

Capital structure and company growth to profitability and value of manufacturing companies

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Abstract

This study aims to evaluate and analyze the impact of growth and the relationship between capital structure and company growth with profitability and company value in the context of manufacturing companies listed on the Indonesia Stock Exchange. The data used are secondary in the form of debt-to-equity ratio, return on equity, and price book value. The data is sourced from the financial statements of manufacturing companies listed on the Indonesia Stock Exchange for 2019-2022 with a sample of 28 manufacturing companies. Data analyzed using a path analysis model is used to analyze the pattern of relationships between variables to determine the influence of the independent variable on the dependent variable. The results showed that the influence of the variable debt to equity ratio on return on equity was significant, the effect of the variable of company growth on profitability return on equity was significant, the influence of the variable capital structure debt to equity ratio to the value of the company price book value was insignificant, the influence of the variable of company growth on the value of the company was not significant, and the effect of profitability variables on company value is significant. The originality lies in the comprehensive merging of two important aspects in the management of the enterprise: factors that affect profitability and factors that affect the value of the company. It not only identifies problems and challenges that the company may face but also provides a set of concrete solutions and actions to be taken to address those problems. In addition, it emphasizes the importance of integrating financial and operational aspects in growth planning and risk management. Thus, it can create a balanced framework to help companies achieve sustainable profitability and optimal long-term value.

Key words: Capital structure; company growth; profitability; company value

INTRODUCTION

The use of appropriate capital structures can help a company significantly increase its profitability (Hamid et al., 2015) (Serghiescu & Văidean, 2014). Good management in managing debt and equity can be the key to increasing profitability through an efficient capital structure (Cuevas-Vargas et al., 2021). A balanced capital structure between debt and equity can open up opportunities for cost savings and increased net profit (Kruk, 2021). The selection of good funding sources in the capital structure can provide a strong competitive advantage in generating profits (Ronoowah & Seetanah, 2022). Companies that understand well the risks and returns of their capital structure can achieve sustainable profitability (Kulikov et al., 2023). By optimizing the capital structure, the company can experience stable and sustainable profit growth (Alam & Zeesha, 2021).

A good capital structure can significantly increase the value of a company by optimizing the use of financial resources (Ahmed et al., 2023). By choosing the right combination of debt and equity, a company can increase the value of its assets sustainably (Hermundsdottir & Aspelund, 2021). A balanced capital structure can help companies reduce capital costs and improve operational efficiency, which has a positive impact on company value (Luo & Jiang, 2022)(Bui & Nguyen, 2023). The use of a good capital structure can increase a company's attractiveness in the eyes of investors and shareholders, which in turn increases stock price and market value (Bui & Nguyen, 2023). Companies that understand the risks and returns of their choice of capital structure can create strong long-term value (Dao & Ta, 2020). A flexible capital structure can also allow companies to adapt to market and economic changes, which can increase the overall value of the company (Nenu et al., 2018).

Sustainable growth can open up new opportunities and increase revenue, which in turn increases the profitability of the company (Bhattacharya et al., 2023). Companies that successfully expand their market share and products tend to experience a significant increase in profits (Islami et al., 2020). With growth, companies can gain greater operational efficiencies, leading to increased profit margins (Handoyo et al., 2023). Growth can also assist companies in achieving higher economies of scale, which often have a positive impact on profitability (Mansikkamäki, 2023) (Tippmann et al., 2023). Investment in research and development and expansion into new markets can improve a company's long-term profitability (Tippmann et al., 2023). The growth of a company can attract the interest of investors and potential shareholders, which can have a positive impact on the stock price and valuation of the company.

Sustainable company growth can significantly increase company value by increasing assets, revenue, and market share (Aydoğmuş et al., 2022). Investment in the expansion of new products or services can create sustainable growth opportunities, which has a positive impact on a company's valuation. Companies that successfully expand into new regions or markets often see a significant increase in company value (Farida & Setiawan, 2022). Growth can strengthen a firm's bargaining power in the market, increase profitability, and ultimately lift the value of the firm (Cronqvist et al., 2015). Companies that successfully attract new customers and retain old customers usually experience an increase in company value due to stable cash flow (Alkitbi et al., 2021). Growth can be an attraction for potential investors and shareholders, which can drive up share prices and company valuations (Cronqvist et al., 2015).

But in reality: Too high a capital structure can result in heavy interest expenses, hurt liquidity, and ultimately damage the value of the company (Kedzior et al., 2020; Kim et al., 2023); the Higher capital structure can disrupt a company's profitability due to high-interest payments (Agathokleous, 2022; Dwivedi et al., 2023); Although high company growth can increase company value, unsustainable or too fast growth can also cause pressure on the company's operations and finances, which can reduce the long-term value of the company (Bocken & Short, 2021a); Too fast a company's growth can result in pressure on a company's resources and operations, which can ultimately hurt its profitability (Struckell et al., 2022; German-Soto & Sánchez-Hiza, 2021); High profitability does not necessarily mean high firm value, as other factors such as risk and competition can also affect the assessment of firm value (Suhadak et al., 2019; Islami et al., 2020).

This research is important because it can provide a better understanding of how capital structure policies and company growth rates can affect profitability and company value in Indonesia's manufacturing sector, which in turn can provide valuable guidance for company management, shareholders, and

regulators to make more effective decisions in managing and growing businesses and designing policies that support economic development nationally.

