

The Nexus Between Relationship of Environmental Uncertainty and Capital Structure: Corporate Governance as Moderator

TRİYONOWATI¹, RIZKI AMALIA ELFITA², NUR LAILY³, SUWITHO⁴

^{1,3,4}Department Of Management, Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya, Surabaya, INDONESIA

²Department Of Accounting, Faculty of Economy Business and Digital Technology, Universitas Nahdlatul Ulama, Surabaya, INDONESIA

Abstract: - Changes in the external environment create uncertainty for the company. This study aims to find empirical evidence of the effect of environmental uncertainty on the capital structure of companies moderated by corporate governance. The research was conducted on manufacturing companies in Indonesia during 2014-2018. Data were analyzed using moderated regression analysis. The findings show that the effect of environmental uncertainty on the company's capital structure and the moderating ability of corporate governance strengthens the effect of environmental uncertainty on the company's capital structure. The contribution of this finding is useful for company owners, where when environmental uncertainty is higher and corporate governance is getting better, it actually makes managers try to allocate greater debt into their capital structure. It is better if the owner does not easily believe in the results of performing of his managers and remains under periodic control. Another contribution of this finding is also reminiscent of the concept of pecking order theory, which has been underestimated.

Key-Words: - Capital structure, environmental uncertainty, corporate governance, environmental management.

Received: September 21, 2021. Revised: July 12, 2022. Accepted: August 2, 2022. Published: September 5, 2022.

1 Introduction

Changes in the economic and market environment that never stop is a contingency factor facing companies [1]. Two constructions of the business environment experienced directly by companies are environmental dynamics and environmental uncertainty [2]. A dynamic environment is characterized by a constant rate of change in consumer demand, but opportunities to create new markets remain open. In this environment, companies need to change products to meet changing customer preferences and secure their competitive advantage [3]. This condition must also be read well by the company's management because rapidly changing customer preferences are difficult to predict [4].

In addition, the environmental uncertainty that is being faced can also affect the company's performance [5]. This occurs because of rapid changes in uncertain conditions. Environmental uncertainty requires management's ability to accurately understand external environmental conditions. This is because of the difficulty in anticipating and assimilating environmental conditions simultaneously [6]. Environmental

uncertainty is often driven by intense competition and the unpredictable pace of technological progress. In such an environment, product cycles are often short, forcing firms to invest more in technology to face competition [5], [7], [8]. In a competitive environment, which is characterized by the pace of technological change, investment in technology plays an important role in achieving and maintaining its competitive advantage [9]–[11]. Investing in technology also helps companies increase capacity and develop new products that can adapt to market uncertainties (Ramirez et al., 2018). In addition, companies are expected to understand changing market trends and produce new products in a rapidly changing business environment.

Environmental uncertainty that grows from business competition also encourages company management to be more innovative in developing new ideas that differ from competitors [12]–[14]. This condition encourages company management to invest in creating new products and processes from ideas generated by company management. In addition, the rapidly changing technological changes also need to be responded well by company managers so that the technology owned by the company can be useful for the company in order to

win the competition in an uncertain business environment. Uncertainty in the business environment results in the need for companies to invest in technology and research and development, which causes changes in the company's capital structure. An uncertain business environment increases the company's debt on the company's capital structure because of the enormous investment costs required in a condition of environmental uncertainty [15], [16].

The large investments made by the company's management during this time of high environmental uncertainty also paved the way for the company's management to take opportunistic actions. Therefore, a strong corporate governance role can limit the possibility of opportunistic actions taken by management. Corporate governance encourages company management to be more careful in managing the company's capital structure under uncertain environmental conditions [15]. Corporate governance provides greater support to corporate managers in the face of environmental uncertainty [5], [17]. This support helps company managers to make technology investments. This condition results in an increase in debt in the corporate structure when corporate governance gives managers flexibility to change business strategies in an uncertain environment. This needs to be monitored to prevent the increase in the level of debt in the company [12], [16], [18]. Therefore, it is necessary to conduct an empirical study to determine the relationship between environmental changes and changes in the capital structure of a company moderated by corporate governance. The contribution given can certainly help the owners or stakeholders before they decide to approve or reject the proposals of their managers when an internal meeting is held on environmental changes and for the sake of the company's sustainability.

