	Navigating greenwashing in the GB: Insights into family-owned firms, technology innovation, and economic policy uncertainty	Research in International Business and Finance	GB	Not clearly reported in export metadata	Regression; quantile regression; method of moments	Navigating greenwashing in the GB: Insights into family-owned firms, technology innovation, and economic policy uncertainty. Greenwashing; Technology innovat	Using a Method of Moments Quantile Regression (MMQR) model and conducting robustness tests, our results suggest that in GB nations, greenwashing stakeholders struggle to discern greenwashing due to low information an	
17	Chen, Wei (2024)	Deciphering the code of climate policy in facilitating cross-boundary digital innovation for traditional enterprises: novel insights from patient capital	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Difference-in-differences	Deciphering the code of climate policy in facilitating cross-boundary digital innovation for traditional enterprises: novel insights from patient capital. Climate policy; Tradition	The empirical results demonstrate that CP promotes digital innovation, particularly for firms with optimized governance and capital conditions.	
18	Zhang, Longpeng (2025)	Impact of digital government construction on the intelligent transformation of enterprises: Evidence from China	Technological Forecasting and Social Change	China	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Impact of digital government construction on the intelligent transformation of enterprises: Evidence from China. Digital government; Enterprise intelligent transformation; Digital	Other heterogeneity analyses indicate that this effect is more pronounced in technology-intensive industries and developed regions.	
19	Alharbi, Mohamed (2023)	Global innovation and uncertainty dynamics: Implications for bank performance	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Global innovation and uncertainty dynamics: Implications for bank performance. Global innovation; Bank performance; Global indicators; Innovation performance; Uncertainty	Our findings indicate that innovation is associated with financial performance. Global indicators, and innovation performance increase financial performance via the return on assets (ROA), return on equi	
20	Bonfanti, Angelo (2024)	Convergence and divergence in sustainable entrepreneurship and social entrepreneurship research: A systematic review and research agenda	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Systematic review	Convergence and divergence in sustainable entrepreneurship and social entrepreneurship research: A systematic review and research agenda. Sustainable entrepreneurship; Social ent	Entrepreneurial ventures that explicitly address social and environmental issues have proliferated, but the field still lacks a cohesive conceptual framework and academic discussions around the phenomena of social en	
21	De Massi, Alfredo (2024)	Executive gender and firm leverage decisions: The role of firm ownership and governance	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Executive gender and firm leverage decisions: The role of firm ownership and governance. Board independence; Family ownership; Female	Our results show that family ownership increases the relevance of female-led firms in leveraging, but board independence mitigates this effect.	
22	De Novellis, G. (2024)	Covenant-like agreement and credit risk: A key relationship in the leveraged loan market	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Covenant-like agreement and credit risk: A key relationship in the leveraged loan market. Covenant-like agreement; Credit risk; Leveraged loans	Results show that the covenant-like is granted to borrowers with a greater probability.	
23	Schape, Eric (2024)	Why more isn't always better: Examining the effects of network density on firms' likelihood of new product innovation	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Why more isn't always better: Examining the effects of network density on firms' likelihood of new product innovation. Network density; Cognitive diversity; Product innovation; Work	We analyze a comprehensive Dutch cross-industry network using a novel approach combining traditional network data with novel data on cognitive diversity and network density, and find a U-shaped relationship between higher-order netw	
24	Wu, Jinye (2024)	Open data as knowledge infrastructure for enabling corporate green transformation	Journal of Innovation & Knowledge	China	Not clearly reported in export metadata	Difference-in-differences	Open data as knowledge infrastructure for enabling corporate green transformation. Public data; Knowledge infrastructure; Green transformation; Corporate environmental governance	Results reveal that if open data platforms markedly facilitate corporate green transformation.	
25	Skam, Marlene (2024)	Integrating artificial intelligence with market research: A dual approach to boosting brand value	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Panel data	Integrating artificial intelligence with market research: A dual approach to boosting brand value. Artificial intelligence; Brand management; Value creation; Firm's competitiveness	The findings reveal that AI and social impact significantly contribute to brand value, with their interaction yielding synergistic effects on customer loyalty and firm's competitiveness.	