The purpose of this study is to identify and analyze the relationship between capital structure, company growth, profitability, and company value in manufacturing companies listed on the Indonesia Stock Exchange.

Literature Review

The company's financial management is an important aspect of ensuring operational continuity and growth. One approach often used by companies to achieve growth is to leverage debt. Although the use of debt can magnify profitability, it also carries significant risks. Reliance on debt is a financial strategy used by companies to fund business growth and expansion. It involves the use of debt in the capital structure of the company to obtain a higher yield than the cost of debt issued. Overleveraging is a condition that arises when a company uses too much debt for its equity. Overleveraging results in companies having high-interest expenses, which can reduce net income significantly (C. G. Li et al., 2014). Large interest expenses can hinder a company's ability to invest or allocate resources to more productive areas. A heavy debt burden can create financial stress on the company. If revenue is insufficient to pay interest and principal, the company could face the risk of default or serious liquidity problems. Overindebted companies may be limited in their ability to plan long-term investments or business expansion. This can hinder the growth and innovation of the company. Overleveraging can reduce investor and shareholder confidence, which can result in a decline in share price and a higher cost of capital in the future (Gross et al., 2018).

To avoid the negative impact of overleverage, companies should look for alternative funding sources such as equity shares, internal income, or venture capital to reduce dependence on debt. Before taking on debt, companies should conduct a comprehensive risk analysis to understand its financial consequences. The company must have an effective debt management strategy, including payment planning and regular monitoring of its debt structure. Companies must continuously monitor financial performance and be prepared to take corrective action if there are signs of overleveraging risk (Cingano, 2014).

The use of debt as a tool to achieve the company's growth and development goals is a common practice in the business world. While it can provide benefits, such as accelerating growth and increasing profits, keep in mind that excessive use of debt is also risky. The use of excessive debt is the practice of companies that rely too much on debt as the main source of funding. The goal is to enlarge the capital available for investment and growth. However, excessive use of debt can result in significant financial risks (Arhinful & Radmehr, 2023).

One of the main risks that arise from the overuse of debt is the risk of bankruptcy. If the company cannot fulfill its debt repayment obligations, risks will occur. The use of high debt results in companies having high-interest expenses. If the company's revenue is insufficient to pay this interest expense, the company may experience serious financial difficulties (Yue et al., 2022). High debt repayment obligations can put significant financial strain on a company. This can hinder a company's ability to operate smoothly and invest resources in growth. The risk of bankruptcy can result in a decrease in the company's liquidity, which can make it difficult to meet short-term and day-to-day operational obligations. Excessive use of debt can limit a company's ability to invest in growth opportunities that may arise, as most revenue must be allocated to servicing debt (Dwivedi et al., 2023).

To avoid the risk of bankruptcy and reduction in corporate value, the Company sought diverse sources of funding, including equity, internal revenue, and other alternative approaches. The company must have a wise debt management strategy, including the management of payment schedules and regular monitoring of its debt structure. Companies must actively monitor their financial performance and be ready to take corrective action in case of a decline in the ability to repay debts (Rasheed et al., 2023)(Gennaro, 2021). In addition to the risk of bankruptcy, excessive use of debt can also reduce the value of a company significantly. If financial risk or bankruptcy arises, the company's stock price can drop dramatically. This will hurt shareholders and reduce the market value of the company. Companies that are too heavily indebted will lose investor and shareholder confidence, which can affect credit scoring and future borrowing costs (Habermann & Fischer, 2023).

METHOD

The location of the research was carried out on the Indonesia Stock Exchange by collecting data through the Indonesian Capital Market Directory (ICMD) for 2019-2022.

Research Design

The data used are secondary in the form of debt-to-equity ratio (DER), return on equity (ROE), and price book value (PBV). Data is sourced from the financial statements of manufacturing companies listed on the Indonesia Stock Exchange.

Population and Sample

The study population is all manufacturing companies listed on the Indonesia Stock Exchange according to the publication of the Indonesian capital market directory. The total population is 143 manufacturing companies.

The sampling technique used is purposive sampling type judgment sampling. The criteria used in sampling are as follows:

Table 1.
Character Sample

Sample Characteristics	Information
Manufacturing companies listed on the Indonesia Stock Exchange with the classification of the Indonesian capital market directory (ICMD) for 2019-2022	143
Manufacturing companies that do not publish complete financial statements from 2019-2022	33
Manufacturing companies that do not have a positive asset change value in 2019-2022	82
Number of samples	28

After using this method, it is known that the research sample is as many as 28 companies. The companies that became the research sample are:

Table 2.
Nama Perusahaan

No	Code	No	Code
1	AKPI	15	JPFA
2	AMFG	16	KAEF
3	ASII	17	KBLI
4	BATA	18	KBLM
5	BTON	19	KLBF
6	CPIN	20	MYOR
7	FASW	21	NIKL
8	GGRM	22	PBRX
9	HMSP	23	POLY
10	ICBP	24	CICY
11	IMAS	25	ROTI
12	INDF	26	ACID
13	INKP	27	TFCO
14	INRU	28	ULTJ

Data Analysis Methods

The path analysis model is used to analyze the pattern of relationships between variables to determine the direct or indirect influence of a set of independent variables on the dependent variable. The path analysis model is a set of hypothesized asymmetric relations among the variables (Parreño et al., 2021).

