

Research Article

Capital Structure Research Trends : A Bibliometric Review

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Abstract: This study uses a bibliometric analysis based on Scopus data to map the literature on capital structure development for the period 2018–2023. Using articles from Q1 and Q2 indexed journals selected using the PRISMA 2020 guidelines, this study examines publication trends, dominant keywords, and theme evolution using VOSviewer. The results show a shift in focus from classical theories (such as trade-off and pecking order) to contemporary issues such as ESG, green finance, and digitalization. In addition, the majority of studies are still dominated by developed countries, while contributions from developing countries are still limited. These findings highlight the need for a contextual approach and updating of theoretical models in capital structure research, as well as providing an initial foundation for empirical studies in the technology sector of developing countries. Furthermore, the study suggests that future research should explore the application of these emerging themes in the context of developing economies, particularly in relation to technological advancements. This could provide valuable insights for both scholars and practitioners aiming to adapt capital structure theories to the dynamic market conditions of these countries.

Keywords: Bibliometric Analysis; Capital Structure; Digital Finance; Emerging Markets; ESG.

1. Introduction

In the situation of economic uncertainty and the era of globalization, the role of corporate financial management has become increasingly important so that companies can face increasingly fierce competition. To face this increasingly competitive market, companies must make good financial decisions related to managing their resources (Diantimala et al., 2021). In running its business, the company must decide how the company obtains and uses funding sources is a major factor in determining the level of risk faced and can affect the performance and health of the company. Capital structure reflects the company's approach in choosing between different types of funding such as debt, equity or a mixture of debt and equity. Theoretical foundations such as the Modigliani-Miller theorem, Trade-Off Theory, Pecking Order Theory, and Agency Theory provide varied lenses to evaluate optimal capital structure configurations. In recent years, the topic has evolved, reflecting changing global finance dynamics, technological advances, and regulatory environments.

When the company will make a decision to use debt in the composition of its capital structure, it will provide benefits to the company in the form of a tax shield, namely the burden of debt interest which can reduce the company's taxable income thereby increasing profitability (Belas et al., 2018a). However, if the amount of corporate debt is too much, it can increase the company's financial risk which, if not managed properly, has the potential to reduce the company's value (Diantimala et al., 2021).

The company's capital structure is one of the elements that support business processes that allow companies to balance efficiency and innovation to increase the company's competitiveness in the face of highly dynamic market conditions (Miglietta et al., 2018). According to (Ehsan et al., 2023) the capital structure can affect the company's ability to take advantage of investment opportunities so that it has an impact on the company's long-term survival.

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However, in practice, capital structure decisions are strongly influenced by internal and external factors, such as asset structure (Panova, 2020), total fixed assets (Mateos-Ronco & Guzmán-Asunción, 2018), intangible assets (Konovalova & Caplinska, 2020), profitability (Kyissima et al., 2020), macroeconomic stability (Marcelle Amelot & Subadar Agathee, 2021), financial market regulations (Guizani, 2021), board gender diversity (Adusei & Obeng, 2019), firm size and age (Belas et al., 2018b), cash flow risk (Harris & Roark, 2019), and technological developments (Eca et al., 2022; Han et al., 2023; Huang & Song, n.d.). This complexity has become even more apparent in the last five years, as companies face global challenges such as the COVID-19 pandemic, the transition to a green economy, and the digitalization of finance. Therefore, the literature on capital structure is growing rapidly, not only in terms of the number of publications, but also in terms of the diversity of theoretical approaches, research, and analytical focus.

This study undertakes a bibliometric analysis of capital structure literature published between 2018 and 2023, relying on Scopus as the primary database. The purpose is to provide information about the trend of research that has been published related to capital structure in the 2018-2023 period.

3. Materials and Method

This study uses a quantitative bibliometric approach based on scientific publication data from Scopus Quartil 1 and Quartil 2. The analysis was conducted on 71 scientific articles that had been selected based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines.

