Adpebi International Journal of Multidisciplinary Sciences

https://journal.adpebi.com/index.php/AIJMS

Vol.4 No.2, 2025
ISSN: 2829-8217
pp.173-179

Optimizing Company Value Through Digitalization, Tax Planning, and Capital Structure: Analysis of Its Influence on the Banking Sector in Indonesia

Rizma Fitri Handayani[1], Alfian Misran[2], Galuh Tresna Murti[3]

[1,2] Accounting Study Program, Economics and Business Faculty, Lambung Mangkurat University, Jl. Brigjend Hassan Basry, Kayu Tangi, Banjarmasin 70123, South Kalimantan

3 Accounting Study Program, School of Economics and Business, Telkom University, Main Campus (Bandung Campus), Jl. Telekomunikasi no. 1, Bandung 40257, West Java, Indonesia

DOI: https://doi.org/10.54099/aijms.v4i2.1408

ARTICLE INFO

Research Paper

Article history:

Received: 25 March 2025
Revised: 05 May 2025
Accepted: 07 July 2025

ABSTRACT

This study aims to test and analyze the influence of independent variables, namely Digitalization, Tax Planning, and Capital Structure on the dependent variable, namely Company Value using the Tobins'Q ratio to measure company value. The population of this study includes companies from the banking sector listed on the Indonesia Stock Exchange (IDX) in the 2020-2024 period. The research sample was selected using a purposive sampling technique, resulting in a total of 30 companies. Data analysis was carried out using multiple linear regression analysis with the help of the IBM SPSS Statistics application. The results of this study indicate that digitalization has a significant negative effect on company value, tax planning has a significant negative effect on company value, and capital structure has a significant positive effect on company value.

Keywords: Company Value, Digitalization, Tax Planning, Capital Structur

This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 International License.

INTRODUCTION

In the current era of economic transformation, firm value is increasingly recognized as a central indicator of company performance and market perception. This is particularly relevant for the banking sector, which plays a central role in financial intermediation and contributes significantly to economic performance, especially in emerging markets (Dayag & Trinidad, 2019; Vu & Le, 2021). Maintaining and improving firm value requires not only operational efficiency, but also strategic decisions regarding digital transformation, tax planning, and capital structure management.

Digitalization, as a key aspect of corporate transformation, has received growing attention due to its potential to improve operational efficiency and reshape investor perception. According to Deegan & Tanner (2002), digitalization refers to the transformation of information into digital formats, enabling automation and efficient decision-making. Prior studies such as Salvi et al. (2021) and Swamy et al. (2019) find that increased digital presence and external exposure through online information are positively associated with firm value. However, contrasting findings from Nugraha (2022) and Santosa & Salma (2023) suggest no significant impact, indicating inconsistency that warrants further exploration.

Tax planning is another critical dimension influencing financial outcomes. By minimizing tax

liabilities within legal boundaries, companies aim to retain more earnings, thus increasing shareholder value. Yet, the relationship between tax planning and firm value remains inconclusive. While studies like Angelina & Darmawan (2021) and Anisran & Ma'wa (2023) identify a positive influence, others such as Astuti et al. (2021) report insignificant effects. These variations may stem from industry-specific factors and regulatory environments that shape corporate tax behavior.

Capital structure, reflecting a firm's financial leverage and risk tolerance, also influences market valuation. The pecking order theory (Myers & Majiuf, 1984) posits that firms prefer internal funding before resorting to debt or equity issuance due to information asymmetry. Empirical evidence from Frank & Goyal (2003) supports the relevance of this theory in emerging markets, while Connelly et al. (2011) argue that capital decisions signal managerial confidence and strategic intent to investors. Despite these insights, results across contexts vary, highlighting the complexity of financial policy outcomes.

Although previous research has examined these three variables separately, integrated empirical analysis within the banking sector remains scarce. Additionally, most studies overlook the role of external digital exposure—such as public attention measured by the Google Search Volume Index (GSVI) (Da et al., 2011; Swamy et al., 2019)—as a novel proxy for digitalization that captures real-time investor sentiment.

This study seeks to fill this research gap by evaluating the combined effects of digitalization (measured through GSVI), tax planning (measured through ETR), and capital structure (measured through DER) on firm value (measured through Tobin's Q) in Indonesia's banking sector during 2020–2024. The novelty of this research lies in the integration of these three strategic variables in one empirical model, the adoption of GSVI as an external digital signal, and the contextual focus on banking institutions subject to specific regulatory conditions.

