Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

Does Institutional Ownership Moderate the Effects of CAR, Tax Avoidance, and CSR on Firm Value? Evidence from the Indonesian Banking Industry

Muhammad Aimar Gimnastyar[1*], Mochammad Ridwan Ristyawan[2], Anggraini Syahputri[3], Wendy[4], Uray Ndaru Mustika[5]
[1,2,3,4,5]Faculty of Economics and Business, Universitas Tanjungpura, Indonesia
aimargim.office@gmail.com[1], m.ridwanristyawan@untan.ac.id[2],
anggrainisyahputri@ekonomi.untan.ac.id[3], wendy@ekonomi.untan.ac.id[3],
urayndarumustika@ekonomi.untan.ac.id[5]

*Corresponding Author
Submitted: Feb 12, 2026
Accepted: Maret 6, 2026
Published: April 1, 2026

ABSTRACT

This study aims to examine the effects of Capital Adequacy Ratio (CAR), Tax Avoidance, and Corporate Social Responsibility Disclosure (CSRD) on firm value in banks listed on the Indonesia Stock Exchange that meet the eligibility criteria from 2020 to 2024, as well as to evaluate the role of Institutional Ownership (IO) as a moderating variable. The sample was selected using purposive sampling, resulting in 27 banks with a total of 125 observations. Data were analyzed using panel data regression with moderated regression analysis (MRA), employing both Random Effects Model (REM) and Fixed Effects Model (FEM) to investigate the direct and moderating effects among the variables. The results indicate that CAR has a positive and significant effect on firm value, confirming its role as a key indicator of financial stability and market confidence in the banking sector. In contrast, Tax Avoidance does not significantly affect firm value, while CSRD also shows no direct significant impact. Moderation analysis reveals that IO strengthens the positive effect of CAR on firm value, does not significantly moderate the relationship between Tax Avoidance and firm value, and negatively moderates the effect of CSRD on firm value. These findings highlight the importance of capital adequacy as a primary financial signal and suggest that institutional investors are selective in responding to CSR practices. The study provides practical implications for investors, banking management, and regulators in enhancing corporate governance and improving the interpretation of financial signals in the Indonesian banking sector.

Keywords: Banking Sector; Capital Adequacy Ratio; Corporate Social Responsibility; Firm Value; Institutional Ownership; Tax Avoidance

INTRODUCTION

The banking industry plays a strategic role in the national economy as an agent of trust, an agent of development, and an agent of service, making its stability through firm value a critical aspect to consider (Abdelsalam et al., 2024; Broekhoff et al., 2024; Gil-Jardón et al., 2024). However, data from the Indonesia Stock Exchange (IDX) for the period 2020–2024 indicate that bank firm values, as proxied by Price to Book Value (PBV), fluctuated despite a relatively stable Capital Adequacy Ratio (CAR) above 23%, well above the regulatory minimum standard of 8%, which should serve as a positive signal to strengthen firm value (IDX, 2024; OJK, 2016). This divergence raises the question of whether capital adequacy truly influences firm value or if other factors play a more dominant role.

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

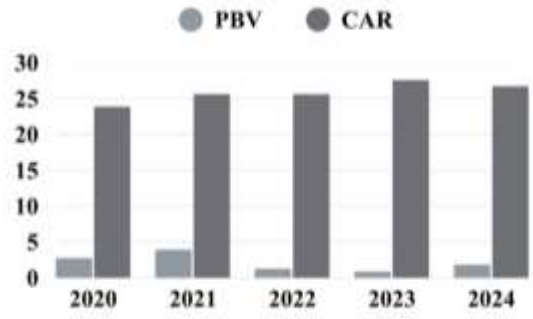

Figure 1. Comparison of PBV and CAR of Indonesian Banks
Source: Processed data from www.idx.co.id and www.ojk.go.id (2025).

In addition to capital adequacy, tax compliance also serves as an important signal for investors (Su & Deng, 2024). Although tax revenue realization increased from 89.43% in 2020 to 101.4% in 2024, Indonesia's tax-to-GDP ratio remains low, around 10–12%, far below the Asia-Pacific average (19.5%) and the OECD average (33.9%) (DJP, 2020; Kemenkeu, 2024; OECD, 2025). This situation reflects a narrow tax base and a high potential for tax avoidance, which the market may interpret either as efficiency or as a risk (Pavlou et al., 2025). Meanwhile, regulation POJK 51/2017 requires banks to conduct CSR disclosure in their annual and sustainability reports, which can serve as a signal of reputation and social legitimacy (Xu et al., 2023). However, compliance levels and the quality of CSR disclosure across banks remain heterogeneous, making its effect on investor perception worthy of further analysis. In this context, institutional ownership (IO) functions as an external monitoring mechanism that encourages more effective corporate governance. In line with POJK No. 11/POJK.04/2017, IO is considered to strengthen the effect of CAR, mitigate the negative impact of tax avoidance, and weaken the effect of CSRD on firm value. Nevertheless, the level of institutional ownership varies among Indonesian banks (Mai & Syarief, 2021), indicating that the effectiveness of IO as a moderating variable requires further investigation.

Several previous studies have reported inconsistent results. CAR has been found to have a positive effect on firm value (Jagirani et al., 2023) or an insignificant effect (Kartikasari & Ahyani, 2022). Similarly, tax avoidance has been reported to have either a positive impact (Hasan et al., 2021) or a negative impact (Dyussembina & Park, 2024). CSR disclosure has been shown to increase firm value (de Villiers et al., 2024) or to have an insignificant effect (Kahloul et al., 2022). Findings regarding institutional ownership (IO) are also mixed, with IO reported as not affecting the relationship between CAR and firm value (Perdana et al., 2023), yet moderating the relationship between tax avoidance and firm value (Lv et al., 2025) and strengthening the effect of CSR disclosure on firm value (Shah et al., 2025).

Based on the discussion above, it can be concluded that CAR, tax avoidance, and CSR disclosure are important factors suspected to influence bank firm value, although previous studies have reported inconsistent findings. Furthermore, institutional ownership (IO) plays a strategic role as an external monitoring mechanism that has the potential to moderate the relationships among these variables; however, its effectiveness in the Indonesian banking sector still requires empirical testing. This highlights a research gap, namely the need for a study that simultaneously examines the effects of CAR, tax avoidance, and CSR disclosure on firm value, with IO as a moderating variable, in banks listed on the Indonesia Stock Exchange. This study is designed to answer two main research questions: first, whether CAR, tax avoidance, and CSR disclosure significantly affect bank firm value; and second, whether IO moderates the relationships among these variables. The findings are expected to contribute to investors by improving the interpretation of managerial signals, to regulators by evaluating the effectiveness of IO, and to academics by enriching the literature on institutional ownership and firm value in the banking sector.

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

LITERATURE REVIEW

Signaling Theory

Signaling theory emphasizes that firms convey information to investors through both financial and non-financial decisions (Bafera & Kleinert, 2023). In the banking context, a high Capital Adequacy Ratio (CAR) is regarded as a positive signal of a bank's capital resilience in absorbing risks, thereby enhancing investor confidence in its long-term prospects (Abdelsalam et al., 2024). Conversely, tax avoidance practices generate ambivalent signals, as tax efficiency can increase net profit, but overly aggressive tax strategies may damage corporate reputation and reduce market perception (Elamer et al., 2024). Meanwhile, Corporate Social Responsibility Disclosure (CSRD) signals a bank's commitment to social and environmental aspects, which can strengthen public legitimacy and enhance investor trust (Lei et al., 2025). Within this framework, institutional ownership (IO) functions as a mechanism that reinforces the legitimacy of these signals by ensuring optimal capital management and strategically implemented CSR programs, as well as mitigating negative signals from excessive tax practices through its monitoring role (Bagh et al., 2025; Bai et al., 2025; Truong & Nguyen, 2024). Therefore, effective IO implementation makes the information received by the market more credible, ultimately supporting a sustainable increase in firm value.