4. Results and Discussion

The bibliometric analysis revealed a consistent upward trajectory in the number of scholarly publications on capital structure between 2018 and 2023, with a noticeable peak in 2021. This surge is indicative of increasing global academic interest in capital structure, particularly in the wake of the COVID-19 pandemic. The economic disruptions caused by the pandemic prompted researchers to revisit the relevance and applicability of traditional capital structure theories under crisis conditions (Aliani & Omri, 2021). Furthermore, the proliferation of sustainable finance initiatives, such as ESG-related funding instruments, has amplified scholarly discussions surrounding the alignment of capital structure decisions with long-term environmental and social goals (Adeneye et al., 2023; Zahid et al., 2024). These dynamics collectively underscore the heightened relevance of capital structure research in navigating both financial re-silience and corporate sustainability.

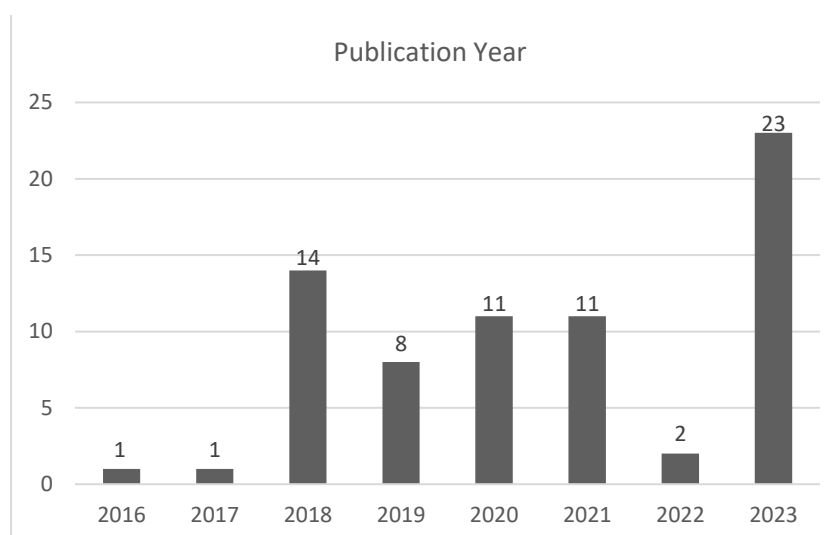


Figure 1. Number of Selected Journal Publications per Year.

Based on the data in Figure 1 above, the largest number of publications in 2023 was 23 journal articles, then the second largest was in 2018 as many as 14 journal articles and in 2020 and 2021 as many as 11 journal articles each and in 2019 as many as 8 journal articles and

2022 as many as 2 journal articles, 1 journal article published in 2016 and 1 journal article published in 2017.

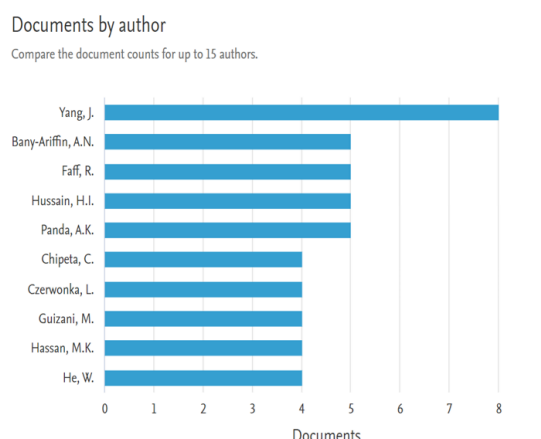


Figure 2. Total Author Distribution.

Notably prolific authors in this field included Yang J., Bany-Arifin A.N., and Faff R., each contributing significantly to capital structure discourse during the review period. Their works often bridge traditional theoretical approaches with contemporary challenges, enhancing the relevance of capital structure research. The selected articles were published across 59 reputable journals, primarily within the domains of business, finance, and management. Notable journals include the *Journal of Business Economics and Management*, *Cogent Business & Management*, *Economic Systems*, and *Journal of Risk and Financial Management*. These publication venues serve as key platforms for disseminating both theoretical and applied research in capital structure.