RESULT AND DISCUSSION

Model the relationship between variables as shown below:

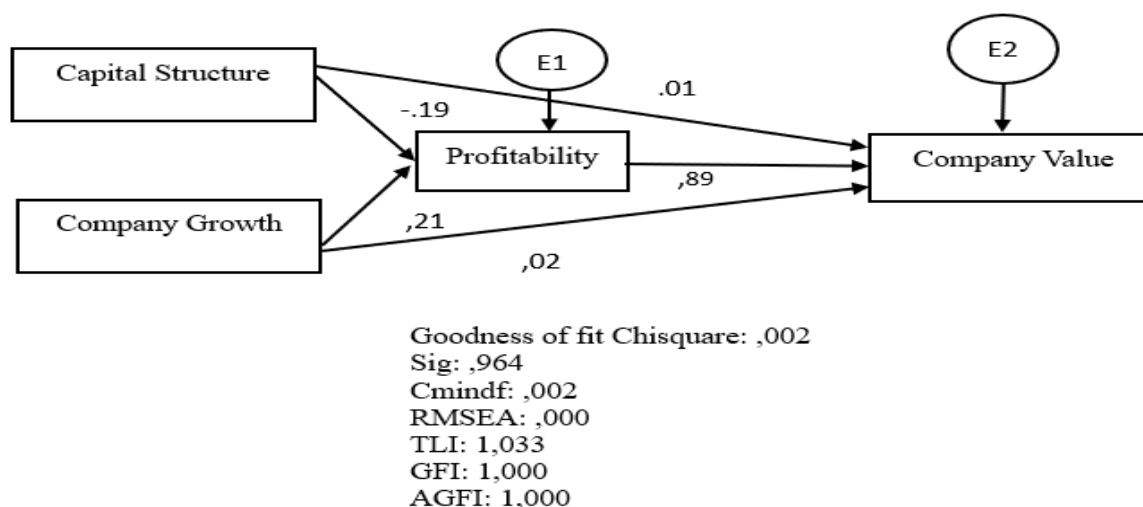


Figure 1.

Model the relationship between variables

Analysis Goodness of Fit

Based on the test criteria, Chi-square (x2), relative Chi-square (x2/pdf), RMSEA, GFI, AGFI, TLI, and CFI above and the goodness of fit value of Amos for version 20 processing results can be shown in the following table:

Table 3.
Evaluasi Goodness of Fit

Good fit Index	Cut-off Value	Model Results	Information
Chi-square (X2)		0,002	good
Ralative Chi-square(X2/df	≤ 3,0	0,002	good
Probability	> 0,05	0,964	good
RMSEA	≤ 0,08	0,000	good
GFI	≥ 0,90	1,000	good
AGFI	≥ 0,90	1,000	good
TLI	≥ 0,95	1,033	good
CFI	≥ 0,95	1,000	good

The cut-of-value and goodness of fit look all good criteria.

Model analysis of structural equations

Based on the results of the calculation of the regression coefficient, the following table is presented:

Table 4.
Standardized Direct Effects (Group Number 1- Default Model)

	PP	DER	ROE
ROE	,209	-,193	,000
PBV	,021	,009	,893

Table 5.
Standardized Indirect Effects (Group Number 1- Default Model)

	PP	DER	ROE
ROE	,000	,000	,000
PBV	,187	-,172	,000

Table 6.

Standardized Total Effects (Group Number 1- Default Model)

	PP	DER	ROE
ROE	,209	-,193	,000
PBV	,208	-,163	,893

Table 7.

Regression Weights: (Group Number 1- Default Model)

	Std. Estimate	Estimste	S.E.	C.R.	P
ROE < --- DER	-,193	-3,921	1,849	-2,121	,034
ROE < --- PP	,209	22,405	9,738	2,301	,021
PBV < --- ROE	,893	,285	,014	20,310	***
PBV < --- DER	,009	,061	,279	,217	,828
PBV < --- PP	,021	,723	1,475	,490	,624

In Table 6, it can be seen that the influence of the DER variable on ROE has a standardized estimate of -0.193, probability = 0.034 < 0.05 shows that the effect of the DER variable on ROE is significant.

The effect of company growth variables on ROE has a standardized estimate of 0.209, with probability = 0.021 < 0.05 indicating that the effect of company growth variables on profitability (ROE) is significant;

The effect of the capital structure variable (DER) on company value (PBV) has a standardized estimate of 0.009 with probability = 0.828 > 0.05 indicating that the effect of the capital structure variable (DER) on company value (PBV) is not significant;

The effect of the company's growth variable on the company's value has a standardized estimate of 0.021 with probability = 0.624 > 0.05 shows that the influence of the company's growth variable on the company's value is not significant; and

The effect of profitability variables has a standardized estimate of 0.893, with probability = 0.000 < 0.05 indicating that the effect of profitability variables (ROE) on company value is significant.

High profitability is not always a high company value, other factors such as risk and competition affect the valuation of the Company's value. Diversifying a product portfolio can help reduce dependence on one particular product or market that may be more vulnerable to risk (Arte & Larimo, 2022). Conduct a careful business risk analysis to identify potential risks that could affect the Company's profitability and value. Develop strategies to manage and mitigate risk. Need to innovate in products to maintain competitiveness (Kuncoro & Suriani, 2018)(Jin & Choi, 2019). This can help increase market share and profitability. Understand competitors well and plan effective strategies to deal with competition that might affect company profitability (Islami et al., 2020) (Farida & Setiawan, 2022). Review your company's operating costs and ways to reduce costs without sacrificing quality or efficiency. Plan company finances carefully by considering various risks (Islami et al., 2020). Make sure the company has sufficient reserves of funds to deal with unexpected situations. Review of product pricing structure to ensure that prices reflect true value to customers and provide good profitability (Gerpott & Berends, 2022) (Wu et al., 2022). Know the intrinsic value of the company well, including assets, debt, and other factors that affect the fundamental value of the company.

