

Research Article

The Influence of Funding Decisions and Intellectual Capital on Firm Value in Indonesia's Primary Consumer Goods Sector Listings

Nabila Evelyn Chandra¹, Vina Arnita²^{1,2} Universitas Pembangunan Panca Budi, Indonesia

* Corresponding Author: Nabila Evelyn Chandra

Abstract: This study aims to investigate the influence of funding decisions and intellectual capital on firm value in the primary consumer goods sector listed on the Indonesia Stock Exchange (IDX) during the period 2020–2023. The research population consists of 23 companies, from which a sample of 15 companies was determined using a purposive sampling technique based on specific selection criteria. Data analysis was conducted using multiple linear regression with the assistance of SPSS version 26. The results indicate that funding decisions, measured by the debt-to-equity ratio (DER), have a significant and positive effect on firm value. This finding suggests that companies that can effectively utilize debt to finance their operations and investments tend to generate sufficient profits, which contributes to an increase in market value. A higher DER often reflects the financing of profitable projects that can enhance shareholder wealth and attract investor confidence. On the other hand, intellectual capital, measured by value added capital employed (VACA), was found to have no significant impact on firm value. This result implies that the selected measurement indicator primarily emphasizes capital efficiency rather than directly capturing value creation activities driven by intangible assets. Consequently, intellectual capital in this form may not directly influence the company's market valuation in the observed sector and period. The findings of this research highlight the critical role of funding decisions in improving firm value and the need for companies to carefully manage their capital structures. Moreover, business leaders should consider adopting broader or alternative approaches to measuring and utilizing intellectual capital to better capture its potential contribution to long-term value creation. By strategically balancing debt usage and optimizing intangible resources, firms in the consumer goods sector can enhance their competitiveness, market value, and sustainable growth.

Received: 17 July 2025;
Revised: 31 July 2025;
Accepted: 10 August 2025;
Published : 12 August 2025;
Curr. Ver.: 12 August 2025;

Keywords: Debt to equity ratio, Intellectual capital, Value added capital employed

1. Introduction

Businesses are fundamentally established to create value and generate profits for their owners or stakeholders. In Indonesia, sectors such as retail and food & beverage are experiencing significant growth and expansion across the country. One key indicator of a company's financial success and rising value is its stock price, which reflects how investors perceive the effectiveness of a company's management in optimizing its resources. Firm value is thus closely tied to investor confidence, often represented by the company's stock performance.

An analysis of the price-to-book value trend across five companies shows varied patterns. For instance, ACES demonstrated a consistent upward trend from 2020 to 2023, indicating strong market performance and investor trust. In contrast, the company identified

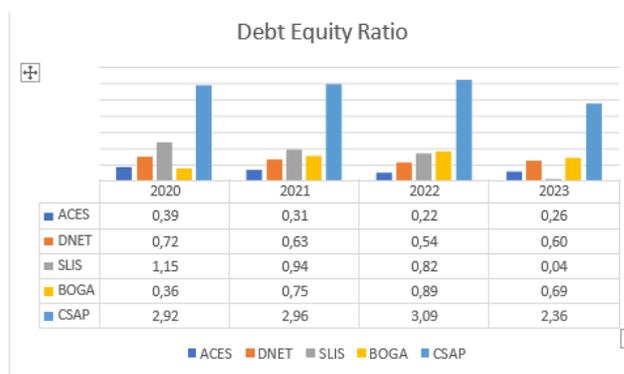


Copyright: © 2025 by the authors.
Submitted for possible open access
publication under the terms and
conditions of the Creative
Commons Attribution (CC BY SA)
license
(<https://creativecommons.org/licenses/by-sa/4.0/>)

with the code CSAP, although recording a relatively low firm value, managed to maintain a stable position—highlighting resilience despite market challenges.

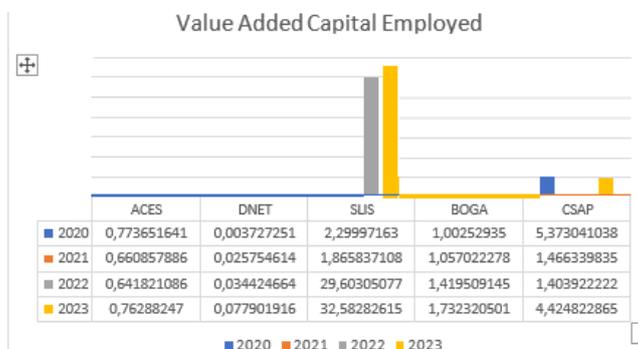
Efni (2022) emphasizes that companies must carefully determine how they source funding for investment activities, balancing the scale and origin of financial support. Financing can come from both internal and external sources. Internally, firms rely on retained earnings and depreciation funds, while external financing may involve acquiring capital through debt or issuing equity (Selviana & Badjra, 2018).

