

Can Leverage Enhance the Impact of Business Diversification on Firm Performance?

Ryan Susanto^{1*}, Dwi Cahyaningdyah², Rochmi Widayanti³

^{1,2} Master of Management Study Program, Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia

³ Management Study Program, Faculty of Economics and Business, Universitas Muhammadiyah Surakarta, Indonesia

*ryansu3112@students.unnes.ac.id

Abstract

The business world, technological advancements, and economic uncertainty drive companies to innovate to maintain operations and continuously improve firm performance. This study examines the influence of business diversification, company size, and leverage on firm performance, as well as the effect of business diversification on firm performance moderated by leverage, in manufacturing companies in the consumer goods sector listed on the Indonesia Stock Exchange (IDX) during the period 2018-2025. The population of this study consists of manufacturing companies in the consumer goods sector listed on the IDX from 2018 to 2025. The sampling technique used is purposive sampling, which involves selecting participants based on specific criteria. A total of 24 companies were sampled in this study. The data analysis technique employed is SmartPLS 3.0 software. The results indicate that business diversification and leverage have a positive and significant effect on financial performance; company size has a negative and significant effect on financial performance; and business diversification has a positive and significant effect on financial performance, moderated by leverage.

Keywords: Business diversification, company size, leverage, firm performance

Introduction

The global economy faces geopolitical uncertainties, ongoing trade tensions, and volatility in major commodities and currencies, which keep businesses and consumers cautious despite some areas of strength. These conditions increase uncertainty regarding raw material costs, logistics expenses, and exchange rates, potentially affecting companies' cost structures. Amid this global situation, the Central Statistics Agency (BPS) reports that Indonesia's economy grew by 5.11% in 2025, supported by domestic demand and activity in key sectors. Inflation remained under control throughout the year, with an annual inflation rate of 2.92% in December 2025, within the central bank's target range, helping maintain people's purchasing power. Monetary policy also continues to support stability, with Bank Indonesia maintaining the BI-Rate at 4.75% through December 2025, as part of efforts to balance growth with exchange rate and price stability (BPS, 2026).

In the consumer goods sector, competition remains intense, while shopping behaviors continue to evolve, driven by the increasing integration of digital commerce and omnichannel retail into daily consumption. This encourages company management to maintain product availability, improve sales execution quality, and ensure product relevance across both physical and digital channels, enabling companies to operate more effectively and efficiently, maintain operational activities, and enhance financial performance to achieve optimal results and sustain their business (Liurong et al., 2022). Increasing competitive pressure can shift an organization's strategic priorities to maintain its competitive advantage (Foong & Idris, 2012). The company needs to develop creativity, innovation, and growth strategies to survive in increasingly fierce business competition (Cotugno & Stefanelli, 2012; Hitt et al., 1997; Li et al., 2019). Business diversification is a strategy companies can use to increase profits, reduce risks, strengthen competitive positions, and sustain business growth (Mehmood & Hunjra, 2019; Ngoc Nguyen, 2019).

Research on business diversification strategies and their impact on company performance remains an important focus for researchers in strategic management and business (Kotabe, 2015; Mehmood & Hunjra, 2019; Schommer, 2018). This is due to differing views on the impact of diversification strategies, with the debate still ongoing as to whether they provide benefits or have negative effects on the Company. Strategic management studies show varying results regarding the influence of business diversification on financial performance (Alemu, 2023; Cotugno & Stefanelli, 2012; Hamdi et al., 2017; Jaafar et al., 2023; Jiang & Han, 2018; Liurong et al., 2022; Mubeen et al., 2022; Ngoc Nguyen, 2019; Peramaiyan et al., 2023; Tacconi et al., 2023; Yang et al., 2022). The difference shows that the influence of business diversification must be carefully examined before diversification, considering the company's characteristics, so that its impact on company performance can be more accurately observed. The research conducted by (Cotugno & Stefanelli, 2012;

Hamdi et al., 2017; Jaafar et al., 2023; Jiang & Han, 2018; Liurong et al., 2022; Mubeen et al., 2022; Yang et al., 2022) shows a positive correlation between business diversification and company performance, with greater diversification involvement significantly improving overall performance. Diversification is viewed as an effective strategy to reduce certain business risks, stabilize income, expand profit sources, and strengthen competitiveness, thereby potentially enhancing the company's financial performance. However, research conducted by (Ngoc Nguyen, 2019) Showing that business diversification negatively affects company performance. This finding indicates that diversified companies tend to perform worse than non-diversified companies.