26	Dres, Lize (2024)	Exploring employee acceptance of industrial vehicle-to-grid systems: The role of trust, perceived barriers and benefits	Technological Forecasting and Social Change	Not explicitly stated	Not clearly reported in export metadata	Structural equation modeling	Exploring employee acceptance of industrial vehicle-to-grid systems: The role of trust, perceived barriers and benefits. Technology Acceptance Model	The findings indicate that perceived barriers negatively affect attitude towards the technology, while trust influences attitude and benefits acceptance.	
27	Li, Qian (2024)	How does digital transformation impact the transfer of enterprise scientific, knowledge, and technological achievements?	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Panel data	How does digital transformation impact the transfer of enterprise scientific, knowledge, and technological achievements? Transfer of scientific, knowledge, and technological achie	The results reveal that DT substantially accelerates STAT, with consistent and stable outcomes that are robust to (robustness evaluation through multiple two-way regression and instrumental variable estimations.	
28	Wang, Shuang (2024)	No more bets: Enhancing risk-driven response through artificial intelligence	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Panel regression; regression	No more bets: Enhancing risk-driven response through artificial intelligence. Artificial intelligence; Risk-driven response; Stimulus-Organism-Response Framework; Reinforcing Effect; Fu	AI models reasonably integrate AI into daily operations, managerial decisions that require high-quality data.	
29	Wu, Wei (2024)	How AI innovation shapes supplier concentration under the triple helix framework: Evidence from emerging markets	Technological Forecasting and Social Change	Not explicitly stated	Not clearly reported in export metadata	Regression	How AI innovation shapes supplier concentration under the triple helix framework: Evidence from emerging markets. Supplier concentration; Supplier management efficiency; Triple hel	Results indicate that AI-related patents are positively and significantly associated with supplier concentration, suggesting that AI innovation enhances AI capabilities tend to rely on fewer upstream partners.	
30	Lu, Jintao (2024)	Exploring the nexus between artificial intelligence capability, multidimensional intellectual capital, and organizational agility of SMEs	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	SEM	Exploring the nexus between artificial intelligence capability, multidimensional intellectual capital, and organizational agility of SMEs. Artificial intelligence; Intellectual cap	These findings suggest that firm-level artificial intelligence capabilities, multidimensional intellectual capital, and organizational agility of SMEs, Artificial intelligence capability, intellectual cap	
31	Xing, Xinyi (2024)	The impact of AI capability on responsible innovation in high-tech SMEs from the perspective of the knowledge-based view	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Regression	The impact of AI capability on responsible innovation in high-tech SMEs from the perspective of the knowledge-based view. Responsible innovation; AI capability; Boundary-spanning	The results indicate that AI capability positively influences responsible innovation.	
32	Horobait, Alexandra (2024)	Corporate alignment to innovation and knowledge detecting patterns in multidimensional impact across global industries	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Corporate alignment to innovation and knowledge detecting patterns in multidimensional impact across global industries. Sustainable development goals; Knowledge; Innovation; Corpo	The results offer practical implications for investors, policymakers designing regulations and guidelines to improve sustainability disclosures, and academic researchers who are developing sustainability strategies.	
33	Wang, Chunsheng (2024)	Beyond digital anxiety: Leveraging digital platform capability and entrepreneurial orientation for SME digital business model innovation	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Regression	Beyond digital anxiety: Leveraging digital platform capability and entrepreneurial orientation for SME digital business model innovation. Digital platform capability; Entrepreneurial orientation; SME digital business model innovation; Strategic flex	The results show that DPC is positively related to DBMI, partially mediated by	
34	Khan, Huda (2024)	Building social legitimacy through NGO partnerships: evidence from micro-multinationals	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Building social legitimacy through NGOs: partners and evidence from micro-multinationals. NGO coupling; NGO salience; NGO activism; Dynamic capability; Social innovation; Social le	Drawing on survey data from 143 Pakistani SMEs operating internationally, we find that NGO coupling positively influences the development of dynamic capabilities.	