This study specifically examines companies in the primary goods sector listed on the Indonesia Stock Exchange, using the debt-to-equity ratio as a measure to evaluate corporate decisions in choosing alternative funding strategies. The findings aim to provide insights into how funding structures can influence firm stability and long-term value creation—crucial factors for investors and stakeholders seeking sustainable growth.



Picture 1. Debt to equity ratio

ACES, DNET, and BOGA have maintained relatively low debt levels, reflecting effective financial management and a stable capital structure. In contrast, SLIS saw a sharp increase in its debt ratio in 2020, reaching 1.15, largely due to the impact of the COVID-19 pandemic which disrupted operations and reduced profits. However, by 2023, SLIS managed to lower its debt ratio significantly to 0.04. A similar recovery was observed in CSAP. Although many companies faced rising debt during the pandemic, these examples highlight their ability to adapt and restore financial stability, underscoring the importance of strategic debt control in times of crisis



Pict 2. Value Added Capital Employed

The method chosen for this research is to use quantitative methods and by using secondary data. The data used are in the form of number or financial reports of primary sector companies listed on the Indonesia stock exchange. The advantages of using quantitative methods are that they can provide objective results and are not influenced by

opinions or biases in research. Quantitative methods can provide reliable and repeatable results because the use standardized measurement instrument and systematic statistical analysis techniques.

Quantitative method can also provide accurate and precise results, because they use valid measurement instruments and appropriate statistical analysis techniques. Quantitative methods also have weaknesses. The weaknesses include limitations in understanding context, quantitative methods are unable to capture the deeper context and nuances of the phenomena being studied. Limitations in understanding processes are also on of the weaknesses of quantitative methodes, as they can only provide an overview of the final results and carry risk of bias, such as sample selection or measurement bias.the issues in this study are wheather the development of the debt to equity ratio in 2020 has an impact on the size of companies in the primary consumer goods sector listed on the Indonesia stock exchange and whether the development of value capital employed, which fluctuated btrween increases and decreases in 2020-2023, has an impact on the size of companies in the primary consumer goods sector listed on the Indonesia stock exchange. Does this have an impact on the size of companies in the primary consumer goods sector listed on the Indonesia stock exchange?.

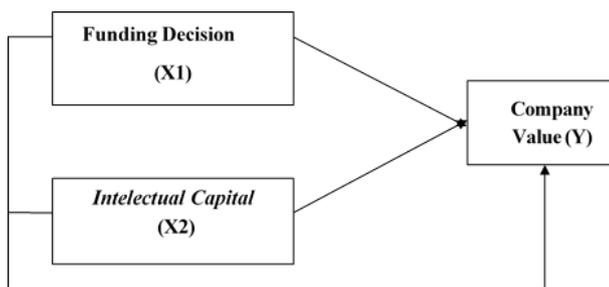
2. Method

This study employs a quantitative-descriptive approach to examine how financing decisions and intellectual capital influence company value, specifically within the primary consumer goods sector listed on the Indonesia Stock Exchange. This sector was chosen due to its active role in enhancing local product quality and production systems. Data was sourced from companies' published financial reports and analyzed using Statistical Quality Control (SQC). The sample was selected through purposive sampling based on specific criteria: companies listed between 2020–2023, those consistently publishing financial reports in Indonesian Rupiah, and those not experiencing continuous losses during the period. This method ensures the research focuses on financially stable companies with complete and relevant data for accurate analysis.