Documents by subject area

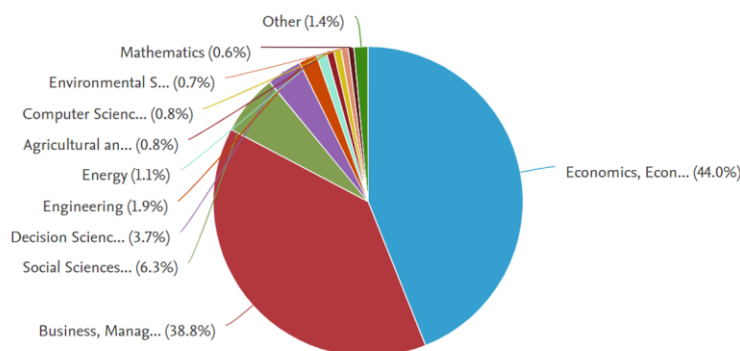


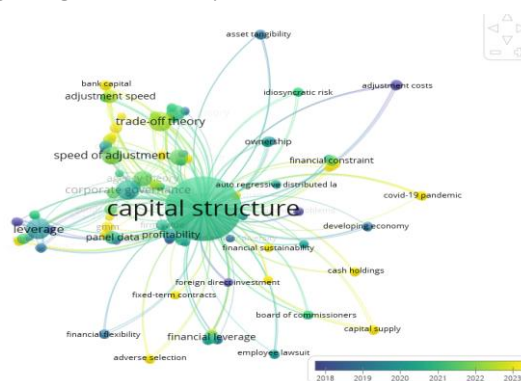
Figure 3. Distribution of journals by subject.

The selected articles were published across 59 reputable journals, primarily within the domains of business, finance, and management. Notable journals include the *Journal of Business Economics and Management*, *Cogent Business & Management*, *Economic Systems*, and *Journal of Risk and Financial Management*. These publication venues serve as key platforms for disseminating both theoretical and applied research in capital structure. Geographic analysis revealed that the United States, United Kingdom, China, India, and Indonesia were among the most active countries in capital structure research during the period. Institutions such as Universiti Sains Malaysia, University of Glasgow, Universitas Indonesia, and the University of Texas at Dallas emerged as prolific contributors. While developed nations continue to dominate the field, increasing participation from emerging economies signals a diversification in research perspectives, particularly in exploring capital structure dynamics among SMEs, family-owned businesses, and tech-based firms.

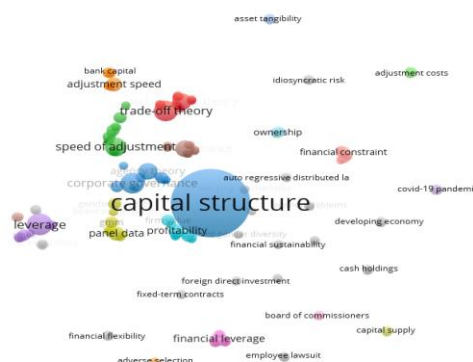
Table 1. Number of Article Citations.

No	Articel	Citation
1	Impact Of Selected Characteristic Of SMES on The Capital Structure	34
2	Moderating effects of corporate governance mechanism on the relation between capital structure and firm performance	36
3	Diversification, capital structure and profitability: A panel VAR approach, Research in International Business and Finance	37
4	A study on factors driving the capital structure decisions of small and medium enterprises (SMEs) in India	37
5	Corporate Debt Maturity Profiles	40
6	Intangible Assets and Capital Structure	45
7	Board Gender diversity and the capital structure of microfinance institutions a global analysis	46
8	Capital Structure in the hospitality industry : The Role of the asset-light and fee oriented strategy	46
9	Corporate governance practices and capital structure decisions: the moderating effect of gender diversity	49
10	Firm Age, Corporate Governance, and Capital Structure	117

Among the selected 71 articles, several works stood out based on citation metrics. An influential article examining firm age, corporate governance and capital structure was cited over 117 times, highlighting the intersection of financial strategy and institutional context. Another highly cited study analyzed the link between corporate governance and capital decisions : the moderating effect of gender diversity cited 49 times, demonstrating the academic interest in integrating sustainability metrics within financial models.