The theoretical basis and some other literature that is still being debated will be presented to raise the problem hypothesis. This hypothesis will be tested using the formulation of the method described in the next chapter, then the findings got will be analyzed and discussed to provide useful conclusions for interested parties.

2 Literature Review

2.1 Business Environment Challenges

The business environment has undergone significant changes [17]. These changes are expected to be increasingly complex and difficult to

predict. The business environment (will) be increasingly turbulent. Globalization is one of the major causes of the increasingly turbulent business environment today. Globalization reflects the opportunity for business organizations to develop through the exploitation of international markets at a more efficient cost [25], [26]. This condition also encourages the creation of tighter competition between business organizations. The increasingly fierce competition has forced business organizations to find new ways to survive. Besides being customer oriented, business organizations must also be efficient. As a result, many business organizations are reducing employees. The size of the organization is smaller because they are downsizing to be more flexible.

Smaller organizations don't have to reduce activities. As a result, business organizations need to introduce new ways of getting things done. Jobs are no longer mechanistically designed. Independent groups, self-managed teams or semi-autonomous work teams, are a new way of getting work done. The group is given great authority to get the job done. In addition to increasingly fierce competition, external environmental pressures are also getting higher.

Business environment can be divided into two categories, namely: the external and internal environment [17], [27]. The external environment is divided into two categories, namely: the remote environment and the industrial environment, while the internal environment is the aspects that exist within the company. The remote environment includes political, economic, social and technological factors; industrial environment includes aspects contained in the concept of competitive strategy (competitive strategy) which includes aspects of barriers to entry, aspects of supplier bargaining power, aspects of buyers' bargaining power, aspects of the availability of substitute goods and aspects of competition in the industry. The company's internal environment includes aspects of finance, human resources, marketing, operations and management aspects.

The business environment can also affect all aspects of the business, both at the organizational and individual levels. Competence will distinguish people who perform well with mediocrity. Competence can be in the form of motives, talents or traits, self-concept, attitudes or values or attitudes, self-knowledge, or cognitive skills in behavior. In general, the competence of an entrepreneur is the same as that of a manager, plus the ability to read opportunities and self-management [28], [29]. This is because an

entrepreneur, apart from being a business owner (manager) is also a business executor, so it is very necessary to have the ability to see and take advantage of the opportunities that exist as well as possible, while to be able to take advantage of existing opportunities, an entrepreneur must have good self-management, and able to manage their own abilities, so that they can improve their business abilities.

2.2 Environmental Uncertainty and Corporate Capital Structure

Fast and gradual changes in technology, fast-changing consumer preferences, and fluctuations in product supply or demand of materials are contingent problems faced by companies. These conditions create environmental uncertainty that can disrupt the sustainability of the company's life [27], [30]. This shows that environmental uncertainty is a contingent problem that can make it more difficult for company management to predict the sustainability of the company in the future because of changes in the external environment. Changes in the external environment encourage management to become more active in creating internal and external contingency factors in response to environmental changes [6], [31].

Environmental uncertainty is a condition that arises because of business changes, so they must be effective steps taken by company management to overcome environmental uncertainty [31]. When a company faces with an uncertain business environment, a leader must be able to understand how to expect by minimizing the impact of an uncertain business environment. The higher the environmental uncertainty, the less revenue the company will have, and the possibility of potential cash flow shortages [32]. Therefore, the company will increase external funding to meet the cash flow needs and technology investment and research and development needs in a dynamic economic environment. Environmental uncertainty encourages management to become more aggressive in allocating debt to the corporate capital structure to meet the company's needs. Investment in research and development and in technology requires large funding, so they are not met by internal funding.