The business diversification strategy affects the company's financing needs, as expanding into new sectors requires greater capital. According to Lewellen (1971) Diversified companies tend to have greater debt financing needs than non-diversified companies. Diversified companies need to have greater leverage to expand operations, develop new products, and maintain the sustainability of their business activities (Foong & Idris, 2012). An effective financial structure helps a company manage its funding needs to maximize shareholder value. Diversified companies have a greater debt capacity because their risks are spread across multiple lines of business. A larger debt capacity provides room for the company to use external financing to support diversification strategies, although an increase in capacity does not always lead to increased debt usage (Singh et al., 2003). Some studies state that diversified companies require greater leverage to maximize company performance (Adam et al., 2023; Cappa et al., 2020; Fekadu Agmas, 2020; Foong & Idris, 2012; Jensen & Meckling, 2012; Jouda & Hellara, 2018; Oladimeji & Udosen, 2019; Singh et al., 2003; Tabash et al., 2020). This research positions leverage as a moderating variable to provide more detailed insights into how it improves company performance through diversification.

Literature Review

Agency Theory

Agency theory explains the contractual relationship between business owners, who act as principals, and managers, who act as agents. The principal grants the agent authority to make decisions regarding the company's sustainability on the principal's behalf. This delegation of responsibility divides their roles and can create challenges, as they may have different interests. The conflicts that arise from this situation are known as agency conflicts (Jensen & Meckling, 2012). According to agency theory, conflicts of interest arise when managers and shareholders are not aligned on diversification strategies. Shareholders generally believe that diversification can decrease the company's value, from both their own and the company's perspectives. On the other hand, managers often support diversification more because it can reduce income risks and other profit-related risks in their jobs. This difference in views creates tension between the goals of shareholders and managers regarding the company's diversification (Lacoste et al., 2010). This situation can create a conflict of interest between managers and shareholders, as shareholders may see diversification as a loss for the company, while managers may favor it to reduce their personal risk and increase job security (Mubeen et al., 2022).

Business Diversification & Firm Performance

Diversification strategy represents a corporate growth strategy that enables companies to expand their business activities by entering new products, markets, or industries beyond their existing operations (Ansoff, 1948). The company diversifies when it operates in more than one industry or enters new products or markets outside its main business (Mubeen et al., 2022). Business diversification strategies can help companies increase profits, reduce risks, strengthen competitive positions, and maintain growth and business sustainability (Mehmood & Hunjra, 2019; Ngoc Nguyen, 2019). According to the research conducted by (Cotugno & Stefanelli, 2012; Jaafar et al., 2023; Jiang & Han, 2018; Liurong et al., 2022; Mubeen et al., 2022) Shows a positive correlation between business diversification and company performance, with greater diversification involvement significantly improving overall performance. However, the research conducted by Ngoc Nguyen (2019) shows that business diversification negatively impacts company performance. These findings indicate that diversified companies tend to perform worse than those that do not diversify. Hypothesis 1: Business diversification has a positive effect on firm performance.

Leverage & Firm Performance

Diversified companies need to have larger debts to expand operations, develop new products, and maintain business sustainability (Foong & Idris, 2012). These needs highlight the importance of an effective financial structure to help companies optimally manage their funding requirements and improve performance. A higher debt capacity provides companies with more opportunities to utilize external financing to support diversification strategies (Singh et al., 2003). The company's capital structure decisions have attracted the attention of academics and practitioners for several decades, especially considering that they can have a

significant impact on the company's profitability (Cappa et al., 2020). Research conducted by (Fekadu Agmas, 2020; Oladimeji & Udosen, 2019; Tabash et al., 2020) showing that leverage positively affects financial performance. However, the research conducted by (Samo & Murad, 2019; Ullah et al., 2020) explains that leverage negatively affects financial performance.

Hypothesis 2: Leverage has a positive effect on firm performance.