A company's growth too fast can result in pressure on resources and operations, which can ultimately hurt its profitability. It is important to plan the growth of the company carefully, taking into account the capacity of available resources, capital requirements, and their impact on operations. Ensure strong financial management by managing cash flow well. This includes close supervision of expenses, long-term financial planning, and efficient allocation of funds. Review available resources, including manpower, infrastructure, and technology, and upgrade or modernize resources if needed (Verhoef et al., 2021) (Kraus et al., 2022) . Growth will be more restrained by taking gradual measures. For example, opening branches or gradually expanding products. Improve operational efficiency with better processes, more advanced technology, and cost savings across the Enterprise (Practice, 2021). Ensure the company has sufficient funding sources to support growth without putting too much strain on its capital structure. This can be done by looking for suitable investors, loans, or other funding (Wang et al., 2023) (Q. Li et al., 2023) . Carefully consider the opportunities and risks associated with rapid

growth (Mercure et al., 2021). Perform a regular Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis. Company management has the necessary experience and skills to effectively manage rapid growth (Pedraza-Rodríguez et al., 2023)(Santos et al., 2021). Establish clear performance metrics and continuously monitor company growth and its impact on profitability (Cardona & Rey, 2008). Always be ready to adapt and adjust growth plans in case of unexpected changes in market or business conditions (Weber & Dholakia, 1998) (Ramos-Hidalgo et al., 2022).

Unsustainable company growth can cause pressure on the company's operations and finances, which can reduce the Company's long-term value (Bocken & Short, 2021b). Create a measurable and sustainable growth plan. Consider realistic growth targets that enable the company to manage growth well (Carp et al., 2020)(Vuković et al., 2022). Review company resources, including manpower, equipment, and infrastructure. Ensure the company has sufficient capacity to support planned growth (Merino & Carmenado, 2012) (Perifanis & Kitsios, 2023). Improve operational efficiency by making process improvements, automating routine tasks, and finding ways to reduce operational costs (Haleem et al., 2021). Good financial management by carefully managing cash flow, identifying the right sources of funding, and minimizing interest expenses (Salas-Molina et al., 2023). Consider diversifying products will help mitigate risk with growth being too dependent on a single product or market. Keep a reserve fund to deal with emergencies or uncertainties that may arise during the growth period. If growth is too fast and unsustainable, consider controlling it by scaling operations or focusing on the most profitable markets or products. The management team must have the experience and skills necessary to effectively manage rapid growth (Hendry, 1984) (Pedraza-Rodríguez et al., 2023) (Santos et al., 2021). Conduct regular evaluations of company performance and establish clear performance metrics to measure the impact of growth on the company's long-term value (Vuong & Nguyen, 2022).

High capital structure can result in large interest expenses that disrupt company profitability (Nguyen et al., 2023). Renegotiate corporate debt with lower interest rates or longer terms (Roberts & Sufi, 2009). This can reduce the interest burden that the Company must pay (Beckmann et al., 2022)(Delgado et al., 2023). Review the company's capital structure and consider shifting the proportion of share capital if possible to help reduce interest expense pressures (Ahmed et al., 2023). Efficient debt management by managing interest and principal payment schedules and taking advantage of refinance opportunities when interest rates fall (To et al., 2013). Looking for alternative sources of funding other than debt, such as equity investments or funding from venture capitalists, to reduce dependence on debt (Bollaert et al., 2021). Make efforts to increase the company's profitability through increased sales, operational efficiency, and good cost management. Review all debt-financed investments (Nazir et al., 2021). Ensure that the investment generates returns high enough to compensate for interest costs (Hiegel et al., 2023). Carefully maintain the company's liquidity to ensure it has enough funds to meet interest payment obligations (Karim et al., 2021). If possible, consider gradually reducing corporate debt by prioritizing debt repayment ahead of schedule (OECD, 2021). If the capital structure is very complex, consider consulting a financial expert or financial consultant who can provide more specific advice. Consider the long-term impact of financial decisions, including the impact of capital structure, in the Company's financial planning (Anozie et al., 2023) (Bui & Nguyen, 2023).

Too high a capital structure can result in heavy interest expenses, hurt liquidity, and damage company value (Huang et al., 2023). Consider renegotiating debt at a lower interest rate. Looking for alternative sources of funding other than debt. This can be obtained capital from equity investors, venture capitalists, or get funding through stocks. Improve the company's cash management by optimizing cash flow in and out. This can help reduce liquidity pressure. The company's business plan needs to be reviewed and ensure the expected growth matches the company's financial capacity. Evaluate the company's operations to reduce operational costs without sacrificing quality or productivity. Make sure debt payments are always on time to avoid fines and additional fees that can increase interest expenses (Hartley & Kallis, 2021). Identify and manage risks associated with high capital structure (Nenu et al., 2018). Anticipate possible changes in interest rates or changes in market conditions. It is important to always plan and manage the capital structure carefully to ensure that the company remains financially sound and can achieve optimal value (Thi Mai Nguyen et al., 2023).