H1. Environmental uncertainty has a positive impact on the corporate capital structure.

2.3 Environmental Uncertainty, Corporate Governance and Corporate Capital Structure

Good corporate governance can predict or manage all the risks that the company might face in the future [33]. The ability to predict or manage all the risks that might be faced by the company makes corporate governance more active in informing management about risks in the future, so that management becomes more confident that the decisions they have made are the right one [33]. Uncertainty in the business environment is a condition that cannot be avoided, therefore company management must be able to manage the risks that might be faced by the company so that the company has the minimum impact because of the uncertainty of the business environment.

Companies are required to manage environmental uncertainty through innovative efforts to maintain the company's position in a competitive environment [34]. Environmental factors provide opportunities, constraints, and threads, therefore influence the attractiveness and ability of the company to innovate [35]. To maintain the company's position in a competitive environment, the company management strives to be more active in conditions of high environmental uncertainty by investing in research and development and in technology to keep up with changes caused by environmental uncertainty. Corporate governance is active in performing its functions properly in times of high environmental uncertainty. Corporate governance provides greater support to company managers to overcome environmental uncertainty [17], [33], [36]. This support makes it easier for company managers to make greater investments in technology and research and development to have better management in high environmental uncertainty. This condition results in increased debt in the corporate capital structure when corporate governance allows managers to change the company's business strategy in environmental uncertainty.

H2. Corporate governance strengthens the influence of business environment uncertainty on the corporate capital structure.

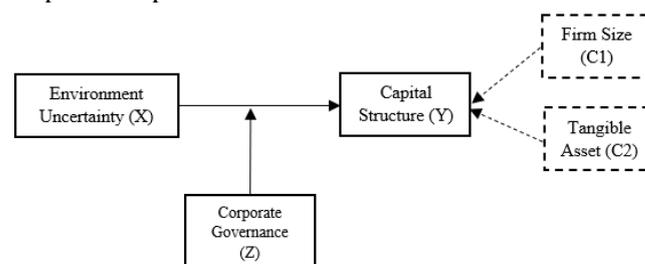


Fig. 1: Conceptual Framework

3 Research Method

This study discusses 3 major problems, namely the uncertainty of the business environment, corporate governance, and the corporate capital structure.

Model 1:

$$DER = \beta_0 + \beta_1 EU + \beta_4 TANGIBLE + \beta_5 SIZE + \varepsilon$$

- ✓ **DER** is the corporate capital structure,
- ✓ **EU** shows the environmental uncertainty,
- ✓ **TANGIBLE** represents corporate tangibility,
- ✓ **SIZE** shows the size of the company, and ε is an error.
- ✓ The corporate governance index represented by **CG**.
- ✓ **EU*CG** is a description of the interaction between environmental uncertainty and corporate governance.
- ✓ The dependent variable (DER) is measured as total debt over total equity

Model 2:

$$DER = \beta_0 + \beta_1 EU + \beta_2 CG + \beta_4 TANGIBLE + \beta_5 SIZE + \varepsilon$$

Model 3:

$$DER = \beta_0 + \beta_1 EU + \beta_2 CG + \beta_3 EU*CG + \beta_4 TANGIBLE + \beta_5 SIZE + \varepsilon$$

To measure the quality of corporate governance, we use a principal component analysis method to deal with the multidimensional aspects of governance mechanisms [17], [37]. It is used to combine individual governance characteristics to construct a single governance index. The corporate governance (CG) index is calculated based on a linear combination of the following individual governance measures:

$$GCG_{it} = \sum_{m=1}^n Loading_{im} Governance_{m,it}$$

Where governance it represents an individual measure of governance m from a company i in the year of t and loading is the assignment for the individual governance measure m of a company i .

This study combines several company-specific control variables that were found to have a significant influence on the corporate capital structure decisions in previous studies. The company-specific control variables are tangibility asset (TANGIBLE), which are measured as the ratio of fixed assets to total assets [38], [39], and company size (SIZE), which is measured based on the natural logarithm of total assets [40]–[42].