Table 1. Research Sample

No	Nama Perusahaan	Kode Saham
1.	Bintang Oto Global Tbk	BOGA
2.	Sumber Alfaria Jaya Tbk	AMRT
3.	Sariguna Primatirta Tbk	CLEO
4.	Campina Ice Cream Industry Tbk	CAMP
5.	Wilmar Cahaya Indonesia Tbk	CEKA
6.	Gaya Abadi Sempurna Tbk	SLIS
7.	Indofood CBP Sukses Makmur Tbk	ICBP
8.	Indofood Sukses Makmur	INDF
9.	Mayora Indah Tbk	MYOR
10.	Nippon Indosari Corpindo Tbk	ROTI
11.	Tigaraksa Satria Tbk	TGKA
12.	Ace Hardware Indonesia Tbk	ACES
13.	Indoritel Makmur International Tbk	DNET
14.	Erajaya Swasembada Tbk	ERAA
15.	MAP Aktif Perkasa Tbk	MAPA

The fishbone diagram is one of the three main approaches used to support this analysis.



3. Proposed Method

This research adopts a quantitative method, focusing on factual issues derived from a defined population and analyzed through secondary data. The data, primarily numerical, allows for measurable analysis using statistical testing. Furthermore, the study takes an associative approach, aiming to identify relationships between variables. The research is centered on companies within the primary consumer goods sector that are publicly listed on the Indonesia Stock Exchange, as they represent a relevant and dynamic population for examining financial decision-making and its impact on company performance.

Algorithm/Pseudocode

This study uses descriptive statistical data testing to describe the maximum, minimum and average values of each of the research variable used.

	N	Minimum	Maximum	Mean	Std. Deviation
VACA	60	.00373	12.99815	2.7250040	2.74077945
DER	60	.22017	4.41309	1.1686995	1.11626737
PBV	60	.17361	5.63211	1.6576167	1.64275808
Valid N (listwise)	60				

Based on the data presented in the table, this study utilizes a total of 60 data points for comprehensive analysis.

1. Funding Decision (DER)

The analysis reveals that the average value for the funding decision variable, as proxied by the Debt to Equity Ratio (DER), is 1.11626737. The lowest DER recorded is 0.22017, while the highest reaches 4.41309. Notably, PT Gaya Abadi Sempurna reported the lowest DER value in 2023, indicating a relatively low reliance on debt compared to equity—a condition that may reflect prudent financial management.

2. Intellectual Capital (VACA)

For the intellectual capital variable, represented by Value Added Capital Employed (VACA), the minimum observed value is 0.00373 and the maximum is 12.99815. The average VACA stands at 2.7250040, with a standard deviation of 2.74077945, suggesting a wide dispersion among companies in terms of intellectual capital efficiency. PT Indoritel Makmur Internasional holds the lowest VACA value, highlighting potential inefficiencies in utilizing capital to generate added value.

3. Enterprise Value

Enterprise value, measured using the Price to Book Value (PBV) ratio, ranges from a minimum of 0.17361 to a maximum of 5.63211. The average PBV is 1.6576167,

with a standard deviation of 1.64275808. PT Erajaya Swasembada has the lowest PBV, potentially signaling a market undervaluation or the need to strengthen investor perception of its intrinsic value.

4. Normality Test

The normality test aims to determine whether the dependent and independent variables in the regression model are normally distributed. As explained by Sujawerni (2015), this can be assessed through the normal probability plot as well as the Kolmogorov-Smirnov (K-S) non-parametric statistical test. Ensuring normal distribution is critical to validate the assumptions of regression analysis and to ensure the reliability of the results.

		<i>Unstandardized Residual</i>
N		60
Normal Parameters^{a,b}	Mean	.0000000
	Std. Deviation	.90821188
Most Extreme Differences	Absolute	.074
	Positive	.063
	Negative	-.074
Test Statistic		.074

Based on table above, it can be seen that the significance value of Asymp. Sig. (2-tailed) is 0.200, which means that the data is Asymp. Sig (2-tailed) > 0.05, so it can be concluded that the data used in this study is normally distributed.

4. Results and Discussion

Debt to Equity Ratio

Debt is one of the most important sources of financing for a company. Debt can generate income for a company, and debt can be considered good if it used wisely and not excessively. A company's financing can be obtained through either debt or equity. Good debt is current debt because the more current debt a company has, the more it indicates that the company is able to pay off that debt each month, which signifies that the company is generating significant profit and thus capable of paying off the debt.

Funding decisions affect the quality of profits earned by the company, which in turn affects the dividend policy that will be distributed to investors. Management's desire to obtain funding sources through the capital market and to maximize the company's value will lead the company to make discretionary accruals so that the company's performance appears favorable.