LITERATURE REVIEW (if any)

Digitalization and Firm Value

Digital transformation has become a fundamental strategic imperative for firms, particularly in industries heavily influenced by technology and innovation. According to Chen & Srinivasan (2019), digitalization improves operational performance, customer engagement, and internal decision-making—all of which may contribute to firm value. Salvi et al. (2021) emphasized that online digital information can act as a market signal, enhancing firm transparency and positively impacting investor perception. However, empirical evidence on the relationship between digitalization and firm value remains inconclusive. While Swamy et al. (2019) found that digital attention—measured through Google Search Volume Index (GSVI)—has a significant effect on firm valuation in emerging markets, other studies such as Santosa & Salma (2023) and Nugraha (2022) found no significant influence in the context of Indonesian banks

Tax Planning and Firm Value

Tax planning represents a corporate effort to manage tax liabilities legally and efficiently. From an agency theory perspective, efficient tax planning reduces agency costs by maximizing residual claims for shareholders (Jensen & Meckling, 1976). Angelina & Darmawan (2021) demonstrated that Cash Effective Tax Rate (Cash ETR) is positively associated with firm value, while Book Tax Difference has a negative association. In contrast, Astuti et al. (2021) and Sari & Irawati (2022) reported no significant effect, possibly due to industry-specific tax treatment or differences in transparency levels. Further, studies conducted in Vietnam by Vu & Le (2021) confirm that effective tax strategies are crucial in improving valuation, particularly for firms with higher profitability margins or regulatory complexity.

Capital Structure and Firm Value

Capital structure reflects the firm's decision in balancing debt and equity, which significantly impacts risk and return. Myers & Majluf (1984) introduced the pecking order theory, where internal

funding is prioritized over external debt or equity due to asymmetric information. This is supported by empirical findings from Frank & Goyal (2003) and Luu (2021), who found that leverage, when optimally maintained, can signal financial discipline and enhance firm value. In emerging markets, capital structure decisions are often influenced by regulatory constraints, especially in the banking industry. Connelly et al. (2011) argue that capital decisions also serve a signaling role, communicating management confidence to investors.

METHOD

This study uses a quantitative explanatory approach with a causal design to examine the influence of digitalization, tax planning, and capital structure on firm value. The study employs secondary data and applies statistical methods to test the formulated hypotheses. The population consists of all banking companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. A purposive sampling technique was applied to select banks that met the following criteria with a total of 30 banking firms were selected as the final sample. The study uses secondary data collected from the official website of the Indonesia Stock Exchange (www.idx.co.id), each company's financial statements, and Google Trends. The variables used include:

- **Firm Value**, measured using Tobin's Q ratio.
- **Digitalization**, proxied by Google Search Volume Index (GSVI).
- **Tax Planning**, measured by Effective Tax Rate (ETR).
- **Capital Structure**, proxied by Debt to Equity Ratio (DER).

Model feasibility was tested using the F-test, and the significance of each independent variable was assessed using the t-test. All statistical analyses were conducted using IBM SPSS Statistics version 27.

RESULT AND DISCUSSION

Descriptive Statistics

Base on Table 1 Descriptive statistics provide a summary of the variables used in the model, including mean, standard deviation, minimum, and maximum values.

Table 1. Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Digitalization	150	0.23077	81.21154	38.935	21.21309294
Tax Planning	150	0.01221	0.65919	0.2454489	0.08552187
Capital Structure	150	0.08099	16.07858	4.9295662	2.9889643
Firm Value	150	0.36863	18.49779	1.2770616	1.5501088
Valid N (listwise)	150				

Source: Data processed with SPSS 27, 2025

Classical Assumption Tests

To ensure the reliability of regression analysis, classical assumption tests were conducted:

- **Normality Test**:

  The residuals were tested using the Kolmogorov–Smirnov test. After removing outliers, the p-value > 0.05, indicating that the residuals are normally distributed.
- **Multicollinearity Test:**

© 2022 ADPEBI Publications. All Rights Reserved.

Variance Inflation Factor (VIF) values for all independent variables were below 10 and tolerance values were above 0.1, suggesting the absence of multicollinearity.

- **Heteroscedasticity Test:**
  The Glejser test showed that the significance values of all variables > 0.05, indicating that the model is free from heteroscedasticity.
- **Autocorrelation Test:**
  The Durbin-Watson statistic was adjusted using the Cochrane-Orcutt method and resulted in a value close to 2, indicating no autocorrelation in the residuals.