The analysis used in this study is moderated regression analysis (MRA). MRA is used to examine the moderating effect of corporate governance on the effect of environmental uncertainty on the corporate capital structure.

4 Results

4.1 Descriptive Statistics

Descriptive statistics are presented in Table 1. Based on the results shown in Table 1, the average value of the corporate capital structure (DER) is 0,30413 with a standard deviation of 0,34254 yang which shows that manufacturing companies in Indonesia use the equity in the corporate capital structure, which is showed by an average value of less than 1. The average value of the uncertainty of the business environment is equal to 0.19325 with a standard deviation of 0.16858 which shows that the level of uncertainty in the business environment (EU) is not too high, it can be seen from the average value of less than 1. The average value of corporate governance (CG) is 0,36268 with a standard deviation of 0,13660, which shows the disclosure of corporate governance in manufacturing companies in Indonesia is not good because the mean value is less than 1. The average value of tangibility assets is 0,38732 with a standard deviation of 0,19406, which shows that the tangibility asset of manufacturing companies in Indonesia is quite large, meaning that it is easier for companies to pledge their assets to get debt. The average value of company size is 28,48741 with a standard deviation of 1,62767 which shows that the size of the manufacturing companies in Indonesia as the research sample is relatively the same.

Tabel 1. Descriptive Statistics

	N	Min.	Max.	Mean	Std. Deviation
DER	528	0.0006	3.180	0.304	0.342
EU	528	0.0154	1.633	0.193	0.168
CG	528	0.0774	0.612	0.362	0.136
TANGIBLE	528	0.0005	0.965	0.387	0.194
SIZE	528	24.4141	33.473	28.487	1.627
Valid N (listwise)	528				

Source: Research Data, 2020.

Table 2 describes the correlation between the main variables. The correlation between variables is relatively low, as shown by the Pearson correlation value, which is less than 0,3. A moderate level of correlation occurs between company size and corporate governance, where the correlation value is

equal to -0,545. Therefore, we conclude that multicollinearity is not a problem for regression.

Tabel 2. Correlation Between Variabel

	DER	EU	CG	TANGIBLE	SIZE
DER	1				
EU	0,080	1			
CG	-0,131	-0,063	1		
TANGIBLE	0,311	-0,077	-0,054	1	
SIZE	0,257	-0,158	-0,545	0,219	1

Source: Research Data, 2020.

4.2 Main Regression Results

Table 3 presents the major results of the empirical analysis. The analysis began by estimating the effect of environmental uncertainty on the corporate capital structure, then adds corporate governance as a moderation. We started by estimating the effect of environmental uncertainty on a corporate capital structure in the presence of other control variables. In Model 1, the relationship between environmental uncertainty and corporate capital structure is significantly positive at the 1 percent level. This result supports H1. This implies that manufacturing companies use more of their capital structure when they face increased volatility in an uncertain environment [15], [16]. The next was estimating the effect of environmental uncertainty and corporate governance on the corporate capital structure in the presence of other control variables. In Model 2, the relationship between environmental uncertainty and corporate capital structure is significantly positive at the 1 percent level, while corporate governance does not affect.

Finally, this study estimated the relationship between environmental uncertainty and capital structure as moderated by corporate governance. In Model 3, the relationship between environmental uncertainty and corporate capital structure as moderated by corporate governance is significantly positive at the 5 percent level. Evidence suggested that better corporate governance will allow managers to use the corporate capital structure during times of high volatility, which supports contingency theory. The support from the corporate governance component made it easier for company managers to invest more in technology and research and development to manage high environmental uncertainty. This condition resulted in increased debt in the corporate capital structure when corporate governance allows managers to change the company's business strategies in environmental uncertainty conditions.