CONCLUSION

Profitability is not the only factor that determines a company's value. Risk, competition, operational efficiency, and management strategy also matter. In the face of rapid growth, careful planning, good financial management, as well as an understanding of risk. Product diversification, cost management, and competitor evaluation are also keys to long-term success. In addition, flexibility and periodic performance monitoring are important for sustainable growth and profitability.

Sustainable company growth requires a measurable growth plan, smart resource management, operational efficiency, and accurate financial management. Product diversification, reserve funds, and regular performance monitoring are also important.

A high capital structure can increase interest expenses and disrupt a company's profitability. The solution is to review debt, review capital structure, and efficient debt management. It is also important to increase profitability, evaluate investments with debt, and maintain liquidity.

High capital structure can hurt companies with heavy interest expenses, and low liquidity. Therefore, it must find alternative funding sources, good cash management, operational evaluation to save costs, timely debt repayment, and manage risks related to capital structure.

REFERENCES

- Agathokleous, E. (2022). Mastering the scientific peer review process: tips for young authors from a young senior editor. *Journal of Forestry Research*, 33(1), 1–20. <https://doi.org/10.1007/s11676-021-01388-8>
- Ahmed, A. M., Nugraha, D. P., & Hågen, I. (2023). The Relationship between Capital Structure and Firm Performance: The Moderating Role of Agency Cost. *Risks*, 11(6), 102. <https://doi.org/10.3390/risks11060102>
- Alam, S. M. I., & Zeesha, S. S. (2021). Optimality of Capital Structure Inherent in Sustainable Growth Rate. *Journal of Accounting Research, Business and Finance Management*, 2(2), 37–48. <https://doi.org/10.13140/RG.2.2.17553.97126>
- Alkitbi, S. S., Alshurideh, M., Al Kurdi, B., & Salloum, S. A. (2021). Factors Affect Customer Retention: A Systematic Review. In *Advances in Intelligent Systems and Computing: Vol. 1261 AISC (Issue November)*. Springer International Publishing. https://doi.org/10.1007/978-3-030-58669-0_59
- Anozie, O. R., Muritala, T. A., Ininm, V. E., & Yisau, N. S. (2023). Impact of capital structure on financial performance of oil and gas firms in Nigeria. *Future Business Journal*, 9(1). <https://doi.org/10.1186/s43093-023-00186-4>
- Arhinful, R., & Radmehr, M. (2023). The effect of financial leverage on financial performance: evidence from non-financial institutions listed on the Tokyo stock market. *Journal of Capital Markets Studies*, 7(1), 53–71. <https://doi.org/10.1108/jcms-10-2022-0038>
- Arte, P., & Larimo, J. (2022). Moderating influence of product diversification on the international diversification-performance relationship: A meta-analysis. *Journal of Business Research*, 139(October 2021), 1408–1423. <https://doi.org/10.1016/j.jbusres.2021.10.037>
- Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, 22, S119–S127. <https://doi.org/10.1016/j.bir.2022.11.006>
- Beckmann, J., Gern, K. J., & Jannsen, N. (2022). Should they stay or should they go? Negative interest rate policies under review. *International Economics and Economic Policy*, 19(4), 885–912. <https://doi.org/10.1007/s10368-022-00547-4>
- Bhattacharya, C. B., Sen, S., Edinger-Schons, L. M., & Neureiter, M. (2023). Corporate Purpose and Employee Sustainability Behaviors. *Journal of Business Ethics*, 183(4), 963–981. <https://doi.org/10.1007/s10551-022-05090-5>

- Bocken, N. M. P., & Short, S. W. (2021a). Unsustainable business models – Recognising and resolving institutionalised social and environmental harm. *Journal of Cleaner Production*, 312(May). <https://doi.org/10.1016/j.jclepro.2021.127828>
- Bocken, N. M. P., & Short, S. W. (2021b). Unsustainable business models – Recognising and resolving institutionalised social and environmental harm. *Journal of Cleaner Production*, 312(May), 127828. <https://doi.org/10.1016/j.jclepro.2021.127828>
- Bollaert, H., Lopez-de-Silanes, F., & Schwienbacher, A. (2021). Fintech and access to finance. *Journal of Corporate Finance*, 68(December 2020), 101941. <https://doi.org/10.1016/j.jcorpfin.2021.101941>
- Bui, T. N., & Nguyen, X. H. (2023). The Effect of Capital Structure on Firm Value : A Study of Companies Listed on the Vietnamese Stock Market.
- Cardona, P., & Rey, C. (2008). Management by missions. In *Management by Missions*. <https://doi.org/10.1057/9780230598942>
- Carp, M., Păvăloaia, L., Toma, C., Georgescu, I. E., & Afrăsinei, M. B. (2020). Companies' sustainable growth, accounting quality, and investments performances. The case of the Romanian capital market. *Sustainability (Switzerland)*, 12(22), 1–16. <https://doi.org/10.3390/su12229748>
- Cingano, F. (2014). Trends in Income Inequality and its Impact on Economic Growth. *OECD Social, Employment, and Migration Working Papers*, 163, 0_1,5-59. <https://doi.org/http://dx.doi.org/10.1787/5jxrjncwxv6j-en>
- Cronqvist, H., Siegel, S., & Yu, F. (2015). Value versus growth investing: Why do different investors have different styles? *Journal of Financial Economics*, 117(2), 333–349. <https://doi.org/10.1016/j.jfineco.2015.04.006>
- Cuevas-Vargas, H., Cortés-Palacios, H. A., & Lozano-García, J. J. (2021). Impact of capital structure and innovation on firm performance. Direct and indirect effects of capital structure. *Procedia Computer Science*, 199, 1082–1089. <https://doi.org/10.1016/j.procs.2022.01.137>
- 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. <https://doi.org/10.1108/jed-12-2019-0072>
- Delgado, F. J., Fernández-Rodríguez, E., García-Fernández, R., Landajo, M., & Martínez-Arias, A. (2023). Tax avoidance and earnings management: a neural network approach for the largest European economies. *Financial Innovation*, 9(1). <https://doi.org/10.1186/s40854-022-00424-8>
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., ... Wright, R. (2023). “So what if ChatGPT wrote it?” Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71(March). <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Farida, I., & Setiawan, D. (2022). Business Strategies and Competitive Advantage: The Role of Performance and Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 1–16. <https://doi.org/10.3390/joitmc8030163>
- Gennaro, A. (2021). Insolvency risk and value maximization: A convergence between financial management and risk management. *Risks*, 9(6). <https://doi.org/10.3390/risks9060105>
- German-Soto, V., & Sánchez-Hiza, Ó. (2021). The profitability-growth nexus in the Mexican manufacturing industry. *Social Sciences and Humanities Open*, 4(1). <https://doi.org/10.1016/j.ssaho.2021.100220>