Moderating Effect: Leverage

Leverage needs to be considered in additional analyses of the effect of diversification on company performance, as it can influence financial performance (Adam et al., 2023). Foong & Idris (2012) Research on the effect of leverage on the financial performance of insurance companies in Malaysia and testing whether the relationship between leverage and performance is influenced by the level of product diversification. The results indicate a significant interaction effect between leverage and product diversification on company performance. These findings suggest that leverage can benefit or pose risks to insurance companies' financial performance, depending on the extent of their product diversification. The relationship between leverage and diversification strategy is complex because it varies by diversification type, industry characteristics, and country conditions. Diversification strategies can support growth and profitability, but excessive diversification can lead to agency problems and internal inefficiencies. (Cappa et al., 2020). Leverage plays an important role because it can amplify or dampen the effect of diversification on financial performance. Research in Brazil and Mexico shows that leverage significantly affects the relationship between diversification and performance. Leverage is recognized as a moderating variable that influences the relationship between diversification and performance (Adam et al., 2023).

Hypothesis 4: Business diversification has a positive effect on firm performance, moderated by leverage.

Method

This research employs a descriptive quantitative method and uses secondary data. It targets 75 manufacturing companies in the consumer goods sector listed on the Indonesia Stock Exchange from 2018 to 2025. The sample was chosen through purposive sampling based on specific criteria: companies must operate in the consumer goods sector, be listed on the IDX during 2018-2025, and provide comprehensive financial reports throughout this period. Selected companies must also demonstrate profitability in their financial statements from 2018 to 2025 and report the variables relevant to this study within their financial reports. Applying these criteria, the final research sample comprises 24 manufacturing firms in the consumer goods sector, with data sourced from the Indonesia Stock Exchange for the period 2018-2025. Variables used in this study include:

Table 1. Research Variables

Variable Type	Variable Name	Variable Measurement	Description
Dependent Variable	Return on Equity (ROE)	Net Income / Total Equity	Measuring the company's financial performance based on the return generated from shareholders' equity (Samo & Murad, 2019)
Independent Variable	Business Diversification	$\frac{\sum_{i=1}^n SegSales_i^2}{\sum_{i=1}^n (Sales_i^2)}$	Measuring the extent to which a company conducts business activities across more than one business segment (Jaafar et al., 2023; Mubeen et al., 2022)
Variable Moderation	Leverage	Total Debt / Total Equity	Measuring a company's ability to use debt as a source of funding compared to the equity it owns (Fekadu Agmas, 2020; Tabash et al., 2020)
Control Variable	Company Size	Natural Logarithm of Total Assets	Measures the scale of the company based on its total assets (Ullah et al., 2020; Vu et al., 2019)

This research uses SmartPLS software to analyze the relationships among latent constructs, guided by research objectives focused on prediction and structural model testing. SmartPLS applies the Partial Least Squares Structural Equation Modeling (PLS-SEM) variance-based approach, which emphasizes developing predictive models by optimizing the variance of endogenous constructs that can be explained (Hair, Jr. et al.,

2022). PLS-SEM can analyze complex relationships among latent variables by simultaneously evaluating the measurement and structural models. The PLS-SEM approach is more suitable than Covariance-Based Structural Equation Modeling (CB-SEM) for research focused on prediction, model development, and identifying factors that influence relationships between variables, because it does not impose strict requirements on data distribution and sample size (Ghozali, 2021; Hair, Jr. et al., 2022). This research model involves latent constructs measured by several indicators, thus requiring comprehensive validity and reliability testing of the instrument using outer loadings, Average Variance Extracted (AVE), Cronbach's alpha, composite reliability, convergent validity, and discriminant validity. Structural model analysis is conducted by evaluating path coefficients, p-values, coefficient of determination (R^2), and effect size (f^2) to determine the strength of relationships among constructs and the model's ability to explain and predict endogenous variables. SmartPLS provides a bootstrapping procedure used to test the significance of path coefficients, indirect effects, and mediation effects by forming an empirical sample distribution without relying on strict multivariate normality assumptions (Hair, Jr. et al., 2022). This capability makes SmartPLS suitable for research involving complex relationship models and small-to-medium sample sizes, as it supports predictive and comprehensive testing of relationships among latent constructs.