Market Discipline Theory

Market Discipline Theory explains that the market, comprising investors, depositors, and creditors, rewards or penalizes banking behavior based on publicly available information, which is subsequently reflected in stock prices and firm value (Kazdal et al., 2024). In the highly regulated banking industry with significant systemic risk, market discipline functions as an external monitoring mechanism that complements formal regulatory supervision through market responses to performance and risk indicators disclosed by banks (Godspower-Akpomiemie & Ojah, 2021). The market tends to reward banks with an adequate Capital Adequacy Ratio, as it reflects the ability to absorb risks and maintain financial stability, while aggressive tax avoidance practices may trigger market penalties due to increased reputational risk and regulatory uncertainty (Habib et al., 2024; Molyneux et al., 2023). In addition, a high level of Corporate Social Responsibility Disclosure is perceived positively by the market, as it enhances transparency, reputation, and public trust in the bank (Guo et al., 2024). In this study, institutional ownership strengthens the effectiveness of market discipline by increasing market sensitivity to performance and risk information, as well as promoting more decisive market responses to managerial behaviors that could harm firm value (Drobetz et al., 2025). Therefore, Market Discipline Theory highlights that market reactions to corporate information, reinforced by the presence of institutional investors, play a critical role in shaping bank firm value.

Firm Value in the Banking Sector

Banks, as intermediation institutions, have the primary function of mobilizing funds from surplus parties and reallocating them to deficit parties in the form of credit, thereby maintaining stability and efficiency in the allocation of funds within the economy (World Bank, 2025). As a highly regulated sector, banks operate under strict supervision by financial authorities through various prudential, capital, and governance regulations, including the minimum capital requirement and Capital Adequacy Ratio (CAR) as stipulated in POJK Number 27/POJK.03/2022, the implementation of Good Corporate Governance (GCG) based on POJK Number 55/POJK.03/2016, and obligations for social and sustainable financial responsibility in accordance with POJK Number 51/POJK.03/2017. Collectively, these regulations aim to maintain financial system stability and protect public interests. In this context, firm value is considered important because it reflects shareholder welfare while also serving as a measure of market confidence in a company's prospects (Bagh et al., 2025). Firm value can be measured using several indicators, such as Price to Book Value (PBV), which reflects the market valuation of a company's equity relative to its book value. As illustrated in Figure 1, PBV is often used to describe the general trend of firm value in the banking sector. However, in this study, firm value is measured using Tobin's Q, which compares the market value of a company's assets to their replacement cost (Fabisik et al., 2021). Tobin's Q is considered more comprehensive than PBV because it not only reflects equity conditions based

on book value but also incorporates market expectations regarding the company's future growth prospects (Hitz et al., 2022). Therefore, Tobin's Q is more suitable for capturing investor perceptions of managerial strategies and the quality of bank governance in the long term (Abid et al., 2021).

Capital Adequacy Ratio and Firm Value

The Capital Adequacy Ratio (CAR) is a capital ratio used to assess a bank's ability to absorb potential losses and maintain operational stability (Andersen & Juelsrud, 2024). The Financial Services Authority (OJK), through POJK Number 27/POJK.03/2022, sets a minimum CAR standard of 8%, meaning that banks with a ratio above this threshold are considered to have adequate capital strength (OJK, 2022). CAR is often regarded as a fundamental indicator that provides a positive signal to investors, as it reflects a bank's solvency and its capacity to manage risks (Miao et al., 2025). Several previous studies have found that CAR positively affects firm value, as higher capital ratios increase investor confidence in a bank's long-term prospects (Jagirani et al., 2023; Perdana et al., 2023). However, other studies indicate that the effect of CAR on firm value is not significant, arguing that investors often consider other factors such as profitability, operational efficiency, or macroeconomic conditions when evaluating firm value (Lai & Goh, 2025). Based on this discussion, the first hypothesis of this study is formulated as follows:

H1: Capital Adequacy Ratio has a positive effect on Firm Value.

Tax Avoidance and Firm Value

Tax planning is a company's effort to manage its tax obligations efficiently by utilizing explicitly permitted tax provisions, and is considered a legal and relatively conservative financial management strategy (Folsom et al., 2025). In practice, tax planning often overlaps with tax avoidance, although they differ in terms of aggressiveness and risk (Krieg & Li, 2025). Tax avoidance refers to more aggressive tax planning strategies, still within legal boundaries, exploiting regulatory gaps that may pose reputational and regulatory risks (Habib et al., 2024). In the highly regulated banking sector, tax avoidance is still implemented to maintain profitability and competitiveness, including practices such as transfer pricing between entities within a corporate group, which can shift profits to jurisdictions with lower tax rates, although aggressive implementation increases regulatory risk and may negatively affect market perception (Chen et al., 2022; Choi et al., 2020). This study measures tax avoidance using the Effective Tax Rate (ETR), where a lower ETR relative to the statutory tax rate indicates a higher level of tax avoidance (Sarhan et al., 2024). Several studies suggest that tax avoidance can enhance firm value by increasing net profit, which is perceived positively by investors (Afzali & Thor, 2025; Lee & Choi, 2022). However, other studies find negative or insignificant effects, as aggressive tax strategies may damage corporate reputation and weaken market confidence (Seifzadeh, 2022; Shubita, 2024). Based on this discussion, the second hypothesis of this study is formulated as follows:

H2: Tax Avoidance has a negative effect on Firm Value.

CSR Disclosure and Firm Value

CSR disclosure refers to the extent to which a company discloses its social, environmental, and sustainability activities through annual reports and sustainability reports, which in Indonesia are regulated under POJK 51/2017 on the Implementation of Sustainable Finance. This study uses the list of indicators from POJK 51/2017 as a measure of CSR disclosure, allowing the disclosure to be assessed quantitatively and objectively based on regulatory compliance. As a non-financial signal, CSR disclosure reflects transparency, accountability, and the company's commitment to sustainable business practices, potentially enhancing social legitimacy, reputation, and investor confidence (Roy et al., 2022). Several studies have shown that the broader the CSR disclosure, the more positive its impact on firm value (Guo et al., 2024; V. H. Nguyen, 2025), while other studies indicate that the effect may be insignificant or even negative, as the market may perceive CSR disclosure merely as an administrative obligation or window dressing without real implications (Li et al., 2024; Nampoothiri et al., 2024). Based on this discussion, the third hypothesis of this study is formulated as follows:

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

H3: CSR Disclosure has a positive effect on Firm Value.

The Moderating Role of Institutional Ownership

Institutional ownership (IO) is an external monitoring mechanism that plays a critical role in corporate governance (Moradi et al., 2022). Institutional investors, such as pension funds and insurance companies, generally possess analytical capacity and long-term investment horizons, which promote more effective governance, enhance disclosure quality, curb opportunistic behavior, and align managerial decisions with shareholder interests (Nguyen, 2022). In Indonesia, the role of institutional ownership in fostering corporate transparency and accountability is also emphasized through POJK No. 11/POJK.04/2017 on the Implementation of Governance for Commercial Banks. As a moderating variable within the signaling theory framework, IO is believed to strengthen or weaken the relationships between internal bank factors and firm value. IO can strengthen the positive effect of the Capital Adequacy Ratio (CAR) on firm value by ensuring that strong capital is managed effectively and sustainably (Garel et al., 2022). Conversely, IO mitigates the negative impact of tax avoidance through institutional investor monitoring, which can limit aggressive tax practices that may harm corporate reputation (Kałdoński & Jewartowski, 2024). In ownership structures dominated by institutional investors, CSR disclosure may be evaluated more critically. Under such conditions, CSR activities that do not provide clear economic contributions may be perceived as inefficiency or overinvestment (Wang et al., 2021). Therefore, institutional ownership (IO) is expected to act as a moderating variable that can direct the effect of CSR disclosure on firm value in a negative direction. Based on the discussion above, the research hypotheses related to IO are formulated as follows:

H4: Institutional Ownership positively moderates the relationship between Capital Adequacy Ratio and Firm Value.

H5: Institutional Ownership positively moderates the relationship between Tax Avoidance and Firm Value.