These results confirm that the data meet the basic assumptions of linear regression analysis.

Regression Analysis Result

The multiple linear regression analysis produced the following model:

$$Y = 1{,}024 - 0{,}001Digit - 0{,}250Tax + 0{,}007DER + \varepsilon$$

Where:
Y : Firm Value (Tobin's Q)
Digit : Digitalization (GSVI)
Tax : Tax Planning (ETR)
DER : Capital Structure (Debt to Equity Ratio)

Model Feasibility (R^2 and F-Test)

The coefficient of determination (Adjusted R^2) is 0.207, indicating that approximately 20.7% of the variation in firm value is explained by digitalization, tax planning, and capital structure. Although moderate, this level is acceptable for cross-sectional data in finance and accounting studies.

The F-statistic value is 9.987 with a significance level of 0.000 ($p < 0.01$), indicating that the regression model is statistically feasible and all independent variables collectively have a significant effect on firm value.

t-Test Results (Partial Significance Test)

The t-test (partial test) was used to evaluate the individual influence of each independent variable on firm value (Tobin's Q). The results of the t-test are summarized in the table below:

Table 2. t-Test Results (Partial Significance Test)

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.024	0.025		41.570	<0.001
	Digitalization	-0.001	0.000	-0.338	-3.665	<0.001
	Tax Planning	-0.250	0.065	-0.345	-3.865	<0.001
	Capital Structure	0.007	0.002	0.292	3.219	0.002
a. Dependent Variable: Firm Value						

Source: Data processed with SPSS 27, 2025

Base on Table 2 The t-test confirms the individual significance of all independent variables in the model, reinforcing the validity of the regression findings and providing empirical support for further discussion in the next section.

Discussion of Research Results

Effect of Digitalization on Firm Value

The regression coefficient for digitalization is -0.001 and significant at the 1% level ($t = -3.665$, $p < 0.001$), indicating a significant negative effect of digitalization on firm value. This result contradicts prior studies in developed markets (e.g., Salvi et al., 2021; Swamy et al., 2019), which found a positive relationship. However, it is in line with local studies such as Santosa & Salma (2022) and Nugraha (2021), which reported non-significant or negative effects in the Indonesian banking context.

This outcome might be explained by the inefficiency of digital investments in some Indonesian banks, or by the fact that increased digital exposure may reveal negative sentiments or vulnerabilities, thereby reducing investor confidence. It also highlights that digital transformation alone does not guarantee value creation if not supported by strategy, security, and consumer trust.

Effect of Tax Planning on Firm Value

Tax planning has a negative and significant impact on firm value, with a coefficient of -0.250 ($t = -3.865$, $p < 0.001$). This result contradicts the agency theory's expectation that effective tax planning increases retained earnings and, in turn, firm value (Jensen & Meckling, 1976).

While some studies such as Angelina & Darmawan (2021) report a positive impact through efficient tax management, the negative result in this study may indicate investor skepticism toward aggressive tax practices in the banking sector, or low transparency in reporting. Moreover, such behavior may be interpreted as risk-taking or regulatory avoidance, which can reduce firm valuation in a highly supervised industry.

Effect of Capital Structure on Firm Value

Capital structure (DER) has a positive and significant impact on firm value, with a coefficient of 0.007 ($t = 3.219$, $p = 0.002$). This finding supports the signaling theory (Connelly et al., 2011) and pecking order theory (Myers & Majluf, 1984), which suggest that optimal debt can act as a credible signal of firm strength and discipline.

In the Indonesian banking context, this positive relationship implies that moderate use of leverage is perceived favorably by investors, possibly due to strict capital adequacy regulations. The result is consistent with studies by Luu (2021) and Vu & Le (2021), which highlight the importance of capital management in enhancing firm credibility and market value in emerging markets.

CONCLUSION

This study concludes that digitalization, tax planning, and capital structure significantly influence firm value in the Indonesian banking sector. While capital structure demonstrates a positive effect, digitalization and tax planning show significant negative effects. These results highlight that external digital exposure does not always reflect improved investor perception, particularly when digital strategies are not clearly integrated into the firm’s core operations. Similarly, tax planning efforts may be perceived with caution, especially in a heavily regulated industry where transparency is critical. On the other hand, a well-maintained capital structure can serve as a signal of financial stability and strategic discipline, positively impacting market valuation.