Results and Discussion

1. Descriptive Statistics

Descriptive statistical analysis provides a summary of variable data through key metrics such as the mean, standard deviation, minimum value, and maximum value (Ghozali, 2021).

Table 2. Descriptive Statistical Analysis

Variable	N	Min	Maks	Mean	Std.Deviation
DIVER	192	0,18	1,00	0,645	21,148
LEVERAGE	192	0,09	3,82	0,724	68,308
SIZE	192	25,96	33,02	29,385	154,293
ROE	192	0,01	2,25	2,369	33,503

Source: SmartPLS 3.0 Data Processing, 2025

According to Table 2, the business diversification variable ranges from a minimum value of 0.18 to a maximum of 1. The corresponding mean and standard deviation are 0.64531 and 0.21148, respectively. For the leverage variable, the range is from 0.09 to 3.82, with a mean of 0.72469 and a standard deviation of 0.68308. The firm size variable ranges from a minimum of 25.96 to a maximum of 33.02, with a mean of 29.38557 and a standard deviation of 1.54293. The financial performance variable ranges from a minimum of 0.01 to a maximum of 2.25, with a mean of 2.3693 and a standard deviation of 3.3503.

2. Reliability and Validity Test

Reliability and validity tests are conducted to assess the data used in a study and identify potential anomalies. Several criteria are used in this testing, each with a minimum value that must be met. Specifically, Cronbach's Alpha must be greater than 0.6, composite reliability should be above 0.8, and AVE (Average Variance Extracted) must exceed 0.5. An AVE value below 0.5 should be considered acceptable because it indicates that the variable is unable to explain at least 50% of the variance in its indicators, thus potentially invalid (Ghozali, 2021).

Table 3. Test Reliability and Validity

Variable	Cronbach's Alpha	rho_A	Composite Reliability	AVE
DIVER	1.000	1.000	1.000	1.000
LEVERAGE	1.000	1.000	1.000	1.000
SIZE	1.000	1.000	1.000	1.000
ROE	1.000	1.000	1.000	1.000

Source:

Data Processing, 2025

SmartPLS 3.0

According to Table 3, all variables in this study meet or exceed the minimum thresholds in each test. Cronbach's alpha is 1.000, which is greater than 0.6. Composite reliability is also 1.000, which is above 0.8. AVE is 1.000, which surpasses the minimum threshold of 0.5. These findings indicate that all variables have good reliability and meet the established standards.

3. Test of Discriminant Validity

A model demonstrates strong discriminant validity when the square root of the average variance extracted (AVE) for each construct exceeds the correlation between that construct and others within the model (Ghozali, 2021).

Table 4. Discriminant Validity Test

	DER	DIVER	Mod DER	ROE	SIZE
DIVER	1,000				
ROE	0,173	1,000			
LEVERAGE	0,108	0,564	1,000		
MOD LEV	-0,382	0,151	0,137	1,000	
SIZE	-0,038	-0,026	0,236	0,081	1,000

Source: SmartPLS 3.0 Data Processing, 2025

According to Table 4, the loading and correlation values for indicators and their variables are higher than those for different indicators and their variables. Therefore, it can be concluded that the data tested are valid because they show higher loadings for each variable and indicator than the correlations between indicators and between variables.

4. R-Square Test

The R-Square test assesses how well the independent variable accounts for the variation in the dependent variable. The R-Square value ranges from 0 to 1, with higher values indicating a better model (Ghozali, 2021). The results of the R-Square test are presented in the following table:

Table 5. Nilai R-Square

	R Square	R Square Adjusted
ROE	0,373	0,359

Source: SmartPLS 3.0 Data Processing, 2025

As shown in Table 5, ROE has an R-square adjusted of 0.359, indicating that 35.9% of its variation is explained by the independent variable (diversification business) and the moderator (leverage). The remaining 64,1% of the variability is due to other factors not included in this analysis.

5. f-Square Test

This f-square test indicates whether the latent variable functions as a predictor. The F-square values of 0.02, 0.15, and 0.35 indicate weak, moderate, and strong structural influence, respectively (Ghozali, 2021).