H6: Institutional Ownership negatively moderates the relationship between CSR Disclosure and Firm Value.

Conceptual Framework

Based on the discussion above, the conceptual framework of this study can be formulated as follows:

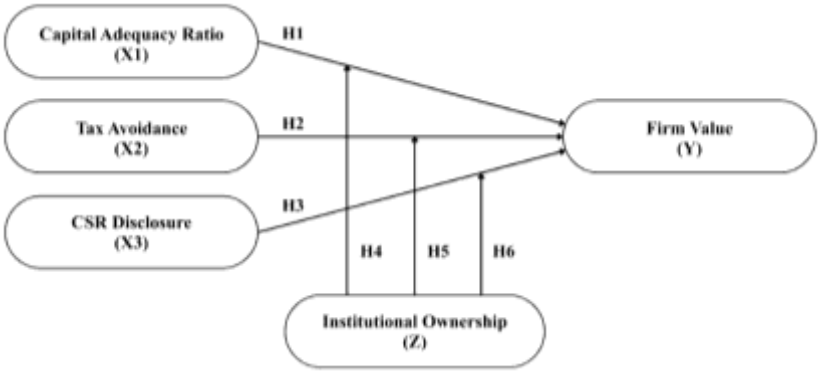

Figure 2. Conceptual Framework
Source: Developed by the author (2025).

METHOD

Research Population

This study employs a quantitative research method, involving the examination of a specific population or sample using structured data collection instruments and statistical analysis to describe phenomena and test specific hypotheses (Sugiyono, 2017). The population in this study consists of all banking companies listed on the Indonesia Stock Exchange (IDX) during the period 2020–2024. The selection of the banking sector is based on its strategic role as a financial intermediation

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

institution (World Bank, 2025) and its compliance with specific regulations from the Financial Services Authority, such as transparency and reporting obligations (OJK, 2025), which make banks a sector with relatively higher information disclosure compared to other industries. In addition, the 2020–2024 period was chosen because it covers key phases of economic dynamics, including the pressures caused by the COVID-19 pandemic, the recovery phase, and global uncertainties affecting fluctuations in banking firm value (IMF, 2023).

Research Sample

The research sample was determined using purposive sampling, which involves selecting samples based on specific criteria that align with the research objectives (Febiyanti & Hersugondo, 2022). The criteria used in this study are as follows:

Table 1. Sample Selection of Banking Companies

No.	Research Criteria	Number of Companies
1	Banking companies listed on the IDX during the 2020–2024 period	45
2	Banking companies that did not consistently publish annual and/or sustainability reports during the 2020–2024 period	(8)
3	Banking companies that experienced losses during the 2020–2024 period	(10)
Final Sample (Companies)		27
Total Observations (27 Companies × 5 Years)		135
Outliers		(10)
Final Observations		125

Source: Processed by the author (2025).

Operational Definition of Variables

This study uses several variables, including Capital Adequacy Ratio (CAR), Tax Avoidance, Corporate Social Responsibility Disclosure (CSR Disclosure), Institutional Ownership (IO), and Firm Value. The operational definitions of each variable are as follows:

Table 2. Research Variables Definitions and Indicators

No.	Research Variable	Definition	Indicator
1	Capital Adequacy Ratio (X1)	CAR is a capital adequacy ratio that indicates a bank's ability to absorb potential losses and maintain financial stability (Vu & Ngo, 2023).	$CAR = \frac{Capital}{Risk - Weighted\ Assets} \times 100$
2	Tax Avoidance (X2)	Tax Avoidance can be measured using the Effective Tax Rate (ETR), which is the ratio of total corporate income tax expense to profit before tax (Sarhan et al., 2024).	$ETR = \frac{Total\ Tax\ Expense}{Profit\ Before\ Tax} \times 100$
3	CSR Disclosure (X3)	CSR Disclosure measures the extent to which a company	$CSRD = \frac{Disclosed\ Indicators}{Total\ Indicators} \times 100$

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

No.	Research Variable	Definition	Indicator
		discloses social, environmental, and sustainability activities, based on POJK No. 51/POJK.03/2017 (OJK, 2017).	
4	Firm Value (Y)	Firm Value represents the market's perception of a company's future prospects and performance, proxied by Tobin's Q (Sarhan et al., 2024).	$Tobin's\ Q = \frac{Market\ Value\ of\ the\ Company}{Replacement\ Cost\ of\ Assets} \times 100$
5	Institutional Ownership (Z)	Institutional Ownership is the proportion of a company's shares held by institutions such as investment firms, pension funds, and other financial entities, serving as an external monitoring mechanism (Moradi et al., 2022).	$IO = \frac{Shares\ Owned\ by\ Institutions}{Total\ Outstanding\ Shares} \times 100$

Source: Processed by the author (2025).

Data Analysis Tools

The data analysis in this study employs panel data regression, as the research data combines time series (2020–2024) and cross-sectional data (27 banking companies) with a total of 125 observations. Panel data regression is chosen because it provides more accurate estimates compared to using only time series or cross-sectional data (Wibowo, 2025). The estimation models used include the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To determine the most appropriate model, a series of specification tests are conducted, including the Chow Test to compare CEM and FEM, the Hausman Test to choose between FEM and REM, and the Lagrange Multiplier (LM) Test to select the appropriate model between CEM and REM.

After the most appropriate model is determined, data feasibility is assessed through classical assumption tests to ensure that the regression results are unbiased. The classical assumption tests applied in this study include the normality test to determine whether the residuals are normally distributed, the multicollinearity test to examine high correlations among independent variables, and the heteroskedasticity test to detect any inconsistency in the residual variance. Additionally, the study also employs outlier tests to identify and handle extreme data points that could potentially affect regression estimates. The panel data regression analysis in this study follows several steps (Hsiao, 2022), namely calculating the ratios of all research variables, including Firm Value (FV), Capital Adequacy Ratio (CAR), Tax Avoidance (TA), Corporate Social Responsibility Disclosure (CSRD), and Institutional Ownership (IO); constructing panel data by combining time series and cross-sectional data; presenting descriptive statistics; performing outlier tests; conducting preliminary estimations using the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) and determining the best model through the Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test; testing classical assumptions; estimating the selected regression model; and interpreting the regression results based on coefficients, probability values, and goodness of fit.

In this study, the moderating variable is Institutional Ownership (IO), which serves as a proxy

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

for an external monitoring mechanism. The moderating role is tested using Moderated Regression Analysis (MRA) by including interaction terms between the independent variables, namely Capital Adequacy Ratio, Tax Avoidance, and CSR Disclosure, and Institutional Ownership. This approach allows for the examination of whether IO strengthens or weakens the effects of the three independent variables on Firm Value. All data processing is conducted using the statistical software EViews, which not only supports panel data regression analysis but also provides facilities for classical assumption testing to ensure the validity of the estimation results.

The regression models used in this study are as follows:

Model I

$$FV_{it} = \alpha + \beta_1 CAR_{it} + \beta_2 TA_{it} + \beta_3 CSRD_{it} + \varepsilon_{it}$$

Model II

$$FV_{it} = \alpha + \beta_1 CAR_{it} + \beta_2 TA_{it} + \beta_3 CSRD_{it} + \beta_4 IO_{it} + \varepsilon_{it}$$

Model III

$$FV_{it} = \alpha + \beta_1 CAR_{it} + \beta_2 TA_{it} + \beta_3 CSRD_{it} + \beta_4 IO_{it} + \beta_5 (CAR_{it} \times IO_{it}) + \beta_6 (TA_{it} \times IO_{it}) + \beta_7 (CSRD_{it} \times IO_{it}) + \varepsilon_{it}$$

Notes:

FV_{it} = Firm Value of company i in year t
CAR_{it} = Capital Adequacy Ratio of company i in year t
TA_{it} = Tax Avoidance of company i in year t
$CSRD_{it}$ = Corporate Social Responsibility Disclosure of company i in year t
IO_{it} = Institutional Ownership of company i in year t
α = constant
$\beta_1 \ldots \beta_7$ = regression coefficients
ε_{it} = error term

RESULTS

Descriptive Statistics

Descriptive statistics were conducted to provide an initial overview of the data, summarize key characteristics, and ensure the quality and suitability of variables for further analysis.