The determination of funding strategies is closely tied to a company's financial capability and operational needs. Companies may draw upon a variety of financing sources, which can be categorized as either internal or external. Internally, firms can utilize retained earnings, preferred stock, or common equity to meet capital requirements without relying on outside parties. Conversely, external financing often involves debt instruments, which obligate the company to bear financial costs such as interest payments. These expenses represent the price of leveraging external capital and must be managed carefully to maintain financial stability and ensure long-term sustainability.

Value Added Capital Employed

Value added capital employed is a method of measuring financial performance used to assess a company's ability to generate added value from the capital employed. Added value is the difference between a company's revenue and the costs incurred to generate that revenue.

Vaca is used to assess a company's ability to generate added value from the capital employed. The higher the vaca value, the better the company's financial performance.

Vaca is frequently used in financial analysis and performance evaluation, particularly in the context of intellectual capital and performance management. Vaca is important in measuring a company's value for several reasons, including: it can measure capital efficiency, helping to assess how efficiently a company uses capital to generate value added, it evaluates financial performance and it identifies opportunities and assesses a company's ability to generate value added.

Price Value Book

Company value reflects how potential investors perceive the company in relation to its share price. If investor confidence in a company increases, the share price will tend to rise along with the company's value. An increase in company value is an achievement that has been accomplished by the company and is certainly desired by its owners. With an increase in company value, the welfare of the owner will also improve (Heri, 2017).

Shareholder prosperity is partly determined by the level of corporate value. High corporate value can be seen from the company's stock price. Corporate value can be approximated in three ways: book value, liquidation value, or market value. The net profit earned by the company, its financial position, and the general economic condition of a country can provide an overview of market value variations.

Figures and Tables

The partial test (*t*) shows the extent to which the independent variable affects the dependent variable. The decision criteria in this study are that H_0 is accepted, then the variable has no effect, and if H_a is accepted, then the variable is accepted and has an effect. The following are the results on the *t*-test.

Table 1. partial test (*t*)

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
		<i>B</i>	Std. Error	<i>Beta</i>		
1	(Constant)	-.327	.184		-1.777	.081
	VACA	.011	.052	.031	.213	.832
	DER	.294	.127	.338	2.307	.025

H1: Financing decisions positively impact firm value

The analysis results strongly support the first hypothesis. With a significance value of 0.005—well below the conventional threshold of 0.05—the data confirms that financing decisions exert a statistically significant influence on company value. The regression coefficient for the Debt to Equity Ratio (DER) stands at 0.294, indicating a direct and positive relationship. Thus, this finding affirms the first hypothesis: that sound financing decisions enhance firm value, and therefore, it is accepted.

H2: Intellectual capital does not affect firm value

In contrast, the second hypothesis does not receive empirical support. With a significance level of $\alpha = 0.05$, the test results yield a *p*-value of 0.832—far exceeding the threshold. The regression coefficient for intellectual capital (proxied by VACA) is -0.005, suggesting a negligible and negative influence on firm value. As such, the evidence leads to the rejection of the second hypothesis, confirming that intellectual capital does not have a significant effect on company value in this context.

The Influence of Financing Decisions on Firm Value

The findings reveal that financing decisions—represented by the Debt to Equity Ratio—positively and significantly affect firm value. This implies that an increase in DER, when well-managed, can enhance a company's value. Leveraging debt effectively allows firms

to invest in profitable ventures, increase tax efficiency through interest deductibility, and signal financial resilience to investors. A higher DER, when coupled with strong financial performance, can project managerial confidence and risk control. These outcomes align with the study by Safarudin et al. (2023), who found that DER does not inherently reduce firm value and may, in fact, support it when used strategically.

The Influence of Intellectual Capital on Firm Value

The regression results for intellectual capital—proxied by Value Added Capital Employed—indicate that this factor does not have a statistically significant impact on firm value. The negative coefficient suggests a lack of alignment between intellectual capital utilization and market valuation, which may be due to inefficiencies in transforming knowledge-based assets into tangible economic gains. Consequently, the hypothesis claiming a relationship between intellectual capital and firm value must be rejected.