Based on these findings, it is suggested that banking institutions carefully evaluate the implementation of digital initiatives to ensure that they align with long-term corporate objectives and contribute meaningfully to firm reputation and performance. Moreover, tax strategies should be

© 2022 ADPEBI Publications. All Rights Reserved.

designed not only for efficiency but also with consideration of regulatory expectations and investor trust. Lastly, firms are encouraged to maintain an optimal balance of debt and equity to sustain confidence among stakeholders. Future research may benefit from exploring additional variables such as corporate governance, digital maturity, and ESG factors, or by employing qualitative approaches to better capture investor sentiment and internal managerial perspectives.

REFERENCES

Angelina, S., & Darmawan, A. (2021). The Impact Of Tax Planning On Firm Value. *Journal of Applied Accounting and Taxation Article History*, *6*(2), 196–204.

Anisran, F., & Ma'wa, M. A. F. (2023). Pengaruh Tax Planning & Tax Avoidance Terhadap Nilai Perusahaan Dengan Transparansi Perusahaan Sebagai Variabel Moderasi. *Jurnal Akuntansi Trisakti*, *10*(2), 305–318. https://doi.org/10.25105/jat.v10i2.17104

Astuti, N. E., Moeljadi, & Hernawati, E. (2021). Pengaruh Perencanaan Pajak, Struktur Modal, dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan Yang Terdaftar di Bursa Efek Indonesia. *Syntax Literate: Jurnal Ilmiah Indonesia*, *6*(1), 14–23. https://doi.org/https://doi.org/10.36418/syntax-literate.v6i1.4611

Chen, W., & Srinivasan, S. (2019). Going Digital: Implications for Firm Value and Performance. *Review of Accounting Studies (Forthcoming)*. https://doi.org/https://dx.doi.org/10.2139/ssrn.4177947

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. In *Journal of Management* (Vol. 37, Issue 1, pp. 39–67). https://doi.org/10.1177/0149206310388419

Da, Z., Engelberg, J., & Gao, P. (2011). In Search of Attention. *Journal of Finance*, *66*(5), 1461–1499. https://doi.org/10.1111/j.1540-6261.2011.01679.x

Dayag, A. J., & Trinidad, F. (2019). A Critical Assessment on Bank Valuation in Existing Literature in the Last Decade. *International Journal of Research in Business and Social Science (2147- 4478)*, *8*(4), 44–58. https://doi.org/10.20525/ijrbs.v8i4.279

Deegan, M., & Tanner, S. (2002). *Digital Futures: Strategies for the Information Age* (Vol. 1). London: Library Association Publishing.

Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, *67*, 217–248.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, *4*, 305–360. http://hupress.harvard.edu/catalog/JENTHF.html

Myers, S. C., & Majiuf, N. S. (1984). Corporate Financing and Investment Decisions When Firms Have Informationthat Investors Do Not Have. *NBER Working Paper*.

Nugraha, A. (2022). Dampak Penerapan Sistem Digitalisasi terhadap Nilai Perusahaan Perbankan. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, *6*, 154–159. https://doi.org/https://doi.org/10.24912/jmbk.v6i2.17841

Salvi, A., Vitolla, F., Rubino, M., Giakoumelou, A., & Raimo, N. (2021). Online Information On Digitalisation Processes and Its Impact On Firm Value. *Journal of Business Research*, *124*, 437–444. https://doi.org/10.1016/j.jbusres.2020.10.025

Santosa, Y. E., & Salma, D. K. (2023). The Effect of Corporate Digitalization on the Value of Firm. *Journal of Business & Banking*, *12*(2), 277. https://doi.org/10.14414/jbb.v12i2.3434

Sari, D., & Irawati, W. (2022). Pengaruh Perencanaan Pajak, Struktur Modal dan Kepemilikan Manajerial Terhadap Nilai Perusahaan dengan Transparansi Perusahaan sebagai Variabel Moderasi. *Jurnal Akuntansi Barelang*, *6*(1). https://doi.org/https://doi.org/10.33884/jab.v6i1.4660

Swamy, V., Dharani, M., & Takeda, F. (2019). Investor Attention And Google Search Volume Index: Evidence From An Emerging Market Using Quantile Regression Analysis. *Research in International Business and Finance*, *50*, 1–17. https://doi.org/10.1016/j.ribaf.2019.04.010

Vu, T. A. T., & Le, V. H. (2021). The Effect of Tax Planning on Firm Value: A Case Study in Vietnam. *Journal of Asian Finance, Economics and Business*, *8*(2), 973–979. https://doi.org/10.13106/jafeb.2021.vol8.no2.0973

© 2022 ADPEBI Publications. All Rights Reserved.