Table 3. Descriptive Statistics Results

Variable	N	Minimum	Maximum	Mean	Std. Deviation
FV	125	45.79	388.84	111.47	42.47
CAR	125	10.50	106.1	33.18	18.74
TA	125	-1.65	104.73	24.18	10.17
CSRD	125	87.23	100.00	96.83	2.99
IO	125	0.34	88.66	36.21	22.60

Source: Processed by the author (2025).

Table 3 presents the descriptive statistics of the research variables based on 125 observations. Firm Value (FV) ranges from 45.79 to 388.84, with a mean of 111.47 and a standard deviation of 42.47, indicating variation in firm performance across banks and observation periods. Capital Adequacy Ratio (CAR) ranges from 10.50 to 106.10, with an average of 33.18 and a standard deviation of 18.74, reflecting differences in banks' capitalization levels. Tax Avoidance (TA) varies from –1.65 to 104.73, with a mean of 24.18 and a standard deviation of 10.17, suggesting variability in tax management practices among the sampled banks. Corporate Social Responsibility Disclosure (CSRD) shows relatively low dispersion, with values ranging from 87.23 to 100.00, a mean of 96.83, and a standard deviation of 2.99, indicating that most banks demonstrate a relatively high level of CSR disclosure. Institutional Ownership (IO) ranges from 0.34 to 88.66, with a mean of 36.21 and a standard deviation of 22.60, reflecting considerable differences in the proportion of institutional shareholdings across banking firms.

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

Outlier Test

In this study, all research variables were tested for extreme observations using the Z-score method with a threshold of |Z| > 3. The identification results revealed several outliers across some variables. Capital Adequacy Ratio (CAR) had 3 outliers with Z-scores of 4.927, 7.389, and 3.626, while Tax Avoidance (TA) also had 3 outliers with Z-scores of 3.790, 7.345, and 3.204. Corporate Social Responsibility Disclosure (CSRD) had 4 outliers with Z-scores of –3.065, –3.065, –4.210, and –3.638, and Firm Value (FV) had 4 outliers with Z-scores of –3.517, –3.354, –3.353, and –3.313. Institutional Ownership (IO) showed no outliers based on the applied criteria. Observations identified as outliers were excluded from the dataset, reducing the number of observations from 135 to 125, resulting in an unbalanced panel data structure. This step was taken to maintain analytical consistency and ensure that the subsequent regression estimates are more valid and not distorted by extreme values, in line with common practices in economic and financial research.

Estimation of the Best Model

The best model was estimated to determine the most suitable panel specification for reliable analysis of independent, moderating, and dependent variables.

Table 4. Estimation of the Best Model Results

Model Specification Test	Model I	Model II	Model III
Chow Test	0.000 < 0.050 (FEM)	0.000 < 0.050 (FEM)	0.000 < 0.050 (FEM)
Hausman Test	0.595 > 0.050 (REM)	0.018 < 0.050 (FEM)	0.002 < 0.050 (FEM)
Lagrange Multiplier Test	0.000 < 0.050 (REM)	-	-

Source: Processed by the author (2025).

Based on the model specification tests presented in Table 4, this study employed the Chow test, Hausman test, and Lagrange Multiplier (LM) test to determine the most appropriate panel data regression model for each research model. For Model I, the Chow test indicated significance at 0.000 < 0.05, suggesting that the Fixed Effect Model (FEM) was preferable to the Common Effect Model (CEM); however, the Hausman test yielded a value of 0.595 > 0.05, indicating that the Random Effect Model (REM) was more suitable. Furthermore, the significant LM test (0.000 < 0.05) confirmed REM as the best model for Model I. In Model II, the Chow test again showed significance at 0.000 < 0.05, favoring FEM over CEM, and the Hausman test result of 0.018 < 0.05 confirmed FEM as the most appropriate model, making the LM test unnecessary. Similarly, for Model III, both the Chow and Hausman tests indicated significance < 0.05, consistently confirming FEM as the proper model, so the LM test was not conducted. Overall, the specification tests demonstrate that Model I employed REM, while Models II and III used FEM as the most suitable panel regression models for further analysis.

Classical Assumption Test

The Classical Assumption Test was conducted to examine the general characteristics of the regression residuals, such as normality, multicollinearity, and heteroskedasticity, even though panel data with a sufficiently large sample does not strictly require these assumptions to be fully met.

Table 5. Classical Assumption Test Results

Assumption Test	Method	Model I	Model II	Model III
Normality	Jarque-Bera	Not normally distributed, p = 0.000	Not normally distributed, p = 0.000	Not normally distributed, p = 0.000
Multicollinearity	Pairwise Correlation	No correlation with |r| > 0.85	No correlation with |r| > 0.85	Correlation detected with

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

Assumption Test	Method	Model I	Model II	Model III
				|r| > 0.85
Heteroskedasticity	Glejser	Heteroskedasticity present with p < 0.050	No heteroskedasticity with p > 0.050	No heteroskedasticity with p > 0.050

Source: Processed by the author (2025).

Based on Table 5, the results of the classical assumption tests indicate that the residuals in Model I, Model II, and Model III are not normally distributed according to the Jarque–Bera test (p = 0.000). However, although the residuals are not perfectly normally distributed, this does not invalidate the regression results. In panel data analysis, the effective sample size is determined by the total number of panel observations rather than solely by the number of cross-sectional units. In this study, the regression is estimated using 125 panel observations, which constitutes a relatively large sample. Therefore, the Central Limit Theorem ensures that the regression estimators approach normal distribution asymptotically, allowing statistical inference to remain valid despite the presence of residual non-normality (Kuersteiner & Prucha, 2013; Galvao et al., 2020). The multicollinearity test, conducted using pairwise correlations, shows that Models I and II do not experience multicollinearity, as all correlation coefficients among independent variables are |r| < 0.85. In Model III, values of |r| > 0.85 were observed due to the inclusion of interaction terms in the moderation model. This is a common consequence of forming interaction variables and does not compromise the validity of the model estimation. Furthermore, the heteroskedasticity test using the Glejser method indicates that Model I exhibits heteroskedasticity (p < 0.05), whereas Models II and III do not show signs of heteroskedasticity (p > 0.05). To ensure reliable estimation, Model I is estimated using robust standard errors with the White cross-section method, which corrects bias in standard errors arising from heteroskedasticity and potential irregularities in variances across cross-sectional units, thereby making coefficient estimates and hypothesis testing more reliable (MacKinnon et al., 2023; Bai et al., 2024). Overall, the classical assumption tests indicate no fundamental methodological constraints in this study, confirming that all three panel regression models are suitable for further estimation and regression result analysis.

Regression Estimation Results

In this study, the regression estimation results are presented to examine the effects of independent and moderating variables on firm value, including the magnitude, direction, and statistical significance of these relationships.

Table 6. Regression Estimation Results

Variable	Model I	Model II	Model III
CAR	0.836** (0.018)	0.287 (0.355)	-1.320** (0.043)
TA	0.224 (0.421)	-0.038 (0.891)	0.190 (0.821)
CSRD	1.760 (0.172)	1.501 (0.165)	5.125*** (0.008)
IO	-	1.685*** (0.000)	11.718** (0.018)
CAR × IO	-	-	0.035*** (0.005)
TA × IO	-	-	-0.004 (0.855)
CSRD × IO	-	-	-0.112** (0.025)
R^2	0.136	0.709	0.740
Adjusted R^2	0.114	0.616	0.646
F-statistic	6.309	7.644	7.876
Prob. F	0.000	0.000	0.000
Note on significance indicators: *** p < 0.01; ** p < 0.05; * p < 0.1.			

Source: Processed by the author (2025).