The Combined Effect of Financing Decisions and Intellectual Capital on Firm Value

Despite the individual insignificance of intellectual capital, the joint analysis using the F-test shows that both financing decisions and intellectual capital together exert a significant effect on company value. This suggests that while intellectual capital may not independently influence firm value, it plays a complementary role when integrated with sound financial strategies. This conclusion resonates with Firdaus (2019), who emphasized that optimizing capital structure and capital efficiency—reflected in DER and VACA—can create substantial value when managed synergistically.

Model feasibility Test (F Test)

To begin testing the hypothesis by identifying the independent variables that simultaneously influence the dependent variable. The F test is performed by examining the significant F value in the output results, where if calculated F value has a significant F value < 0.05 , then variable X simultaneously influences Y. The results of the model feasibility test are shown in the following table.

Test F

<i>Model</i>	<i>m of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>
1Regression	7.032	2	3.516	4.118
Residual		57	.854	
Total		59		

a. Dependent Variable: Ln_PBV

b. Predictors: (Constant), DER, VACA

Based on table. The F statistic is 4.118 with a significance level of 0.021, so that $0.000 < 0.05$, it is known that the variables of funding decisions and intellectual capital simultaneously have a significant effect on profitability.

These results remain in the concept of signal theory which suggests that company with strong financial performance will send a positive signal to investors and the market, which in turn will increase the value of the company, such as high profitability, which tends to provide a positive signal to investors and the capital market. This signal can be interpreted in share value and contribute to increasing company value. This shows that investors and capital market give higher valuation to companies with good financial performance, so that their share prices are also higher.

Supported by research results of Dirman (2020), large equity can be a positive indication for the financial prospect of a company which has the potential to provide a positive signal to investors and increase company value. Therefore, investors and the capital market tend to give higher valuation to companies that have good profitability. In the context of this research, company value is measured by share prices. The research results show that companies with a higher level of equity share prices as well.

Based on research (Nurhayati, 2020) it is argued that value added company employees have no influence on company value. Vaca only measures a company's ability to generate added value from the capital used, but does not consider other factors that affect company value, such as risk, growth, and competitive advantage. Vaca may not be an effective tool for comparing different companies due to difference in capital structure, industry and business strategy.

5. Comparative Analysis

Influence of Financing Decisions on Firm Value

The analysis demonstrates a clear and positive relationship between financing decisions—measured by the Debt to Equity Ratio (DER)—and firm value. A higher DER, when managed strategically, can contribute significantly to enhancing a company's valuation. This is particularly true when borrowed capital is allocated toward productive and high-return projects. Furthermore, interest expenses on debt offer tax advantages by reducing taxable income, ultimately increasing net profits and company value. Companies that maintain strong financial performance despite elevated debt levels send a powerful signal to investors, indicating sound risk management and financial resilience. These findings are consistent with the research by Safarudin et al. (2023), which affirms that a high DER does not inherently diminish firm value when managed effectively.

Impact of Intellectual Capital on Firm Value

Conversely, the analysis of intellectual capital—represented by Value Added Capital Employed (VACA)—reveals no significant influence on firm value. The negative regression coefficient suggests that higher levels of VACA do not necessarily correlate with increased firm valuation. This is likely because VACA measures capital efficiency rather than the intrinsic value of intangible assets. Key elements such as knowledge, innovation, skills, and stakeholder relationships—while critical—are not fully captured by VACA metrics. As such, the impact of intellectual capital may be underrepresented in this model. These findings align with Yeossy (2021), who similarly concluded that VACA lacks a statistically significant effect on company value.

Combined Effect of Financing Decisions and Intellectual Capital on Firm Value

Although intellectual capital alone may not significantly influence firm value, the study's F-test results show that financing decisions and intellectual capital together produce a meaningful impact. This indicates that while each factor may vary in individual influence, their combined implementation contributes positively to firm valuation. These results support the conclusions of Firdaus (2019), who emphasized the importance of harmonizing financial structure and capital efficiency to unlock added value and optimize a company's growth potential.

5. Conclusion

This research investigates how financing decisions and intellectual capital affect a company's market value. Based on the multiple regression analysis conducted, several key conclusions are drawn:

1. Financing decisions, as indicated by the Debt to Equity Ratio (DER), positively influence firm value.
This is primarily due to the benefits of debt utilization, such as tax savings and the ability to finance profitable investments. When managed prudently, higher debt levels can serve as a lever to amplify company value.
2. Intellectual capital, proxied by Value Added Capital Employed (VACA), does not significantly affect firm value.