Table 6. f-Square Value

Variable	ROE
DIVER	0,035
LEVERAGE	0,457
SIZE	0,041
Mod DER	0,029

Source: SmartPLS 3.0 Data Processing, 2025

Referring to Table 6, the f-squared value for the diversification variable is in the range $0.02 < 0.035 < 0.15$, indicating that diversification's ability to explain ROE is considered weak. The f-square value for the leverage variable is $0.35 < 0.457$, suggesting that the leverage variable has a strong influence on the explanation of ROE. The f-square value for the firm size variable is $0.02 < 0.041 < 0.15$, indicating that it has a weak influence on explaining ROE. The f-square value of the moderation variable leverage is $0.02 < 0.029 < 0.15$, suggesting that the leverage moderation variable has a weak influence in explaining ROE.

6. Path Coefficient Test

Path coefficient testing is conducted to assess the direct influence on the dependent variable, as explained in the hypothesis. This testing uses the bootstrapping method with SmartPLS 3.0. The hypothesis is accepted if the T-statistic is greater than 1.96 or the p-value is less than 0.05 (Ghozali, 2021).

Table 7. Path Coefficients

<i>Direct Effect</i>	<i>Original Sample</i>	<i>Standard Deviation</i>	<i>T Statistics</i>	<i>P Values</i>
DIVER -> ROE	0,162	0,051	3,197	0,001
LEVERAGE -> ROE	0,565	0,123	4,581	0,000
SIZE -> ROE	-0,165	0,046	3,585	0,000
Mod_LEV -> ROE	0,240	0,085	2,829	0,005

Source: SmartPLS 3.0 Data Processing, 2025

Based on Table 7, the path coefficients indicate the influence of the independent and moderating variables on the dependent variable. The results are explained as follows:

a. Business diversification and Firm performance

The test results in Table 7 show a β value of 0.162, a p-value of 0.001 (less than 5%), and a T-statistic value of 3.197 (greater than 1.96). This indicates that there is a positive and significant impact of business diversification on the financial performance of manufacturing companies in the consumer goods sector from 2018 to 2025, in line with findings from previous research conducted by (Cotugno & Stefanelli, 2012; Jaafar et al., 2023; Jiang & Han, 2018; Liurong et al., 2022; Mubeen et al., 2022) Shows a positive correlation between business diversification and company performance. Business diversification can improve a company's financial performance by providing opportunities to expand revenue sources, reduce dependence on a single business segment, and enhance its ability to respond to changes in the business environment. Companies that diversify can spread operational risks across multiple business areas, so income stability is better maintained when one segment experiences a decline in performance. Diversification also allows companies to capitalize on broader market opportunities through product development, expansion into new customer segments, and optimization of available assets. Strategic relationships between business segments can create synergies by leveraging shared resources, technology, distribution networks, and managerial capabilities, thereby increasing operational efficiency. The diversification strategy also strengthens the company's flexibility in facing economic uncertainties by providing alternative growth sources and greater adaptability to market changes. These conditions enhance competitiveness and drive the creation of economic value, thereby positively impacting the company's financial performance.

b. Leverage & Firm Performance

The test results in Table 7 show a β value of 0.565, a p-value of 0.000 (less than 5%), and a t-statistic of 4.581 (greater than 1.96). This indicates a positive and significant impact of leverage on the financial performance of manufacturing companies in the consumer goods sector from 2018 to 2025, consistent with the previous investigation conducted by (Fekadu Agmas, 2020; Oladimeji & Udosen, 2019; Tabash et al., 2020) showing that leverage positively affects financial performance. The use of leverage in the funding structure does not always indicate poor financial condition; rather, it can be an effective strategy when managed properly. Appropriate leverage can increase working capital, expand operations, and reduce the tax burden through the tax shield. The level of leverage, measured by the debt-to-equity ratio, influences the company's ability to generate profits, which is reflected in return on equity. The more efficiently a company utilizes debt for productive activities, the greater its chances of increasing profit and return on equity. A high debt-to-equity ratio indicates that the company relies more on external funding sources, and if managed correctly, can provide a leverage effect (financial leverage) that enhances shareholder profits. However, leverage must be maintained at an optimal level because excessive debt can increase financial risk.