Based on the regression results presented in Table 6, the analysis of each hypothesis can be described as follows, using the p-value as the criterion for acceptance or rejection, where a p-value

Owner: Riset & Jurnal Akuntansi
e –ISSN : 2548-9224 | p–ISSN : 2548-7507
Volume 10 Nomor 2, April 2026
DOI : https://doi.org/10.33395/owner.v10i2.3228

less than 0.05 indicates significance.

H1: Capital Adequacy Ratio (CAR) has a positive effect on Firm Value. Based on Model I, CAR has a significant positive effect on Firm Value, with a coefficient of 0.836 and a p-value of 0.018, which is below the 0.05 threshold, indicating that an increase in CAR is associated with an increase in Firm Value. Therefore, H1 is accepted.

H2: Tax Avoidance (TA) has a negative effect on Firm Value. From Model I, TA does not significantly affect Firm Value. The coefficient is 0.224 with a p-value of 0.421, which is greater than 0.05. This indicates that the relationship between Tax Avoidance and Firm Value is not significant. Hence, H2 is rejected.

H3: CSR Disclosure (CSRD) has a positive effect on Firm Value. Based on Model I, CSRD has a positive coefficient of 1.760 but a p-value of 0.172, which is greater than 0.05. This suggests that the effect of CSR Disclosure on Firm Value is not significant. Thus, H3 is rejected.

H4: Institutional Ownership (IO) positively moderates the relationship between CAR and Firm Value. From Model III, the interaction term CAR × IO has a positive coefficient of 0.035 with a p-value of 0.005, less than 0.05. This indicates that Institutional Ownership significantly strengthens the positive effect of CAR on Firm Value. Therefore, H4 is accepted.

H5: Institutional Ownership (IO) positively moderates the relationship between TA and Firm Value. Based on Model III, the interaction term TA × IO has a coefficient of -0.004 with a p-value of 0.855, which is greater than 0.05. This indicates that Institutional Ownership does not significantly moderate the effect of Tax Avoidance on Firm Value. Hence, H5 is rejected.

H6: Institutional Ownership (IO) negatively moderates the relationship between CSR Disclosure and Firm Value. From Model III, the interaction term CSRD × IO has a negative coefficient of -0.112 with a p-value of 0.025, which is less than 0.05. This shows that Institutional Ownership significantly weakens the effect of CSR Disclosure on Firm Value. Therefore, H6 is accepted.

DISCUSSION

The Effect of Capital Adequacy Ratio on Firm Value

Hypothesis H1 proposed that Capital Adequacy Ratio (CAR) has a positive effect on Firm Value. Based on the estimation results from Model II, which evaluates the direct effects of the independent variables on firm value, CAR shows a positive and statistically significant coefficient, indicating that higher capital adequacy contributes to higher firm value. A higher Capital Adequacy Ratio reflects stronger financial stability and resilience, which is critical in the banking sector. From the signaling theory perspective, a high CAR acts as a positive signal to the market, indicating that the bank has the capacity to absorb risks and comply with regulatory capital requirements. This signal enhances investor confidence by portraying the bank as less risky and more capable of sustaining performance over time. As a result, firms with higher CAR tend to be valued more favorably by investors, as market perceptions of lower risk translate into higher firm value. These findings are consistent with prior research that has documented a significant positive relationship between CAR and firm value (Jagirani et al., 2023; Perdana et al., 2023; Chernykh et al., 2023). Although the interaction term between CAR and Institutional Ownership in Model III shows a negative and significant coefficient (–1.320; p = 0.043), this model is intended to examine the moderating role of institutional ownership rather than the direct effect of CAR. Therefore, the interpretation of H1 remains based on Model II, and the results support the acceptance of H1.

The Effect of Tax Avoidance on Firm Value

Hypothesis H2 proposed that Tax Avoidance has a negative effect on Firm Value. The discussion of H2 emphasizes that, based on the estimation results from the selected model, Tax Avoidance shows a positive coefficient of 0.224 with a p-value of 0.421, indicating that the effect is not statistically significant at the 5 percent level. This suggests that tax avoidance practices do not have a meaningful impact on firm value within the sampled banks. From a signaling theory perspective, the level of tax avoidance does not provide a strong signal to investors that would influence their perception of the firm's value. In the banking context, although tax avoidance could theoretically enhance net profits, the observed levels in the sample appear insufficient to trigger a

significant market response. These findings are consistent with previous studies indicating that the effect of tax avoidance on firm value can be insignificant, particularly in highly regulated sectors (Shubita, 2024). Therefore, H2 is not supported, highlighting that tax planning strategies in the studied banks do not materially affect investor valuation.

The Effect of CSR Disclosure on Firm Value

Hypothesis H3 proposed that CSR Disclosure has a positive effect on Firm Value. Based on the estimation results from Model II, which is used to evaluate the direct effects of the independent variables on firm value, CSR Disclosure shows a positive coefficient of 1.760 with a p-value of 0.172, indicating that the effect is not statistically significant at the 5 percent level. This suggests that CSR disclosure practices in the sampled banks do not have a meaningful direct impact on firm value. Although CSR Disclosure becomes positive and statistically significant in Model III with a coefficient of 5.125 and a p-value of 0.008, this model incorporates the interaction term with institutional ownership and is primarily intended to examine the moderating effect rather than the direct relationship between CSR Disclosure and firm value. From a signaling theory perspective, CSR disclosure is expected to act as a signal of transparency, accountability, and commitment to sustainable business practices. However, the findings indicate that this signal alone is not strong enough to influence investor perceptions of firm value when the moderating effect is not considered. Therefore, H3 is not supported, emphasizing that CSR disclosure by itself does not substantially affect investor valuation.

The Moderating Role of Institutional Ownership on the Relationship between Capital Adequacy Ratio and Firm Value

Hypothesis H4 proposed that Institutional Ownership positively moderates the relationship between Capital Adequacy Ratio (CAR) and Firm Value. The results indicate that the interaction between CAR and Institutional Ownership (IO) has a coefficient of 0.035 with a p-value of 0.005, which is statistically significant. This finding confirms that the presence of institutional investors strengthens the positive effect of CAR on market perceptions of firm value. In addition, IO as an independent variable also shows a significant direct effect on firm value, while the moderating effect remains significant when analyzed together. This pattern can be classified as a quasi-moderation, where institutional ownership amplifies the CAR–firm value relationship through its direct contribution. From the signaling theory perspective, institutional investors enhance monitoring mechanisms and the credibility of capital management, leading to more positive market perceptions of a bank's performance and value. Simultaneously, from the market discipline theory perspective, the presence of institutional investors exerts external pressure on management to maintain prudent capital levels and sound financial policies. This external oversight reduces managerial discretion in risk-taking and ensures that capital adequacy is not only a regulatory requirement but also a signal of stability to the market. These findings are consistent with previous studies highlighting the role of institutional ownership in reinforcing the impact of financial indicators on firm value (Garel et al., 2022). Therefore, H4 is supported, underscoring the strategic role of institutional investors in strengthening the signaling effect of CAR and applying market discipline to the banking sector.

The Moderating Role of Institutional Ownership on the Relationship between Tax Avoidance and Firm Value

Hypothesis H5 proposed that Institutional Ownership positively moderates the relationship between Tax Avoidance (TA) and Firm Value. The results show that the interaction between TA and Institutional Ownership has a coefficient of –0.004 with a p-value of 0.855, indicating that the moderating effect is not statistically significant. This finding suggests that, within the study sample, the presence of institutional investors does not strengthen the relationship between Tax Avoidance and firm value. From the signaling theory perspective, although institutional ownership is theoretically expected to curb aggressive tax avoidance practices, this moderating signal is not always effectively transmitted to the market. This may occur because institutional investors tend to prioritize portfolio returns over active monitoring, especially in highly regulated sectors like

banking, where managerial discretion is relatively limited (Driss et al., 2021). Similarly, from the market discipline theory perspective, institutional investors are expected to impose external pressure on management to maintain prudent tax policies and financial transparency. However, in the observed sample, this discipline mechanism appears limited, as the regulatory environment constrains managerial discretion and reduces the impact of institutional oversight on market perceptions of firm value. Consequently, the marginal role of IO as an additional governance mechanism is constrained, and the moderating effect remains insignificant. Based on these findings, H5 is not supported.