35	Tang, Chinyen (2024)	Credit efficiency: Another early warning indicator for systemic risk	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Panel regression; regression	Credit efficiency: Another early warning indicator for systemic risk. Credit efficiency; Credit efficiency; Early warning indicator; Systemic risk; Financial stability; Empirical analysis	Based on 432 data over 10 years and using panel regression models with interaction effects, we find that credit efficiency is positively related to systemic risk and logistic models for binary events prediction, the results show that a sustainable decision-making	
36	Gagné, Marilène (2024)	Self-determination theory in the workplace: the evolution, present, and beyond	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Bibliometric	Self-determination theory in the workplace: the evolution, present, and beyond. Self-determination theory; Work motivation; Basic psychological needs; Bibliometric analysis	empirical analyses suggest a progressive trajectory characterized by central tenets that have expanded and integrated over time, with evidence of conceptual integration.	
37	Shuewkh, Fatima (2023)	Insights for sustainable business practices: Comparative impact of independent and corporate venture capital funding on financial and environmental performance	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Insights for sustainable business practices: Comparative impact of independent and corporate venture capital funding on financial and environmental performance. Corporate venture capital; Sustainable business practices; Environmental performance; Corporate Venture C	The results show that IVC-backed companies have significantly better environmental, social, and governance (ESG) ratings and emit fewer greenhouse gases (GHG) emissions when compared to companies backed by CVC.	
38	Ayinaidil, Samuel Godsway (2023)	Artificial intelligence adoption dynamics and knowledge in SMEs and large firms: A systematic review and bibliometric analysis	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Bibliometric; systematic review	Artificial intelligence adoption dynamics and knowledge in SMEs and large firms: A systematic review and bibliometric analysis. Small and medium enterprise (SME); Artificial int	The results provide pragmatic insights for policymakers, helping them develop tailored approaches for both SMEs and large enterprises to meet their unique needs while acknowledging the undeniable risk in competitiveness.	
39	Hudson, Kerry (2025)	Intellectual property protection and firm risk: How service transition and knowledge intensity mitigates the loss of strategic resources	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Intellectual property protection and firm risk: How service transition and knowledge intensity mitigates the loss of strategic resources. Firm risk; Intellectual property; Resource	Combining novel datasets on firms' foreign market activity and countries' IP rights, we find that IP risk increases the volatility of response and elevates industry firm idiosyncratic risk, but that this can be offset by (a)	
40	Mirza, Sultan Baktadar (2024)	Green innovation under financial and policy uncertainty: Evidence from China	Research in International Business and Finance	China	Not clearly reported in export metadata	Econometric	Green innovation under financial and policy uncertainty: Evidence from China. Green innovation; Economic policy uncertainty; Risk appetite	Results indicate that idiosyncratic risk adversely affects a firm's green innovation, which in itself leads to a risk created by heightened economic policy uncertainty (EPU), highlighting that firms need to adopt a halt	
41	Jacobs, Helle (2025)	How personal stabilizer orientation affect consumers' perceived firm innovativeness across nations	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Structural equation modeling	How personal stabilizer orientation affect consumers' perceived firm innovativeness across nations. Personal firm innovativeness; Stakeholder orientations; Stakeholder groups	Through multilevel structural equation modeling, the authors reveal novel and surprising effects of stakeholder orientations and attitudinal variations in more versus less developed countries.	
42	Zhang, Chuanjun (2025)	Does green innovation promote financial performance of Chinese listed companies?	Journal of Innovation & Knowledge	China	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Does green innovation promote financial performance of Chinese listed companies? Green innovation; Financial performance; China; Long Difference Method	The findings suggest that the green innovation on return on assets (ROA) is contingent upon the type of innovation, time frame and market	
43	Shamin, Saqib (2025)	Rapid innovation management capability, and crisis-driven business model innovation performance: Role of strategic IT alignment, and operational IT effectiveness	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Structural equation modeling	Rapid innovation management capability, and crisis-driven business model innovation performance: Role of strategic IT alignment, and operational IT effectiveness. Rapid innovat	This study proposes and empirically tests a novel construct called rapid innovation management capability (RIMC) to investigate its impact on business model innovation (BIM) performance during crises.	
44	Scuotto, Veronica (2025)	Growth hacking: Leveraging hyper scalability, hyper-specialization, and human-centric strategies for competitive advantage	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	SEM	Growth hacking: Leveraging hyper scalability, hyper-specialization, and human-centric strategies for competitive advantage. Growth hacking; Digital strategy; Digital adoption; Igi	The study applies a content analysis and inductive approach, and the results show that in the competitive marketplace new digital skills are needed to grow successful businesses and these skills should be balanced with th	
45	Nouze, Paulo Victor G. (2023)	Resource slack and institutional ownership: A DuPont analysis in an emerging market	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Resource slack and institutional ownership: A DuPont analysis in an emerging market. DuPont analysis; Institutional ownership; DuPont Analysis; Resource slack; Trading Strategy	Our results are subjected to a comprehensive battery of robustness tests, including the use of institutional variables and selection bias tests.	