- Gerpott, T. J., & Berends, J. (2022). Competitive pricing on online markets: a literature review. *Journal of Revenue and Pricing Management*, 21(6), 596–622. <https://doi.org/10.1057/s41272-022-00390-x>
- Gross, M., Henry, J., & Semmler, W. (2018). DESTABILIZING EFFECTS of BANK OVERLEVERAGING on REAL ACTIVITY - AN ANALYSIS BASED on A THRESHOLD MCS-GVAR. *Macroeconomic Dynamics*, 22(7), 1750–1768. <https://doi.org/10.1017/S1365100516001024>
- Habermann, F., & Fischer, F. B. (2023). Corporate Social Performance and the Likelihood of Bankruptcy: Evidence from a Period of Economic Upswing. *Journal of Business Ethics*, 182(1), 243–259. <https://doi.org/10.1007/s10551-021-04956-4>
- Haleem, A., Javaid, M., Singh, R. P., Rab, S., & Suman, R. (2021). Hyperautomation for the enhancement of automation in industries. *Sensors International*, 2(August), 100124. <https://doi.org/10.1016/j.sintl.2021.100124>
- Hamid, M. A., Abdullah, A., & Kamaruzzaman, N. A. (2015). Capital Structure and Profitability in Family and Non-Family Firms: Malaysian Evidence. *Procedia Economics and Finance*, 31(15), 44–55. [https://doi.org/10.1016/s2212-5671\(15\)01130-2](https://doi.org/10.1016/s2212-5671(15)01130-2)
- Handoyo, S., Suharman, H., Ghani, E. K., & Soedarsono, S. (2023). A business strategy, operational efficiency, ownership structure, and manufacturing performance: The moderating role of market uncertainty and competition intensity and its implication on open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2), 100039. <https://doi.org/10.1016/j.joitmc.2023.100039>
- Hartley, T., & Kallis, G. (2021). Interest-bearing loans and unpayable debts in slow-growing economies: Insights from ten historical cases. *Ecological Economics*, 188(June 2020), 107132. <https://doi.org/10.1016/j.ecolecon.2021.107132>
- Hendry, G. R. T. (1984). The multiplicity of 1-factors in the square of a graph. *Journal of Graph Theory*, 8(3), 399–403. <https://doi.org/10.1002/jgt.3190080308>
- Hermundsdottir, F., & Aspelund, A. (2021). Sustainability innovations and firm competitiveness: A review. *Journal of Cleaner Production*, 280, 124715. <https://doi.org/10.1016/j.jclepro.2020.124715>
- Hiegel, A., Siry, J., Mei, B., & Bettinger, P. (2023). Transaction Costs and Investment Interest in the U.S. South and the Pacific Northwest Timberland Regions. *Forests*, 14(8). <https://doi.org/10.3390/f14081588>
- Huang, J., Kombate, B., Li, Y., Kouadio, K. R., & Xie, P. (2023). Effective risk management in the shadow of COVID-19 pandemic: The evidence of Indonesian listed corporations. *Heliyon*, 9(5), e15744. <https://doi.org/10.1016/j.heliyon.2023.e15744>
- Islami, X., Mustafa, N., & Topuzovska Latkovikj, M. (2020). Linking Porter's generic strategies to firm performance. *Future Business Journal*, 6(1), 1–15. <https://doi.org/10.1186/s43093-020-0009-1>
- Jin, S. H., & Choi, S. O. (2019). The effect of innovation capability on business performance: A focus on it and business service companies. *Sustainability (Switzerland)*, 11(19), 1–15. <https://doi.org/10.3390/su11195246>
- Karim, M. R., Shetu, S. A., & Razia, S. (2021). COVID-19, liquidity and financial health: empirical evidence from South Asian economy. *Asian Journal of Economics and Banking*, 5(3), 307–323. <https://doi.org/10.1108/ajeb-03-2021-0033>
- Kedzior, M., Grabinska, B., Grabinski, K., & Kedzior, D. (2020). Capital Structure Choices in Technology Firms: Empirical Results from Polish Listed Companies. *Journal of Risk and Financial Management*, 13(9), 221. <https://doi.org/10.3390/jrfm13090221>