The Moderating Role of Institutional Ownership on the Relationship between CSR Disclosure and Firm Value

Hypothesis H6 proposed that Institutional Ownership negatively moderates the relationship between CSR Disclosure (CSRD) and Firm Value. The estimation results indicate that the interaction between CSRD and Institutional Ownership has a coefficient of –0.112 with a p-value of 0.025, showing that the moderating effect is statistically significant and in the expected negative direction. Additionally, Institutional Ownership also exerts a significant direct effect on firm value, suggesting that the moderating effect can be categorized as quasi-moderation. In other words, for banks with higher levels of institutional ownership, the impact of CSR disclosure on firm value tends to be more limited. From the signaling theory perspective, CSR expenditures in firms with substantial institutional ownership may be perceived by the market as mandatory costs (non-discretionary) that do not necessarily translate into economic value creation. In such cases, CSR activities without clear economic contributions may be considered overinvestment or inefficient resource allocation, particularly in highly regulated banking sectors where managerial discretion is limited (Wang et al., 2021). Similarly, from the market discipline theory perspective, institutional investors are expected to monitor CSR practices to ensure that expenditures generate genuine long-term value. However, when CSR initiatives are perceived as obligatory or non-discretionary, the disciplining effect of institutional ownership is reduced, and the market may interpret these activities as costs rather than value-enhancing signals. Consequently, CSR is seen not as a signal of long-term value creation but potentially as a factor that could suppress profits and lower firm value perceptions (Shah et al., 2025). Based on these insights, H6 is supported.

Goodness-of-Fit and Model Significance

The R^2 values indicate the proportion of variance in firm value explained by the independent variables, with Model I at 0.136, Model II at 0.709, and Model III at 0.740, showing that Model II and Model III have substantially greater explanatory power. Adjusted R^2 values of 0.114, 0.616, and 0.646, respectively, confirm that Model III remains the most robust after accounting for the number of predictors and sample size, highlighting the added explanatory value of incorporating Institutional Ownership as a moderating variable. F-statistics of 6.309, 7.644, and 7.876 with p-values of 0.000 for all models indicate that the independent variables collectively exert a significant effect on firm value. Overall, the models demonstrate adequate goodness-of-fit and strong statistical significance, with Model III performing best in capturing variations in firm value, underscoring both the theoretical relevance and empirical robustness of including Institutional Ownership to explain firm value dynamics in the banking sector.

CONCLUSION

Main Finding

Based on the empirical results, this study finds that the Capital Adequacy Ratio (CAR) has a positive and significant effect on firm value in Indonesian banking companies, indicating that stronger capital adequacy increases market valuation. Institutional Ownership (IO) also significantly strengthens the positive effect of CAR on firm value, suggesting that institutional investors enhance monitoring and reinforce investor confidence in well-capitalized banks. In contrast, Tax Avoidance (TA) does not have a significant effect on firm value, and IO does not significantly moderate the relationship between TA and firm value, implying that tax avoidance practices are not a primary consideration for investors in valuing banking firms. Furthermore,

Corporate Social Responsibility Disclosure (CSRD) does not show a significant direct effect on firm value. However, when moderated by IO, CSRD shows a significant negative effect on firm value, indicating that in banks with higher institutional ownership, CSR disclosure may be perceived by the market as additional costs rather than value-enhancing activities. These findings highlight that institutional ownership plays an important role in shaping how financial strength and corporate disclosure are interpreted by investors in the Indonesian banking sector.

Research Limitations

This study has several limitations that should be considered. First, the focus on banking companies listed on the Indonesia Stock Exchange during the 2020–2024 period limits the generalizability of the results to other sectors, industries, or countries with different regulatory frameworks and market conditions. Second, the use of purposive sampling and the removal of outliers resulted in an unbalanced panel with a total of 125 observations, which, although improving the reliability of the estimates, may reduce the representativeness of the sample. Third, some classical regression assumptions were not fully met, particularly regarding the non-normality of residuals and indications of heteroskedasticity in one of the models, which, despite being addressed using robust standard errors, could still affect the precision of coefficient estimates. Finally, the study relies entirely on secondary data and does not explicitly address potential endogeneity. Future research is therefore recommended to expand the scope, incorporate more diverse data sources, and apply alternative estimation methods to enhance the robustness and generalizability of the findings.

Research Recommendations

Based on the findings of this study, future research is recommended to expand the sample scope and consider additional variables as mediators or moderators, such as corporate governance, liquidity risk, or corporate reputation, to deepen the understanding of how financial and non-financial factors affect firm value. Alternative methodological approaches, including dynamic panel models, instrumental variable techniques, or case studies, can also be employed to explore investor perceptions of signals from capital adequacy, CSR activities, and tax strategies. Practically, strong capital management and effective institutional ownership can enhance positive signals to the market regarding firm value, while CSR initiatives and tax policies should be implemented substantively to have a tangible impact on market perceptions.

REFERENCES

Abdelsalam, O., Chantziaras, A., Joseph, N. L., & Tsileponis, N. (2024). Trust matters: A global perspective on the influence of trust on bank market risk. *Journal of International Financial Markets, Institutions and Money*, *92*. https://doi.org/10.1016/j.intfin.2024.101959

Abid, A., Gull, A. A., Hussain, N., & Nguyen, D. K. (2021). Risk governance and bank risk-taking behavior: Evidence from Asian banks. Journal of International Financial Markets, Institutions and Money, 75. https://doi.org/10.1016/j.intfin.2021.101466

Afzali, M., & Thor, T. (2025). Corporate culture and tax planning. *Review of Quantitative Finance and Accounting*, *64*(2), 861–898. https://doi.org/10.1007/s11156-024-01320-1

Andersen, H., & Juelsrud, R. E. (2024). Optimal capital adequacy ratios for banks. *Latin American Journal of Central Banking*, *5*(2). https://doi.org/10.1016/j.latcb.2023.100107

Bafera, J., & Kleinert, S. (2023). Signaling Theory in Entrepreneurship Research: A Systematic Review and Research Agenda. *Entrepreneurship: Theory and Practice*, *47*(6), 2419–2464. https://doi.org/10.1177/10422587221138489

Bagh, T., Hunjra, A. I., & Corbet, S. (2025). The impact of corporate governance on firm value: Understanding the role of strategic change. *International Review of Economics and Finance*, *103*. https://doi.org/10.1016/j.iref.2025.104472

Bai, J., Choi, S. H., & Liao, Y. (2024). Standard errors for panel data models with unknown clusters. *Journal of Econometrics, 240*(2), 105004. https://doi.org/10.1016/j.jeconom.2020.08.006

Bai, Y., Liu, X., & Alam, F. (2025). Corporate tax avoidance and stock returns: Unveiling the moderating mechanism of tax plans. *International Review of Financial Analysis*, *106*. https://doi.org/10.1016/j.irfa.2025.104461

Broekhoff, M. C., van der Cruijsen, C., & de Haan, J. (2024). Towards financial inclusion: Trust in banks' payment services among groups at risk. *Economic Analysis and Policy*, *82*, 104–123. https://doi.org/10.1016/j.eap.2024.02.038

Bursa Efek Indonesia (IDX). (2024). *Summary Financial Ratio by Industry (Oktober 2024)*. IDX – Digital Statistic/LaporanStatistik.https://idx.co.id/id/data-pasar/laporan-statistik/digital-statistic/monthly/financial-report-and-ratio-of-listed-companies/summary-financial-ratio-by-industry?filter=eyJ5ZWFyIjoiMjAyNCIsIm1vbnRoIjoiMTAiLCJxdWFydGVyIjowLCJ0eXBlIjoibW9udGhseSJ9&

Chen, S., Ma, H., Teng, H., & Wu, Q. (2022). Banking liberalization and corporate tax planning: Evidence from natural experiments. *Journal of Corporate Finance*, *76*. https://doi.org/10.1016/j.jcorpfin.2022.102264