c. Company Size & Firm Performance

The test results in Table 7 show a β value of -0.165, a p-value of 0.000 (less than 5%), and a T-statistic of 3.585 (greater than 1.96). This indicates a significant negative impact of company size on the financial performance of manufacturing companies in the consumer goods sector from 2018 to 2025. The results of this study differ from those of Ullah et al., (2020), indicating that company size negatively affects firm performance. The size of a company does not always indicate good financial performance. Large companies often have complex organizational structures, with many layers of management oversight, divisions, and dispersed shareholders, making management supervision increasingly difficult and potentially leading to conflicts of interest. This situation creates opportunities for managers to act in their own interests, which can ultimately reduce efficiency, slow decision-making, and hinder market adaptation. Large assets will not have a positive impact on performance without effective oversight, efficient work systems, adequate supervision, and competent human resources.

d. Moderation Effect: Leverage

The test results in Table 7 show a β value of 0.240, a p-value of 0.005 (less than 5%), and a T-statistic value of 2.829 (greater than 1.96). This indicates a positive and significant impact of business diversification on financial performance, moderated by leverage in manufacturing companies in the consumer goods sector from 2018 to 2025, in line with previous research findings conducted by (Adam et al., 2023) The results show a positive and significant impact of business diversification on financial performance, which is moderated by leverage. The use of leverage in diversification strategies provides companies with greater funding capacity to expand operations,

develop new products, and enhance competitiveness in an increasingly competitive business environment. Diversification, supported by an effective capital structure, enables companies to optimize resource utilization, expand market opportunities, and increase profit potential for shareholders. Companies that pursue diversification tend to have greater debt capacity because business risks are spread across multiple segments, providing greater flexibility in obtaining external financing. However, increased debt usage must be managed optimally so that leverage can strengthen the success of diversification strategies, increase company value, and ensure business sustainability without excessively increasing financial risk.

Conclusion

Research findings indicate that business diversification and leverage directly have a positive effect on company performance, while leverage can moderate the relationship between business diversification and company performance. These results show that business diversification provides strategic benefits for companies by reducing operational risks, stabilizing income, expanding revenue sources, and strengthening competitiveness. Companies that enter various business segments or markets can reduce dependence on a single income source, capitalize on new market opportunities, improve resource efficiency, and create more stable profits, thereby supporting improved financial performance. Leverage also enhances company performance, as external funding sources can support operational expansion, product development, and growth opportunities. An optimally managed capital structure enables companies to increase resource efficiency, create value for shareholders, and sustain business growth. However, leverage must be controlled to ensure diversification benefits are achieved without excessively increasing financial risk. This research provides empirical evidence regarding the relationship between business diversification, leverage, and company performance in manufacturing companies in the consumer goods sector listed on the Indonesia Stock Exchange from 2018 to 2025. This sector faces intense competition, shifting consumer preferences, and evolving market dynamics. The findings offer practical implications for management, suggesting that diversification strategies should be implemented selectively, considering synergies among business segments, resource efficiency, and optimal leverage levels to balance growth opportunities and financial risk. The generalizability of these results is limited because the study only involves manufacturing companies in the consumer goods sector listed on the Indonesia Stock Exchange during 2018–2025. Future research could expand to other sectors and observation periods, use alternative diversification measurement methods such as the Jacquemin-Berry entropy index, consider other performance indicators like Tobin's Q, ROA, and NPM, and include additional variables such as managerial ownership and company age to gain a broader understanding of the factors influencing company performance.