The reason lies in the nature of VACA, which focuses on measuring the efficiency of capital usage rather than capturing the value of intangible assets such as employee expertise, innovation capacity, and relational capital—factors that often drive long-term competitive advantage.

3. When examined together, financing decisions and intellectual capital exert a significant combined effect on firm value.

This suggests that companies that strategically align financial management with efficient capital utilization can strengthen their market position, optimize their capital structure, and deliver higher added value to stakeholders.

References

- Ardiansyah, G. G. K. (2020). Pengaruh profitabilitas, ukuran perusahaan, leverage dan likuiditas terhadap nilai perusahaan. *Jurnal Paradigma Akuntansi*, 2(1), 367–375. <https://doi.org/10.24912/jpa.v2i1.7165>
- Arfan, A. (2022). Pengaruh profitabilitas, ukuran perusahaan, solvabilitas, keputusan investasi dan kebijakan hutang terhadap nilai perusahaan. *Jurakunman (Jurnal Akuntansi dan Manajemen)*, 15(1), 165–181. <https://doi.org/10.48042/jurakunman.v15i1.95>
- Astuti, D. W. (2019). Pengaruh profitabilitas, leverage dan ukuran perusahaan terhadap luas pengungkapan tanggung jawab sosial. *Akuntansi Dewantara*, 3(2), 179–191. <https://doi.org/10.26460/ad.v3i2.5287>
- Budisaptorini, A. T., Chandrarin, G., & Assih, P. (2019). The effect of company size on company profitability and company value: The case of manufacturing companies. *International Journal of Economics and Business Administration*, 7(2), 251–256. <https://doi.org/10.35808/ijeba/241>
- Dirman, A. (2020). Financial distress: The impacts of profitability, liquidity, leverage, firm size, and free cash flow. *International Journal of Business, Economics and Law*, 22(1), 17–25.
- Faqih, A. W. A. (2019). Strategi pengembangan SDM dalam persaingan bisnis industri kreatif di era digital. *Jurnal Hukum dan Kemanusiaan*, 13(1), 115–126.
- Febriani, R. (2020). Pengaruh likuiditas dan leverage terhadap nilai perusahaan dengan profitabilitas sebagai variabel intervening. *Progress: Jurnal Pendidikan, Akuntansi dan Keuangan*, 3(2), 216–245. <https://doi.org/10.47080/progress.v3i2.943>
- Gilje, E. P., Gormley, T. A., & Levit, D. (2020). Who's paying attention? Measuring common ownership and its impact on managerial incentives. *Journal of Financial Economics*, 137(1), 152–178. <https://doi.org/10.1016/j.jfineco.2019.12.006>
- Hertina, D., Hidayat, M. B. H., & Mustika, D. (2019). Ukuran perusahaan, kebijakan hutang dan profitabilitas pengaruhnya terhadap nilai perusahaan. *Jurnal Ecodemica*, 3(1), 1–10.
- Iqbal, U., & Usman, M. (2018). Impact of financial leverage on firm performance: Textile composite companies of Pakistan. *SEISENSE Journal of Management*, 1(2), 70–78. <https://doi.org/10.33215/sjom.v1i2.13>
- Jaya, S. (2020). Pengaruh ukuran perusahaan (firm size) dan profitabilitas (ROA) terhadap nilai perusahaan (firm value) pada perusahaan sub sektor property dan real estate di Bursa Efek Indonesia (BEI). *Jurnal Manajemen Motivasi*, 16(1), 38–44. <https://doi.org/10.29406/jmm.v16i1.2136>
- Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), 423–431. <https://doi.org/10.1080/23311975.2021.1920116>
- Narendra, A. P. (2015). Data besar, data analisis, dan pengembangan kompetensi pustakawan. *Record and Library Journal*, 1(2), 83–93.

- Nurnaningsih, A., Norrahman, R. A., & Wibowo, T. S. (2023). Pemberdayaan sumber daya manusia dalam konteks manajemen pendidikan. *Journal of International Multidisciplinary Research*, 1(2), 221–235.
- Ode, S., & Tambun, Y. A. M. (2022). Implementasi program merdeka belajar kampus merdeka tahun 2021 (Implementasi program studi independen bersertifikat sekolah ekspor). *Journal of Government (Kajian Manajemen Pemerintahan dan Otonomi Daerah)*, 7(2), 38–50.