Cheng Hsiao. (2022). *Analysis of Panel Data* (4th ed.). Cambridge University Press. https://books.google.co.id/books?hl=id&lr=&id=DHtrEAAAQBAJ&oi=fnd&pg=PR13&dq=panel+data+book&ots=QTi4AR1Fr4&sig=meGONFYdkBRqQerB_ZsPdV4bLjM&redir_esc=y#v=onepage&q=panel%20data%20book&f=false

Chernykh, L., Davydov, D., & Sihvonen, J. (2023). Financial stability and public confidence in banks. *Journal of Financial Stability, 69*, 101187. https://doi.org/10.1016/j.jfs.2023.101187

Choi, J. P., Furusawa, T., & Ishikawa, J. (2020). Transfer pricing regulation and tax competition. *Journal of International Economics*, *127*, 103367. https://doi.org/10.1016/j.jinteco.2020.103367

de Villiers, C., Ma, D., & Marques, A. (2024). Corporate social responsibility disclosure, dividend payments and firm value – Relations and mediating effects. *Accounting and Finance*, *64*(1), 185–219. https://doi.org/10.1111/acfi.13140

Direktorat Jenderal Pajak. (2020). *Laporan Keuangan DJP TA 2020 Audited — Informasi Publik*. Statistik Pajak(Stats.Pajak.Go.Id).https://stats.pajak.go.id/sites/default/files/2021-11/Laporan%20Keuangan%20DJP%20TA%202020%20Audited%20-%20Informasi%20Publik.pdf

Driss, H., Drobetz, W., Ghoul, S. E., & Guedhami, O. (2021). Institutional investment horizons, corporate governance, and credit ratings: International evidence. *Journal of Corporate Finance*, https://doi.org/10.1016/j.jcorpfin.2020.101874

Drobetz, W., El Ghoul, S., Guedhami, O., & Yu, X. (2025).Beyond ownership: The role of institutional investors in international corporate governance. *Corporate Governance: An International Review*, 33(5), 1024–1038. https://doi.org/10.1111/corg.12635

Dyussembina, S., & Park, K. (2024). Book-tax differences, dividend payout, and firm value. *International Review of Financial Analysis*, *91*. https://doi.org/10.1016/j.irfa.2023.103037

Elamer, A. A., Boulhaga, M., & Ibrahim, B. A. (2024). Corporate tax avoidance and firm value: The moderating role of environmental, social, and governance (ESG) ratings. *Business Strategy and the Environment*, *33*(7), 7446–7461. https://doi.org/10.1002/bse.3881

Fabisik, K., Fahlenbrach, R., Stulz, R. M., & Taillard, J. P. (2021). Why are firms with more managerial ownership worth less? *Journal of Financial Economics*, *140*(3), 699–725. https://doi.org/10.1016/j.jfineco.2021.02.008

Febiyanti, E., & Hersugondo, H. (2022). Corporate Governance and Profitability: The Role of Cost of Capital as Mediation. *Jurnal Keuangan Dan Perbankan*, *26*(2), 460–474. https://doi.org/10.26905/jkdp.v26i2.7548

Folsom, D., Hasan, M. M., & Zhou, F. (2025). Executive-level internal governance and tax planning. *Journal of Contemporary Accounting & Economics*, *21*(3), 100492. https://doi.org/10.1016/j.jcae.2025.100492

Galvao, A. F., Gu, J., & Volgushev, S. (2020). On the unbiased asymptotic normality of quantile regression with fixed effects. *Journal of Econometrics, 218*(1), 178–215. https://doi.org/10.1016/j.jeconom.2019.12.017

Garel, A., Petit-Romec, A., & Vennet, R. Vander. (2022). Institutional Shareholders and Bank Capital. *Journal of Financial Intermediation*, *50*. https://doi.org/10.1016/j.jfi.2022.100960

Gil-Jardón, J. A., Morganti, P. R., & Atristain-Suárez, C. (2024). The Role of Development and Commercial Banking in Promoting Economic Growth in Mexico: A Sectoral Analysis. *Journal of Risk and Financial Management*, *17*(11). https://doi.org/10.3390/jrfm17110505

Godspower-Akpomiemie, E., & Ojah, K. (2021). Market discipline, regulation and banking effectiveness: Do measures matter? *Journal of Banking & Finance, 133*, 106249. https://doi.org/10.1016/j.jbankfin.2021.106249

Guo, J., Li, C., & Jiao, W. (2024). Corporate Social Responsibility disclosure and market value: The mediating role of investor attention. *Finance Research Letters*, *67*. https://doi.org/10.1016/j.frl.2024.105863

Habib, A., Ranasinghe, D., & Perera, A. (2024). Strategic Deviation and Corporate Tax Avoidance: A Risk Management Perspective. *Journal of Risk and Financial Management*, *17*(4). https://doi.org/10.3390/jrfm17040144

Hasan, M. M., Lobo, G. J., & Qiu, B. (2021). Organizational capital, corporate tax avoidance, and firm value. *Journal of Corporate Finance*, *70*. https://doi.org/10.1016/j.jcorpfin.2021.102050

Hitz, L., Mustafi, I. H., & Zimmermann, H. (2022). The pricing of volatility risk in the US equity market. *International Review of Financial Analysis*, *79*. https://doi.org/10.1016/j.irfa.2021.101951

International Monetary Fund (IMF). (2023). *Indonesia: 2023 Article IV Consultation — Press Release; Staff Report; and Statement by the Executive Director for Indonesia*. IMF. https://www.imf.org/en/Publications/CR/Issues/2023/06/22/Indonesia-2023-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-535060

Jagirani, T. S., Chee, L. C., & Kosim, Z. B. (2023). Relationship between financial risks and firm value: A moderating role of capital adequacy. *Investment Management and Financial Innovations*, *20*(1), 293–303. https://doi.org/10.21511/imfi.20(1).2023.25

Kahloul, I., Sbai, H., & Grira, J. (2022). Does Corporate Social Responsibility reporting improve financial performance? The moderating role of board diversity and gender composition. *Quarterly Review of Economics and Finance*, *84*, 305–314. https://doi.org/10.1016/j.qref.2022.03.001

Kałdoński, M., & Jewartowski, T. (2024). Tax aggressiveness under concentrated ownership: The importance of long-term institutional investors. *Finance Research Letters*, *65*. https://doi.org/10.1016/j.frl.2024.105541

Kartikasari, D., & Ahyani, F. (2022). Influence of Capital on Firm Value Through Enterprise Risk Management in Banking. *Economics and Business Quarterly Reviews*, *5*(2), 231–243. https://doi.org/10.31014/aior.1992.05.02.429

Kazdal, A., Kılıç, Y., & Yılmaz, M. H. (2024). Financial market discipline on bank risk: Implications of state ownership. *Central Bank Review, 24*(2), 100157. https://doi.org/10.1016/j.cbrev.2024.100157

Kementerian Keuangan. (2024). *APBN 2024: Mendukung Pemulihan dan Pertumbuhan Ekonomi*. Anggaran Kemenkeu. https://anggaran.kemenkeu.go.id/in/post/apbn-2024-mendukung-pemulihan-dan-pertumbuhan-ekonomi

Krieg, K. S., & Li, J. (2025). Does diverse tax planning reduce tax risk? *Journal of Contemporary Accounting & Economics*, *21*(3), 100490. https://doi.org/10.1016/j.jcae.2025.100490

Kuersteiner, G. M., & Prucha, I. R. (2013). Limit theory for panel data models with cross sectional dependence and sequential exogeneity. *Journal of Econometrics, 174*(2), 107–126. https://doi.org/10.1016/j.jeconom.2013.02.004

Lai, W. F., & Goh, K. L. (2025). Loan Loss Provisions and Bank Value in the United States: A Moderation Analysis of Economic Policy Uncertainty. *Economics*, *19*(1). https://doi.org/10.1515/econ-2025-0141