- Kim, Y., Jung, S., & Kim, C. (2023). The Impact of Capital Structure on the Profitability Performance of ICT Firms. *Processes*, 11(2). <https://doi.org/10.3390/pr11020635>
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63(December 2021). <https://doi.org/10.1016/j.ijinfomgt.2021.102466>
- Kruk, S. (2021). Impact of Capital Structure on Corporate Value—Review of Literature. *Journal of Risk and Financial Management*, 14(4), 155. <https://doi.org/10.3390/jrfm14040155>
- Kulikov, A., Alabed Alkader, N., Panaedova, G., Ogorodnikov, A., & Rebeka, E. (2023). Modelling Optimal Capital Structure in Gas and Oil Sector by Applying Simulation Theory and Programming Language of Python (Qatar Gas Transport Company). *Energies*, 16(10), 1–15. <https://doi.org/10.3390/en16104067>
- Kuncoro, W., & Suriani, W. O. (2018). Achieving sustainable competitive advantage through product innovation and market driving. *Asia Pacific Management Review*, 23(3), 186–192. <https://doi.org/10.1016/j.apmr.2017.07.006>
- Li, C. G., Dong, H. M., Chen, S., & Yang, Y. (2014). Working capital management, corporate performance, and strategic choices of the wholesale and retail industry in China. *Scientific World Journal*, 2014. <https://doi.org/10.1155/2014/953945>
- Li, Q., Khan, H., Zhang, Z., Lin, L., & Huang, K. (2023). The Impact of the Belt and Road Initiative on Corporate Excessive Debt Mechanism: Evidence from Difference-in-Difference Equation Model. *Sustainability (Switzerland)*, 15(1). <https://doi.org/10.3390/su15010618>
- Luo, Y., & Jiang, C. (2022). The Impact of Corporate Capital Structure on Financial Performance Based on Convolutional Neural Network. *Computational Intelligence and Neuroscience*, 2022. <https://doi.org/10.1155/2022/5895560>
- Mansikkamäki, S. (2023). Firm growth and profitability: The role of age and size in shifts between growth–profitability configurations. *Journal of Business Venturing Insights*, 19(January). <https://doi.org/10.1016/j.jbvi.2023.e00372>
- Mercure, J. F., Sharpe, S., Vinuales, J. E., Ives, M., Grubb, M., Lam, A., Drummond, P., Pollitt, H., Knobloch, F., & Nijse, F. J. M. M. (2021). Risk-opportunity analysis for transformative policy design and appraisal. *Global Environmental Change*, 70(September), 102359. <https://doi.org/10.1016/j.gloenvcha.2021.102359>
- Merino, S. S., & Carmenado, I. de los R. (2012). Capacity Building in Development Projects. *Procedia - Social and Behavioral Sciences*, 46, 960–967. <https://doi.org/10.1016/j.sbspro.2012.05.231>
- Nazir, A., Azam, M., & Khalid, M. U. (2021). Debt financing and firm performance: empirical evidence from the Pakistan Stock Exchange. *Asian Journal of Accounting Research*, 6(3), 324–334. <https://doi.org/10.1108/AJAR-03-2019-0019>
- Nenu, E. A., Vintilă, G., & Gherghina, Ș. C. (2018). The impact of capital structure on risk and firm performance: empirical evidence for the bucharest stock exchange listed companies. *International Journal of Financial Studies*, 6(2). <https://doi.org/10.3390/ijfs6020041>
- Nguyen, S. La, Pham, C. D., Truong, T. Van, Phi, T. Van, Le, L. T., & Vu, T. T. T. (2023). Relationship between Capital Structure and Firm Profitability: Evidence from Vietnamese Listed Companies. *International Journal of Financial Studies*, 11(1). <https://doi.org/10.3390/ijfs11010045>
- OECD. (2021). Bridging the gap in the financing of intangibles to support productivity: Background Paper, An OECD contribution to the G20 Italian Presidency. <https://www.oecd.org/global-forum-productivity/events/Bridging-the-gap-in-the-financing-of-intangibles-to-support-productivity-background-paper.pdf>