Bibliography

- Adam, C., Domingues, D. G., Gomes, D. G. de, & Silva, T. P. da. (2023). Evidence of Diversification and Leverage in the Performance of Brazilian and Mexican Family Businesses. *Latin American Research Review*, 1–16. <https://doi.org/10.1017/lar.2023.10>
- Alemu, F. M. (2023). MethodsX Measuring the intensity of rural livelihood diversification strategies, and their impacts on rural households ' welfare : Evidence from South Gondar zone, Amahara Regional State, Ethiopia. *MethodsX*, 10(October 2022), 102191. <https://doi.org/10.1016/j.mex.2023.102191>
- Ansoff, B. H. I. (1948). Strategies for Diversification. *Harvard Business Review*, 35(5), 113–124.
- BPS. (2026). Pertumbuhan Ekonomi Indonesia Triwulan IV-2025. Badan Pusat Statistik Indonesia. <https://www.bps.go.id/id/pressrelease/2026/02/05/2546/ekonomi-indonesia-tahun-2025-tumbuh-5-11-persen>
- Cappa, F., Cetrini, G., & Oriani, R. (2020). The Impact of Corporate Strategy on Capital Structure: Evidence From Italian Listed Lirms. *Quarterly Review of Economics and Finance*, 76, 379–385. <https://doi.org/10.1016/j.qref.2019.09.005>
- Cotugno, M., & Stefanelli, V. (2012). Geographical and product diversification during instability financial period: Good or bad for banks? *International Research Journal of Finance and Economics*, 85, 87–100. <https://doi.org/10.2139/ssrn.1989919>
- Fekadu Agmas, W. (2020). Impacts of Capital Structure on the Profitability of Construction Companies in Ethiopia. *Journal of Financial Management of Property and Construction*, 25(3), 371–386. <https://doi.org/10.1108/JFMPC-08-2019-0072>
- Foong, S. Y., & Idris, R. (2012). Leverage, Product Diversity, and Performance of General Insurers in

- Malaysia. *Journal of Risk Finance*, 13(4), 347–361. <https://doi.org/10.1108/15265941211254462>
- Ghozali, I. (2021). *Partial Least Squares : Konsep, Teknik, dan Aplikasi Menggunakan Program SmartPLS 3.0 untuk Penelitian Empiris* (A. Tejkusumo (ed.); 3rd ed.). Badan Penerbit Universitas Diponegoro.
- Hair, Jr., J. F., M. Hult, G. T., M. Ringle, C., Sarstedt, & Marko. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* [3rd ed.]. In Sage Publishing (Vol. 3, Issue 1).
- Hamdi, H., Hakimi, A., & Zaghdoudi, K. (2017). Diversification, bank performance, and risk : Have Tunisian banks adopted the new business model ? <https://doi.org/10.1186/s40854-017-0069-6>
- Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International Diversification: Effects on Innovation and Firm Performance in Product-Diversified Firms. *Academy of Management Journal*, 40(4), 767–798. <https://doi.org/10.2307/256948>
- Jaafar, J. A., Latiff, A. R. A., Daud, Z. M., & Osman, M. N. H. (2023). Does Revenue Diversification Strategy Affect the Financial Sustainability of Malaysian Public Universities? A Panel Data Analysis. *Higher Education Policy*, 36(1), 116–143. <https://doi.org/10.1057/s41307-021-00247-9>
- Jensen, M., & Meckling, W. (2012). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *The Economic Nature of the Firm: A Reader*, Third Edition, 283–303. <https://doi.org/10.1017/CBO9780511817410.023>
- Jiang, H., & Han, L. (2018). Does Income Diversification Benefit the Sustainable Development of Chinese Listed Banks ? Analysis. 1–21. <https://doi.org/10.3390/e20040255>
- Jouida, S., & Hellara, S. (2018). Diversification and Target Leverage. *Journal of Multinational Financial Management*. <https://doi.org/10.1016/j.mulfin.2018.06.001>
- Kotabe, M. (2015). The relationship between international service firms' diversification and. 34(4), 345–355. <https://doi.org/10.1057/palgrave.jibs.8400036>
- Lacoste, D., Lavigne, S., Rigamonti, É., & Lacoste, D. (2010). Do Monitoring and Alignment Mechanisms Influence Diversification Strategies ? The Case of French Companies: Do Monitoring and Alignment Mechanisms Influence Diversification Strategies ? The Case of French Companies. 13. <https://doi.org/10.3917/mana.135.0342>
- Lewellen, W. G. (1971). A pure financial rationale for the conglomerate merger. *The Journal of Finance*, 26(2), 521–537. <https://doi.org/https://doi.org/10.1111/j.1540-6261.1971.tb00912.x>
- Li, C. M., Cui, T., Nie, R., Lin, H., & Shan, Y. (2019). Does Diversification Help Improve The Performance of Coal Companies? Evidence From China's Listed Coal Companies. *Resources Policy*, 61(January 2019), 88–98. <https://doi.org/10.1016/j.resourpol.2019.01.013>
- Liurong, Pan, Yinchang, L., & Cheng, L. (2022). Diversified Management and Corporate Performance: Evidence from Chinese Tourism Enterprises. *SSRN Electronic Journal*, 100. <https://doi.org/10.2139/ssrn.4145357>
- Mehmood, R., & Hunjra, A. I. (2019). The Impact of Corporate Diversification and Financial Structure on Firm Performance : Evidence from South Asian Countries. <https://doi.org/10.3390/jrfm12010049>
- Mubeen, R., Han, D., Abbas, J., Raza, S., & Bodian, W. (2022). Examining the Relationship Between Product Market Competition and Chinese Firms' Performance: The Mediating Impact of Capital Structure and Moderating Influence of Firm Size. *Frontiers in Psychology*, 12(May), 1–13. <https://doi.org/10.3389/fpsyg.2021.709678>
- Ngoc Nguyen. (2019). Revenue Diversification, Risk, and Bank Performance of Vietnamese Commercial Banks. *Journal of Risk and Financial Management*, 12(3), 138. <https://doi.org/10.3390/jrfm12030138>
- Oladimeji, M. S., & Udosen, I. (2019). The Effect of Diversification Strategy on Organizational Performance. 11, 120–131.
- Peramaiyan, P., Kumar, A., Kumar, V., Seelan, L. P., Chandra, N., Khandai, S., Parida, N., Kumar, V., Das, A., Pattnaik, S., Ranjan, D., Kumar, P., Yadav, A., McDonald, A. J., Craufurd, P., Singh, S., & Malik, R. K. (2023). Field Crops Research Crop establishment and diversification strategies for intensification of rice-based cropping systems in rice-fallow areas in Odisha. *Field Crops Research*, 302(August), 109078. <https://doi.org/10.1016/j.fcr.2023.109078>