Lee, Y., & Choi, K. (2022). Tax Avoidance and Firm Value: International Evidence*23. *Korean Accounting Review*, *47*(3), 33–74. https://doi.org/10.24056/KAR.2022.06.002

Lei, Z., Petmezas, D., Rau, P. R., & Yang, C. (2025). Local boy does good: The effect of CSR activities on firm value. *Journal of Banking and Finance*, *173*. https://doi.org/10.1016/j.jbankfin.2025.107398

Li, Z., Lin, W., & Zhou, S. (2024). The effect of mandatory CSR disclosure on stock liquidity. *China Economic Review*, *87*. https://doi.org/10.1016/j.chieco.2024.102232

Lv, W., Meng, Q., Cao, Y., & Liu, J. (2025). Impact and moderating mechanism of corporate tax avoidance on firm value from the perspective of corporate governance. *International Review of Financial Analysis*, *99*. https://doi.org/10.1016/j.irfa.2025.103926

Mai, M. U., & Syarief, M. E. (2021). Corporate Governance and Dividend Policy in the Banking Sector on the Indonesian Stock Exchange. *Jurnal Keuangan Dan Perbankan*, *25*(1). https://doi.org/10.26905/jkdp.v25i1.4974

MacKinnon, J. G., Nielsen, M. Ø., & Webb, M. D. (2023). Cluster-robust inference: A guide to empirical practice. *Journal of Econometrics, 232*(2), 272–299. https://doi.org/10.1016/j.jeconom.2022.04.001

Miao, W., Ma, Y., & Xu, H. (2025). The diminishing marginal effect of the capital adequacy ratio on the control of bank risk-taking. *North American Journal of Economics and Finance*, *80*. https://doi.org/10.1016/j.najef.2025.102495

Molyneux, P., Upreti, V., & Zhou, T. (2023). Depositor market discipline: New evidence from selling failed banks. *International Review of Financial Analysis*, 89, 102767. https://doi.org/10.1016/j.irfa.2023.102767

Moradi, M., Yazdifar, H., Eskandar, H., & Namazi, N. R. (2022). Institutional Ownership and Investment Efficiency: Evidence from Iran. *Journal of Risk and Financial Management*, *15*(7). https://doi.org/10.3390/jrfm15070290

Nguyen, Q. K. (2022). Determinants of bank risk governance structure: A cross-country analysis. *Research in International Business and Finance*, *60*. https://doi.org/10.1016/j.ribaf.2021.101575

Nguyen, V. H. (2025). Corporate social responsibility disclosure and firm value: a signaling theory perspective. *Journal of Economics and Development*, *27*(2), 114–128. https://doi.org/10.1108/JED-02-2024-0067

OECD. (2025). *Revenue Statistics in Asia and the Pacific 2025: Indonesia (Country Notes)*. OECD. https://www.oecd.org/en/publications/revenue-statistics-in-asia-and-the-pacific-2025-country-notes_30d43f41-en/indonesia_19969e8e-en.html

Otoritas Jasa Keuangan. (2016). *Peraturan OJK Nomor 55/POJK.03/2016 tentang Penerapan Tata Kelola bagi Bank Umum*. Jakarta: OJK.

Otoritas Jasa Keuangan. (2017). *Peraturan OJK Nomor 51/POJK.03/2017 tentang Penerapan Keuangan Berkelanjutan bagi Lembaga Jasa Keuangan*. Jakarta: OJK.

Otoritas Jasa Keuangan. (2022). *Peraturan OJK Nomor 27/POJK.03/2022 tentang Kewajiban Penyediaan Modal Minimum Bank Umum*. Jakarta: OJK.

Otoritas Jasa Keuangan. (2017). *Peraturan Otoritas Jasa Keuangan Nomor 11/POJK.04/2017 tentang Laporan Kepemilikan atau Setiap Perubahan Kepemilikan Saham Perusahaan Terbuka.* Jakarta: Otoritas Jasa Keuangan.

Pavlou, C., Persakis, A., & Kolias, G. (2025). The Impact of Board Characteristics on Tax Avoidance: Do Industry Regulations Matter? *Journal of Risk and Financial Management*, *18*(6). https://doi.org/10.3390/jrfm18060287

Perdana, M. R., Sudiro, A., Ratnawati, K., & Rofiaty, R. (2023). Does Sustainable Finance Work on Banking Sector in ASEAN?: The Effect of Sustainable Finance and Capital on Firm Value with Institutional Ownership as a Moderating Variable. *Journal of Risk and Financial Management*, *16*(10). https://doi.org/10.3390/jrfm16100449

Roy, P. P., Rao, S., & Zhu, M. (2022). Mandatory CSR expenditure and stock market liquidity. *Journal of Corporate Finance*, *72*. https://doi.org/10.1016/j.jcorpfin.2022.102158

Sarhan, A. A., Elmagrhi, M. H., & Elkhasen, E. M. (2024). Corruption prevention practices and tax avoidance: The moderating effect of corporate board characteristics. *Journal of International Accounting, Auditing and Taxation, 55*. https://doi.org/10.1016/j.intaccaudtax.2024.100615

Seifzadeh, M. (2022). The Effectiveness of Management Ability on Firm Value and Tax Avoidance. *Journal of Risk and Financial Management*, *15*(11). https://doi.org/10.3390/jrfm15110539

Shah, S. Z. A., Akbar, S., & Zhu, X. (2025). Mandatory CSR disclosure, institutional ownership and firm value: Evidence from China. *International Journal of Finance and Economics*, *30*(1), 71–85. https://doi.org/10.1002/ijfe.2908

Shubita, M. F. (2024). The effect of tax avoidance on firm value with leverage as a moderating variable. *Investment Management and Financial Innovations*, *21*(2), 336–344. https://doi.org/10.21511/imfi.21(2).2024.27

Su, Q., & Deng, Y. (2024). Tax avoidance news, investor behavior, and stock market performance. *Finance Research Letters*, *67*. https://doi.org/10.1016/j.frl.2024.105834

Sugiyono. (2017). Metode penelitian kuantitatif, kualitatif, dan R & D. *Alfabeta*. https://ardhindie.com/pdf/Sugiyono.-%282017%29.-Metode-Penelitian-Kuantitatif%2C-Kualitatif-Dan-R%26D/

Truong, T. N., & Nguyen, V. C. (2024). The impact of the board of directors and the audit committee on the transparency of financial information of companies listed in a frontier market. *Heliyon*, *10*(22). https://doi.org/10.1016/j.heliyon.2024.e40188

Vishnu Nampoothiri, M., Entrop, O., & Annamalai, T. R. (2024). Effect of mandatory sustainability performance disclosures on firm value: Evidence from listed European firms. *Corporate Social Responsibility and Environmental Management*, *31*(6), 5220–5235. https://doi.org/10.1002/csr.2860

Vu, T. H., & Ngo, T. T. (2023). Bank capital and bank stability: The mediating role of liquidity creation and moderating role of asset diversification. *Cogent Business & Management, 10*(2), 2208425. https://doi.org/10.1080/23311975.2023.2208425

Wang, Z., Lu, W., & Liu, M. (2021). Corporate social responsibility overinvestment in mergers and acquisitions. *International Review of Financial Analysis*, *78*, 101944. https://doi.org/10.1016/j.irfa.2021.101944

Wibowo, S. A. (2025). Penggunaan EViews dalam Pengujian Data Panel untuk Penelitian Akuntansi: Pendekatan Konseptual dan Aplikatif. *Reviu Akuntansi Dan Bisnis Indonesia*, *9*(1), 174–186. https://doi.org/10.18196/rabin.v9i1.26898

World Bank. (2025). *Global Financial Development Report*. World Bank. https://www.worldbank.org/en/publication/gfdr

Xu, R., Liu, J., & Yang, D. (2023). The Formation of Reputation in CSR Disclosure: The Role of Signal Transmission and Sensemaking Processes of Stakeholders. *Sustainability (Switzerland)*, *15*(12). https://doi.org/10.3390/su15129418