The relationship between tangibility and corporate capital structure is significantly positive at the 1 percent level, which supports the trade-off

theory. According to this theory, firms with higher intangibles have more fixed assets that can be offered as collateral loans. It also reduces the risk of the bank when making loans to such companies. As a result, companies with high tangible assets often find it easier to get debt financing [36]. The coefficient of the company size is significantly positive at the 1 percent level. This is consistent with the trade-off theory, which states that large companies have more reputation and diversification, and have a smaller probability of bankruptcy. These factors allow large companies to use more of the corporate capital structure.

Overall, the results show that manufacturing companies in Indonesia consider the volatility in environmental uncertainty when planning their financial policies. The findings of this study can strengthen the important role of corporate governance as an effective mechanism to limit the use of corporate capital structure during times of high volatility.

Tabel 3. Hypothesis Test Results

Variable	Model 1		Model 2		Model 3	
	Coeff	Sig	Coeff	Sig	Coeff	Sig
Constant	-1,247***	0,000	-1,212***	0,000	-0,994***	0,003
EU	0,277***	0,001	0,276***	0,001	-0,231	0,374
CG			-0,021	0,861	-0,287	0,104
EU * CG					1,234**	0,040
TANGIBLE	0,482***	0,000	0,483***	0,000	0,487***	0,000
SIZE	0,046***	0,000	0,045***	0,000	0,041***	0,000

*Significant at p -value < 0,1; ** Significant at p -value < 0,05; ***Significant at p -value < 0,01

5 Conclusions

This study discusses how corporate governance moderates the influence between environmental uncertainty and corporate capital structure using unbalanced panel data from 528 manufacturing companies listed on the Indonesia Stock Exchange during the 2014-2018 period. The researcher applied the moderated regression analysis model to test the relationship of each variable in the research model. Environmental uncertainty is proxied by the volatility of sales volume. The results showed that environmental uncertainty has a significant positive effect on the decision of the capital structure of manufacturing companies. This study finds that the overall effect of environmental uncertainty on company capital structure among companies with better governance is positive. Evidence suggested that better corporate governance supports the corporate manager's effort to become increasingly aggressive in using the corporate capital structure during times of high sales volatility.

This study has limitations in discussing the role of each component of corporate governance in moderating the relationship of environmental uncertainty to the corporate capital structure. This study only examined the overall corporate governance of the existing components to see its effect on the relationship between environmental uncertainty and corporate capital structure. Concerning the research implications, the findings of this study contribute to the literature on corporate capital structure and corporate governance by providing further evidence on how environmental uncertainty affects the decision of corporate capital structure, as well as how corporate governance moderates these relationships. These results may be useful for policymakers to plan policies to reduce the adverse effects caused by environmental uncertainty. This is important because environmental uncertainty may have a potentially destabilizing effect on a corporate company's ability to form excellent investment, production, and financial decisions. Besides, the results show that the quality of good governance can act as a supervisor and encourage company management to ensure that companies use more leverage when they face volatility in the business environment. These findings can help reinforce the importance of coordination between company policymakers and company managers. Last, these findings can serve as an important guide for company managers and investors to enable them to plan financing and investment decisions.

References:

- [1] M. Li, F. Lan, and F. Zhang, "Why Chinese financial market investors do not care about corporate social responsibility: Evidence from mergers and acquisitions," *Sustain.*, vol. 11, no. 11, pp. 1–20, 2019, doi: 10.3390/su11113144.
- [2] D. C. Chen and T. W. Chen, "Research on sustainable management strategies for the machine tool industry during the covid-19 pandemic in Taiwan," *Sustain.*, vol. 13, no. 23, 2021, doi: 10.3390/su132313449.
- [3] S. Gomera, W. T. Chinyamurindi, and S. Mishi, "Relationship between strategic planning and financial performance: The case of small, micro- and medium-scale businesses in the Buffalo City Metropolitan," *South African J. Econ. Manag. Sci.*, vol. 21, no. 1, pp. 1–9, 2018, doi: 10.4102/sajems.v21i1.1634.
- [4] M. A. Saleem, A. Wasaya, and S. Zahra, "Determinants of frozen food purchase intentions: Insights from a developing country," *Indian J. Mark.*, vol. 47, no. 7, pp. 47–59, 2017, doi: 10.17010/ijom/2017/v47/i7/116476.
- [5] H. Haddad, D. Alkhodari, R. Al-Araj, N. Aburumman, and J. Fraij, "Review of the corporate governance and its effects on the disruptive technology environment," *WSEAS Trans. Environ. Dev.*, vol. 17, pp. 1004–1020, 2021, doi: 10.37394/232015.2021.17.93.
- [6] T. Busch, A. Bassen, S. Lewandowski, and F. Sump, "Corporate Carbon and Financial Performance Revisited," *Organ. Environ.*, 2020, doi: 10.1177/1086026620935638.
- [7] T. Wijaya, A. Darmawati, and A. M. Kuncoro, "e-Lifestyle Confirmatory of Consumer Generation Z," *Int. J. Adv. Comput. Sci. Appl.*, vol. 11, no. 10, pp. 27–33, 2020, doi: 10.14569/IJACSA.2020.0111004.
- [8] S. J. Khan, P. Kaur, F. Jabeen, and A. Dhir, "Green process innovation: Where we are and where we are going," *Bus. Strateg. Environ.*, vol. 30, no. 7, pp. 3273–3296, 2021, doi: 10.1002/bse.2802.
- [9] C. Marinagi, P. Trivellas, and D. P. Sakas, "The Impact of Information Technology on the Development of Supply Chain Competitive Advantage," *Procedia - Soc. Behav. Sci.*, vol. 147, pp. 586–591, 2014, doi: 10.1016/j.sbspro.2014.07.161.
- [10] A. Ilmiyati and M. Munawaroh, "Pengaruh Manajemen Rantai Pasokan Terhadap Keunggulan Kompetitif Dan Kinerja Perusahaan (Studi pada Usaha Kecil dan Menengah di Kabupaten Bantul)," *J. Manaj. Bisnis*, vol. 7, no. 2, pp. 226–251, 2016.
- [11] T. J. Dean and D. F. Pacheco, "Green marketing: A strategic balancing act for creating value," *J. Bus. Strategy*, vol. 35, no. 5, pp. 14–22, 2014, doi: 10.1108/JBS-11-2013-0109.
- [12] A. K. Hinze and F. Sump, "Corporate social responsibility and financial analysts: a review of the literature," *Sustain. Accounting, Manag. Policy J.*, vol. 10, no. 1, pp. 183–207, 2019, doi: 10.1108/SAMPJ-05-2017-0043.
- [13] A. F. Almulhim, "Linking knowledge sharing to innovative work behaviour: The role of psychological empowerment," *J. Asian Financ. Econ. Bus.*, vol. 7, no. 9, pp. 549–560, 2020, doi: 10.13106/JAFEB.2020.VOL7.NO9.549.
- [14] A. Wohllebe, D. S. Hübner, U. Radtke, and S. Podruzsik, "Mobile apps in retail: Effect of