- Samo, A. H., & Murad, H. (2019). Impact of Liquidity and Financial Leverage on a Firm's Profitability – an Empirical Analysis of The Textile Industry of Pakistan. *Research Journal of Textile and Apparel*, 23(4), 291–305. <https://doi.org/10.1108/RJTA-09-2018-0055>
- Schommer, M. (2018). Does the Diversification–Firm Performance Relationship Change Over Time? A Meta-Analytical Review. *Journal of Management Studies*, 4(36). <https://doi.org/10.1111/joms.12393>
- Singh, M., Davidson, W. N., & Suchard, J. (2003). Corporate diversification strategies and capital structure. 43, 147–167.
- Tabash, M. I., Al-Homaidi, E. A., Ahmad, A., & Farhan, N. H. S. (2020). Factors Affecting Financial Performance of Indian Firms: An Empirical Investigation of Firms Listed on Bombay Stock Exchange. *International Journal of Economic Policy in Emerging Economies*, 13(2), 152–172. <https://doi.org/10.1504/IJEPEE.2020.107928>
- Tacconi, F., Waha, K., Jesus, J., Leith, P., Mohammed, C., Venables, W. N., Rana, J. C., Bhardwaj, R., Yadav, R., Pal, S., Hammond, J., & Wijk, M. Van. (2023). Farm diversification strategies, dietary diversity, and farm size: Results from a cross-country sample in South and Southeast Asia. *Global Food Security*, 38(August), 100706. <https://doi.org/10.1016/j.gfs.2023.100706>
- Ullah, A., Pinglu, C., Ullah, S., Zaman, M., & Hashmi, S. H. (2020). The Nexus Between Capital Structure, Firm-Specific Factors, Macroeconomic Factors, and Financial Performance in The Textile Sector of Pakistan. *Heliyon*, 6(8), e04741. <https://doi.org/10.1016/j.heliyon.2020.e04741>
- Vu, T. H., Nguyen, V. D., Ho, M. T., & Vuong, Q. H. (2019). Determinants of Vietnamese Listed Firm Performance: Competition, Wage, CEO, Firm Size, Age, and International Trade. *Journal of Risk and Financial Management*, 12(2). <https://doi.org/10.3390/jrfm12020062>
- Yang, H., He, X., & Li, X. (2022). The Diversification Strategy of Securities Firms in China from the Perspective of Enterprise Operational Sustainability. *Proceedings of Business and Economic Studies*, 5(2), 12–18. <https://doi.org/10.26689/pbes.v5i2.3787>