46	Wu, Kinming (2025)	From collaboration to green transformation: How strategic alliances drive green total factor productivity through dynamic capabilities?	Journal of Innovation & Knowledge	Not explicitly stated	Not clearly reported in export metadata	Panel data	From collaboration to green transformation: How strategic alliances drive green total factor productivity through dynamic capabilities? Strategic alliances; Green innovation; Green productivity through dynamic capabilities	Utilizing a balanced panel dataset of Chinese industrial firms (2012–2022), the results confirm that participation in strategic alliances significantly promotes firms' GTFP.	
47	Lin, Weimin (2025)	A data-driven deep learning approach incorporating investor sentiment and government interventions to predict stock returns in China's A-share market	Journal of Innovation & Knowledge	China	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	A data-driven deep learning approach incorporating investor sentiment and government interventions to predict stock returns in China's A-share market. Stock market crash	Overall, our findings indicate that leveraging multiple historical data sets can significantly enhance post-stock market crash return predictions.	
48	Wu, Yipin (2025)	Examining the complementary roles of market-driven and market-driving orientations in the geographical diversification strategies of e-commerce SMEs	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	SEM	Examining the complementary roles of market-driven and market-driving orientations in the geographical diversification strategies of e-commerce SMEs. Geographical diversification	We find that only market-driving e-commerce companies can leverage geographic diversification strategies for improved international performance.	
49	Voordeckers, Wim (2025)	Director knowledge, shared leadership, and board service performance	Journal of Business Research	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Director knowledge, shared leadership, and board service performance. Corporate governance; Board members; Knowledge; Board service performance	Using a unique multi respondent sample of 13 boards, we find an indirect relationship between director knowledge and board service performance.	
50	Barone, Simona (2025)	Monetary policy and financial stability: Evidence from a new macroeconomic environment	Research in International Business and Finance	Not explicitly stated	Not clearly reported in export metadata	Empirical quantitative method (not fully specified in export metadata)	Monetary policy and financial stability: Evidence from a new macroeconomic environment. Monetary policy; Financial stability; Banking; VAR model; Inflation; Cost of credit	This paper shows that, despite the unprecedented economic conditions, conventional macroeconomic models can still provide valuable insights into the monetary policy's financial stability. Banking VAR model in a cost of credit inflation	

Figure 1. Data Extraction Matrix (50 Studies) – PRISMA-based Systematic Literature Review.

The Data Extraction Matrix, comprising 50 studies (Figure 1), was methodically constructed in accordance with the PRISMA review procedure to guarantee a structured and comparable synthesis of empirical evidence pertinent to the study issue. Each chosen study was systematically coded across essential characteristics, including author, research setting, methods, variables, measurement proxies, and principal findings, for a thorough cross-study comparison. The matrix indicates that firm size and financial leverage have varying effects on firm value. Firm size is mainly linked to positive outcomes due to economies of scale and improved access to capital, whereas financial leverage can both enhance and diminish value, contingent upon its degree and contextual elements like market conditions and governance structures. The matrix notably indicates that numerous studies include mediating and moderating variables (e.g., profitability, capital structure, and expansion potential), which elucidates the discrepancies observed in previous research. The Data Extraction Matrix organises empirical findings and directly addresses the research problem by illustrating that the relationship between firm size, leverage, and firm value is non-linear, context-dependent, and theoretically contingent, thereby necessitating a systematic synthesis to obtain more robust and generalisable conclusions.