- Parreño, M. A., Schmid, B., & Petchey, O. L. (2021). Comparative study of the most tested hypotheses on relationships between biodiversity, productivity, light and nutrients. *Basic and Applied Ecology*, 53, 175–190. <https://doi.org/10.1016/j.baae.2021.03.012>
- Pedraza-Rodríguez, J. A., Ruiz-Vélez, A., Sánchez-Rodríguez, M. I., & Fernández-Esquinas, M. (2023). Management skills and organizational culture as sources of innovation for firms in peripheral regions. *Technological Forecasting and Social Change*, 191(March). <https://doi.org/10.1016/j.techfore.2023.122518>
- Perifanis, N. A., & Kitsios, F. (2023). Investigating the Influence of Artificial Intelligence on Business Value in the Digital Era of Strategy: A Literature Review. *Information (Switzerland)*, 14(2). <https://doi.org/10.3390/info14020085>
- Practice, O. (2021). Digital service excellence : Scaling the next-generation operating model Digital service excellence : Scaling the next-generation operating model Weaving digital into the entire organization will require companies to raise. February.
- Ramos-Hidalgo, E., Edeh, J. N., & Acedo, F. J. (2022). Innovation adaptation and post-entry growth in international new ventures. *European Research on Management and Business Economics*, 28(1). <https://doi.org/10.1016/j.iedeen.2021.100169>
- Rasheed, S., Adeneye, Y., & Kosnin, R. (2023). Sovereign wealth fund investments and financial performance of target firms: The disciplinary role of debt in political agenda theory. *Heliyon*, 9(5), e15519. <https://doi.org/10.1016/j.heliyon.2023.e15519>
- Roberts, M. R., & Sufi, A. (2009). Renegotiation of financial contracts: Evidence from private credit agreements. *Journal of Financial Economics*, 93(2), 159–184. <https://doi.org/10.1016/j.jfineco.2008.08.005>
- Ronoowah, R. K., & Seetanah, B. (2022). Corporate governance, capital structure, and firm performance: a panel VAR approach. *SN Business & Economics*, 3(1), 1–30. <https://doi.org/10.1007/s43546-022-00382-4>
- Salas-Molina, F., Rodríguez-Aguilar, J. A., & Guillen, M. (2023). A multidimensional review of the cash management problem. In *Financial Innovation* (Vol. 9, Issue 1). Springer Berlin Heidelberg. <https://doi.org/10.1186/s40854-023-00473-7>
- Santos, G., Sá, J. C., Félix, M. J., Barreto, L., Carvalho, F., Doiro, M., Zgodavová, K., & Stefanović, M. (2021). New needed quality management skills for quality managers 4.0. *Sustainability (Switzerland)*, 13(11), 1–22. <https://doi.org/10.3390/su13116149>
- Serghiescu, L., & Văidean, V.-L. (2014). Determinant Factors of the Capital Structure of a Firm- an Empirical Analysis. *Procedia Economics and Finance*, 15(14), 1447–1457. [https://doi.org/10.1016/s2212-5671\(14\)00610-8](https://doi.org/10.1016/s2212-5671(14)00610-8)
- Struckell, E., Ojha, D., Patel, P. C., & Dhir, A. (2022). Strategic choice in times of stagnant growth and uncertainty: An institutional theory and organizational change perspective. *Technological Forecasting and Social Change*, 182(June), 121839. <https://doi.org/10.1016/j.techfore.2022.121839>
- Suhadak, Kurniaty, Handayani, S. R., & Rahayu, S. M. (2019). Stock return and financial performance as moderation variables in the influence of good corporate governance towards corporate value. *Asian Journal of Accounting Research*, 4(1), 18–34. <https://doi.org/10.1108/AJAR-07-2018-0021>
- Thi Mai Nguyen, L., Le, D., Vu, K. T., & Tran, T. K. (2023). The role of capital structure management in maintaining the financial stability of hotel firms during the pandemic—A global investigation. *International Journal of Hospitality Management*, 109(November 2022), 103366. <https://doi.org/10.1016/j.ijhm.2022.103366>
- Tippmann, E., Ambos, T. C., Del Giudice, M., Monaghan, S., & Ringov, D. (2023). Scale-ups and scaling in an international business context. *Journal of World Business*, 58(1). <https://doi.org/10.1016/j.jwb.2022.101397>

- To, M. T., Jenarius, T., Inland Revenue Department, ABADIE, A., ANGRIST, J., IMBENS, G., The World Bank Treasury, P., Advisory, M., Achou, T. F., Tenguh, N. C., Gibson, T., Vaart, H. J. Van De, Kose, M. A., Nagle, P., Ohnsorge, F., Sugawara, N., Korea Development Institute (KDI), Szybowski, D., Geometry, ... Vuvor, S. (2013). Government Debt Management : Designing Debt Management Strategies. *International Journal of New Economics and Social Sciences*, 8(February), 56. <https://www.pinterest.com/pin/829647562593461477/%0Ahttps://ird.gov.np/public/pdf/255574382.pdf>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122(September 2019), 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- Vuković, B., Peštović, K., Mirović, V., Jakšić, D., & Milutinović, S. (2022). The Analysis of Company Growth Determinants Based on Financial Statements of the European Companies. *Sustainability (Switzerland)*, 14(2). <https://doi.org/10.3390/su14020770>
- Vuong, T. D. N., & Nguyen, L. T. (2022). The Key Strategies for Measuring Employee Performance in Companies: A Systematic Review. *Sustainability*, 14(21), 14017. <https://doi.org/10.3390/su142114017>
- Wang, Y., Weng, F., & Huo, X. (2023). Can Digital Finance Promote Professional Farmers' Income Growth in China?-An Examination Based on the Perspective of Income Structure. *Agriculture (Switzerland)*, 13(5). <https://doi.org/10.3390/agriculture13051103>
- Weber, J. A., & Dholakia, U. (1998). Planning market share growth in mature business markets. *Industrial Marketing Management*, 27(5), 401–428. [https://doi.org/10.1016/S0019-8501\(97\)00094-1](https://doi.org/10.1016/S0019-8501(97)00094-1)
- Wu, M., Ran, Y., & Zhu, S. X. (2022). Optimal pricing strategy: How to sell to strategic consumers? *International Journal of Production Economics*, 244(November 2021), 108367. <https://doi.org/10.1016/j.ijpe.2021.108367>
- Yue, P., Korkmaz, A. G., Yin, Z., & Zhou, H. (2022). The rise of digital finance: Financial inclusion or debt trap? *Finance Research Letters*, 47(PA), 102604. <https://doi.org/10.1016/j.frl.2021.102604>