- push notification frequency on app user behavior,” *Innov. Mark.*, vol. 17, no. 2, pp. 102–111, 2021, doi: 10.21511/im.17(2).2021.10.
- [15] M. Shehadeh, E. E. Alharasis, H. Haddad, and E. F. Hasan, “The Impact of Ownership Structure and Corporate Governance on Capital Structure of Jordanian Industrial Companies,” *Wseas Trans. Bus. Econ.*, vol. 19, pp. 361–375, 2022, doi: 10.37394/23207.2022.19.32.
- [16] P. R. Setyaningsih and N. Nengzih, “Internal control, organizational culture, and quality of information accounting to prevent fraud: Case study from Indonesia’s agriculture industry,” *Int. J. Financ. Res.*, vol. 11, no. 4, pp. 316–328, 2020, doi: 10.5430/ijfr.v11n4p316.
- [17] S. D. Utomo, Z. Machmuddah, and M. Oktafiyani, “The associations between earnings management, corporate environmental disclosure, corporate financial performance and corporate governance mechanisms,” *WSEAS Trans. Bus. Econ.*, vol. 16, pp. 345–354, 2019.
- [18] M. Vazquez-Olguin, Y. S. Shmaliy, O. Ibarra-Manzano, and S. Marquez-Figueroa, “Distributed UFIR Filtering with Applications to Environmental Monitoring,” *Wseas Trans. Signal Process.*, vol. 16, pp. 185–190, 2021, doi: 10.37394/232014.2020.16.20.
- [19] Y. Xiong, H. K. S. Lam, A. Kumar, E. W. T. Ngai, C. Xiu, and X. Wang, “The mitigating role of blockchain-enabled supply chains during the COVID-19 pandemic,” *Int. J. Oper. Prod. Manag.*, vol. 41, no. 9, pp. 1495–1521, 2021, doi: 10.1108/IJOPM-12-2020-0901.
- [20] J. Q. Dong, “On the contingent rent-generating potential of firm-specific managerial experience,” *J. Bus. Res.*, vol. 69, no. 10, pp. 4358–4362, 2016, doi: 10.1016/j.jbusres.2016.04.066.
- [21] J. Hečková, M. Kubák, S. Marková, A. Chapčáková, N. Svetozarovová, and D. Ratnayake Kaščáková, “Selected aspects of organizational performance management and business sustainability strategy in the european area,” *Qual. - Access to Success*, vol. 22, no. 181, pp. 52–57, 2021.
- [22] Y. Yuan, L. Y. Lu, G. Tian, and Y. Yu, “Business Strategy and Corporate Social Responsibility,” *J. Bus. Ethics*, vol. 162, no. 2, pp. 359–377, 2020, doi: 10.1007/s10551-018-3952-9.
- [23] S. E. A. Ali, F. W. Lai, P. D. D. Dominic, N. J. Brown, P. B. B. Lowry, and R. F. Ali, “Stock market reactions to favorable and unfavorable information security events: A systematic literature review,” *Comput. Secur.*, vol. 110, p. 102451, 2021, doi: 10.1016/j.cose.2021.102451.
- [24] Y. C. Kim, I. Seol, and Y. S. Kang, “A study on the earnings response coefficient (ERC) of socially responsible firms: Legal environment and stages of corporate social responsibility,” *Manag. Res. Rev.*, vol. 41, no. 9, pp. 1010–1032, 2018, doi: 10.1108/MRR-01-2017-0024.
- [25] F. J. Contractor, “The world economy will need even more globalization in the post-pandemic 2021 decade,” *J. Int. Bus. Stud.*, vol. 53, no. 1, pp. 156–171, 2022, doi: 10.1057/s41267-020-00394-y.
- [26] A. Awan, N. Asghar, and H. ur Rehman, “The Impact of Financial Globalization on Output Volatility: Panel Data Evidence for Asian Countries,” *Pakistan J. Commer. Soc. Sci.*, vol. 15, no. 1, pp. 213–239, 2021.
- [27] J. Kaipainen and L. Aarikka- Stenroos, “How to renew business strategy to achieve sustainability and circularity? A process model of strategic development in incumbent technology companies,” *Bus. Strateg. Environ.*, no. April 2021, pp. 1–17, 2022, doi: 10.1002/bse.2992.
- [28] H. Lebdaoui and Y. Chetioui, “CRM, service quality and organizational performance in the banking industry: a comparative study of conventional and Islamic banks,” *Int. J. Bank Mark.*, vol. 38, no. 5, pp. 1081–1106, Jan. 2020, doi: 10.1108/IJBM-09-2019-0344.
- [29] J. Parnell and M. Brady, “Capabilities, strategies and firm performance in the United Kingdom,” *J. Strateg. Manag.*, vol. 12, no. 1, pp. 153–172, 2019, doi: 10.1108/JSMA-10-2018-0107.
- [30] N. Saini and M. Singhania, “Performance relevance of environmental and social disclosures: The role of foreign ownership,” *Benchmarking*, vol. 26, no. 6, pp. 1845–1873, 2019, doi: 10.1108/BIJ-04-2018-0114.
- [31] O. Zamazii, O. Dupliak, K. Vitalii, O. Proskurovych, and A. Mazarchuk, “Place of environmental management in Ukraine in the system of modeling management of sustainable development of the region,” *WSEAS Trans. Environ. Dev.*, vol. 17, pp. 253–261, 2021, doi: 10.37394/232015.2021.17.26.
- [32] Z. Rezaee, H. Dou, and H. Zhang, “Corporate