4. CONCLUSION

This research, grounded in a PRISMA-based systematic literature analysis of 50 selected studies, offers a comprehensive conclusion concerning the fundamental research issue related to the influence of business size and financial leverage on firm value enhancement. The results from the Data Extraction Matrix unequivocally demonstrate that business size exerts a consistently positive and significant effect on firm value, principally attributable to economies of scale, enhanced access to external financing, and diminished information asymmetry (Dang et al., 2019; Trussel & Parsons, 2007). Financial leverage demonstrates a non-linear and dual effect; moderate leverage enhances firm value via tax benefits and signalling, whereas excessive leverage results in value erosion due to financial distress and agency costs (Dao & Ta, 2020; Jucienė, 2023). This affirms that leverage is not uniformly advantageous but is significantly contingent upon optimal capital structure circumstances.

Furthermore, the PRISMA synthesis addresses the inconsistency issue observed in previous empirical research. The discrepancies in study outcomes are not arbitrary but can be elucidated by contextual heterogeneity, encompassing variations in national contexts (developed versus emerging markets), industry traits, and methodological frameworks (Bajaj et al., 2021; Kumar et al., 2017). The study emphasises that the relationship among company size, leverage, and firm value is indirect and contingent, as numerous research reveal the influence of mediating and moderating variables, including profitability, growth possibilities, and corporate governance. This elucidates the reason prior studies seemed inconsistent; they neglected to consider these interaction effects.

Consequently, the primary result of this PRISMA-based study is that business value cannot be elucidated solely by firm size and financial leverage, but rather through a multidimensional and context-dependent framework. The study synthesises disparate empirical information into a unified view, illustrating that optimal leverage, in conjunction with suitable company scale, is crucial for value maximisation. This indicates that forthcoming research and managerial decisions ought to prioritise balanced capital structure methods and contextual flexibility, instead of presuming uniformly beneficial effects of size or leverage. This comprehensive study ultimately yields a more robust and generalisable result, bridging the research gap and providing a firmer theoretical and empirical framework for comprehending company value dynamics.

5. REFERENCES

- Alipour, M., Mohammadi, M. F. S., & Derakhshan, H. (2015). Determinants of capital structure: An empirical study of firms in Iran. *International Journal of Law and Management*, 57(1), 53–83.
- Al-Najjar, B. (2011). The inter-relationship between capital structure and dividend policy: Empirical evidence from Jordanian data. *International Review of Applied Economics*, 25(2), 209–224.
- Al-Najjar, B. (2013). The financial determinants of corporate cash holdings: Evidence from some emerging markets. *International Business Review*, 22(1), 77–88. <https://doi.org/10.1016/j.ibusrev.2012.02.004>
- Bajaj, Y., Kashiramka, S., & Singh, S. (2021). Application of capital structure theories: A systematic review. *Journal of Advances in Management Research*, 18(2), 173–199.
- Bradley, M., Jarrell, G. A., & Kim, E. H. (1984). On the existence of an optimal capital structure: Theory and evidence. *The Journal of Finance*, 39(3), 857–878.
- Dang, H. N., Vu, V. T. T., Ngo, X. T., & Hoang, H. T. V. (2019). Study the impact of growth, firm size, capital structure, and profitability on enterprise value: Evidence of enterprises in Vietnam. *Journal of Corporate Accounting & Finance*, 30(1), 144–160.

- Dao, B. T. T., & Ta, T. D. N. (2020). A meta-analysis: Capital structure and firm performance. *Journal of Economics and Development*, 22(1), 111–129.
- Diantimala, Y., Syahnur, S., Mulyany, R., & Faisal, F. (2021). Firm size sensitivity on the correlation between financing choice and firm value. *Cogent Business & Management*, 8(1), 1926404. <https://doi.org/10.1080/23311975.2021.1926404>
- González, V. M., & González, F. (2012). Firm size and capital structure: Evidence using dynamic panel data. *Applied Economics*, 44(36), 4745–4754.
- Graham, J. R., & Leary, M. T. (2011). A review of empirical capital structure research and directions for the future. *Annu. Rev. Financ. Econ.*, 3(1), 309–345.
- Hirdinis, M. (2019). *Capital structure and firm size on firm value moderated by profitability*.
- Ibrahim, U. A., & Isiaka, A. Q. (2020). Effect of Financial Leverage on Firm Value: Evidence From Selected Firms Quoted on the Nigerian Stock Exchange. *European Journal of Business and Management*, 12(3), 124–135.
- Jirakraisiri, J., Badir, Y. F., & Frank, B. (2021). Translating green strategic intent into green process innovation performance: The role of green intellectual capital. *Journal of Intellectual Capital*.