**Figure 4.** Cluster Analysis of keyword co-occurrences.

Based on the data in Figure 3 above, it can be seen that most of the capital structure articles studied are related to the relationship between capital structure and profitability, then capital structure is related to the theory used, namely trade off theory, then capital structure is related to company leverage.

**Figure 5.** The Keyword co-occurrence.

The keyword co-occurrence analysis using VOSviewer yielded three dominant thematic clusters. The first cluster revolves around financial performance variables, encompassing keywords such as capital structure, firm value, leverage, profitability, and firm size. This cluster reflects the classical empirical interest in how capital structure affects a firm's financial outcomes, with many studies employing metrics like ROA, ROE, and Tobin's Q to explore these linkages (Cheng et al., 2020). The second cluster pertains to theoretical and governance-related themes. Keywords like trade-off theory, pecking order, corporate governance, ownership structure, and risk dominate this grouping. These studies often extend foundational theories by integrating governance dimensions, investigating how board composition, managerial incentives, and ownership dispersion influence capital structure decisions (Chi Xie & Wang, 2024). This indicates a theoretical evolution where the assumptions of classical models are adapted to accommodate complex organizational realities. The third and most emergent cluster focuses on sustainability and innovation. It includes keywords such as ESG, green finance, sustainability, and digital transformation. The presence of these terms suggests that capital structure research is transitioning toward incorporating broader socio-environmental considerations. Recent studies increasingly assess how sustainability practices and digital innovation shape firms' financing preferences, particularly in relation to accessing ESG-linked financial instruments or adapting to investor pressures for responsible capital allocation (Zahid et al., 2024). These clusters demonstrate a multidimensional development in capital structure literature. While classical performance-based and theoretical models remain influential, there is a growing incorporation of strategic, environmental, and technological factors. This progression signifies the field's responsiveness to global changes in corporate behavior and financial policy.

6. Conclusion

The review confirms the ongoing relevance of foundational theories such as the Trade-Off Theory and Pecking Order Theory. However, there is an evident shift toward integrating these models with strategic and sustainability frameworks. This shift reflects the necessity of adapting classical models to contemporary business environments marked by digitalization, regulatory transformation, and stakeholder-driven governance. The integration of ESG considerations into capital structure discussions marks a paradigm shift toward more holistic and long-term financial decision-making. Despite the advancements, notable gaps persist. There is a geographic bias, with limited studies originating from Africa, Southeast Asia, and Latin America, leading to an underrepresentation of local institutional, regulatory, and market-specific influences in global discourse. Second, from a sectoral perspective, research on capital structure in emerging sectors like digital startups, platform-based businesses, and fintech firms is still limited. These entities possess unique asset-light models and funding needs that may not align with traditional capital structure assumptions. Finally, sustainability integration remains nascent. Although ESG appears frequently as a keyword, relatively few studies operationalize it rigorously within capital structure modeling. This gap suggests the need for more empirical investigations linking ESG scores, green bonds, and carbon disclosures with firms' debt-equity choices.

Future studies should aim to contextualize capital structure theories within evolving business paradigms. Specifically, there is potential in developing dynamic capital structure models that account for digital transformation, regulatory shifts, and sustainability metrics. Comparative research across regions and sectors can further uncover nuanced insights. Additionally, interdisciplinary approaches combining finance, environmental science, and data analytics can enhance the explanatory power of capital structure models in complex economic environments.

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