social responsibility and earnings quality: Evidence from China,” *Glob. Financ. J.*, vol. 45, no. April, p. 100473, 2020, doi: 10.1016/j.gfj.2019.05.002.

- [33] I. Ghozali, S. Wahyudi, H. Hersugondo, A. S. Prabuwo, and I. D. Pamungkas, “Bid-Ask Spread on Earnings Management with Good Corporate Governance as Moderation Variables: Banking Sector in Indonesia,” *Wseas Trans. Bus. Econ.*, vol. 19, pp. 386–395, 2022, doi: 10.37394/23207.2022.19.34.
- [34] K. Friesenbichler and A. Reinstaller, “Do firms facing competitors from emerging markets behave differently? Evidence from Austrian manufacturing firms,” *Eur. Bus. Rev.*, vol. 34, no. 2, pp. 153–170, 2022, doi: 10.1108/EBR-09-2020-0216.
- [35] M. C. Türkeş, A. F. Stăncioiu, C. A. Băltescu, and R. C. Marinescu, “Resilience innovations and the use of food order & delivery platforms by the romanian restaurants during the covid-19 pandemic,” *J. Theor. Appl. Electron. Commer. Res.*, vol. 16, no. 7, pp. 3218–3247, 2021, doi: 10.3390/jtaer16070175.
- [36] A. Hamrouni, A. Uyar, and R. Boussaada, “Are corporate social responsibility disclosures relevant for lenders? Empirical evidence from France,” *Manag. Decis.*, vol. 58, no. 2, pp. 267–279, 2020, doi: 10.1108/MD-06-2019-0757.
- [37] J. Jia and M. E. Bradbury, “Risk management committees and firm performance,” *Aust. J. Manag.*, vol. 46, no. 3, pp. 369–388, 2021, doi: 10.1177/0312896220959124.
- [38] C. Bratianu, “A critical analysis of intellectual capital research in universities,” *Proc. Int. Conf. Bus. Excell.*, vol. 12, no. 1, pp. 151–160, 2018, doi: 10.2478/picbe-2018-0015.
- [39] K. H. Shih, C. J. Chang, and B. Lin, “Assessing knowledge creation and intellectual capital in banking industry,” *J. Intellect. Cap.*, vol. 11, no. 1, pp. 74–89, 2010, doi: 10.1108/14691931011013343.
- [40] S. Ranjbar and G. F. Amanollahi, “The effect of financial distress on earnings management and unpredicted net earnings in companies listed on Tehran Stock Exchange,” *Manag. Sci. Lett.*, vol. 8, no. 9, pp. 933–938, 2018, doi: 10.5267/j.msl.2018.6.015.
- [41] Rusdiyanto and I. M. Narsa, “The Effect of Company Size , Leverage and Return on Asset on Earnings Management : Case Study Indonesian,” *Espacios*, vol. 41, no. 17, p. 25, 2020.
- [42] W. Purwidiyanti and N. Tubastuvi, “The Effect

of Financial Literacy and Financial Experience on SME Financial Behavior in Indonesia,” *J. Din. Manaj.*, vol. 10, no. 1, pp. 40–45, 2019, doi: 10.15294/jdm.v10i1.16937.

Creative Commons Attribution License 4.0 (Attribution 4.0 International, CC BY 4.0)

This article is published under the terms of the Creative Commons Attribution License 4.0

https://creativecommons.org/licenses/by/4.0/deed.en_US