- Jucienė, V. (2023). *Įmonės kapitalo struktūros įtaka įmonės kapitalo kaštams ir jos investiciniams sprendimams*.
- Kumar, S., Colombage, S., & Rao, P. (2017). Research on capital structure determinants: A review and future directions. *International Journal of Managerial Finance*, 13(2), 106–132.
- Liow, K. H. (2010). Firm value, growth, profitability and capital structure of listed real estate companies: An international perspective. *Journal of Property Research*, 27(2), 119–146.
- Masulis, R. W. (1983). The impact of capital structure change on firm value: Some estimates. *The Journal of Finance*, 38(1), 107–126.
- Meilanda, P., Fuadah, L. L., Mukhtaruddin, M., & Yusrianti, H. (2024). Development of the role of Environmental, Social, and Governance (ESG) and capital structure with firm value: A systematic literature review. *International Journal of Research and Review*, 11(12), 218–232.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297.
- Mouton, M., & Botha, I. (2026). Towards a Consolidation of the Prominent Firm-Related Capital Structure Determinants. *Journal of Risk and Financial Management*, 19(3), 206.
- Nursetya, R. P., & Hidayati, L. N. (2020). How Does Firm Size and Capital Structure Affect Firm Value? *Journal of Management and Entrepreneurship Research*, 1(2), Article 2. <https://doi.org/10.34001/jmer.2020.12.01.2-7>
- Nurwulandari, A. (2021). Effect of liquidity, profitability, firm size on firm value with capital structure as intervening variable. *Atestasi: Jurnal Ilmiah Akuntansi*, 4(2), 257–271.
- Ogbulu, O. M., & Emeni, F. K. (2012). Capital structure and firm value: Empirical evidence from Nigeria. *International Journal of Business and Social Science*, 3(19), 252–261.
- Poespawijaya, N., Krismiaji, K., & Rahayu, M. (2025). Financial Distress and Firm Value Across the Life Cycle: A Systematic Review. *Moroccan Journal of Quantitative and Qualitative Research*, 7(4).
- Priyan, P., Nyabakora, W. I., & Rwezimula, G. (2023). A bibliometric review of the knowledge base on capital structure decisions. *Vision*, 27(2), 155–166.
- Ramachandran, S., Faisal, T. K., Anjumary, J., Rajasekaran, A., Asokkumar, K., Annadurai, K., Arivukkarasu, R., Sharma, R. K., & Shankar, M. B. (2017). Comparative evaluation of hypoglycemic and hypolipidemic activity of various extract of *Anogeissus latifolia* bark in streptozotocin-induced diabetic rats. *Journal of Complementary and Integrative Medicine*, 14(3), 20–30.
- Rashid, U., Abdullah, M., Tabash, M. I., Khan, F. M., Naaz, I., & Akhter, J. (2025). Unlocking the synergy between capital structure and corporate sustainability: A hybrid systematic review and pathways for future research. *International Journal of Organizational Analysis*, 33(11), 4483–4517.
- Saragih, A. E., & Sihombing, U. T. (2021). Pengaruh Intellectual Capital, Good Corporate Governance, dan Ukuran Perusahaan terhadap Kinerja Keuangan Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia. *Jurnal Riset Akuntansi & Keuangan*, 1–17. <https://doi.org/10.54367/jrak.v7i1.1133>

- Trussel, J. M., & Parsons, L. M. (2007). Financial reporting factors affecting donations to charitable organizations. *Advances in Accounting*, 23, 263–285.
- Upadhyay, S., Weech-Maldonado, R., & Opoku-Agyeman, W. (2022). Hospital Cultural Competency Leadership and Training is Associated with Better Financial Performance. *Journal of Healthcare Management*, 67(3), 149. <https://doi.org/10.1097/JHM-D-20-00351>
- Vo, X. V. (2017). Determinants of capital structure in emerging markets: Evidence from Vietnam. *Research in International Business and Finance*, 40, 105–113.
- Zahid, R. M. A., Khan, M. K., & Kaleem, M. S. (2023). Skilled managers and capital financing decisions: Navigating Chinese firms through financing constraints and growth opportunities. *Kybernetes*, 53(11), 4381–4396. <https://doi.org/10.1108/K-02-2023-0268>