

-RESEARCH ARTICLE-

THE EFFECT OF MACROECONOMIC FACTOR, EARNING MANAGEMENT AND FINANCIAL RISK ON FIRMS' VALUE: AN EMPIRICAL ANALYSIS OF LISTED COMMERCIAL BANKS

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Abstract

Numerous economic aspects, earnings management, and risk considerations impact the value of the banking sector, and academics must pay close attention to this element. This article aims to examine the effect of macroeconomic factors, earnings management such as return on assets (ROA) and return on equity (ROE), and financial risks such as credit and liquidity risks on the firm value of listed commercial banks in Indonesia. From 2011 to 2020, secondary data from the Bank of Indonesia were collected for the study. The study adopted the fixed-effect model (FEM) to examine the link between the variables and the robust standard error to examine the relationships between the variables. According to the results, the interest rate, ROA, and ROE favorably affect the firm value of Indonesian commercial banks that are publicly traded. The data also revealed a negative relationship between credit risk and liquidity risk and the firm value of

Citation (APA): Febrianto, G. N., Ratnawati, T., Riyadi, S. (2022). The Effect of Macroeconomic Factor, Earning Management and Financial Risk on Firms' Value: An Empirical Analysis of Listed Commercial Banks. *International Journal of Economics and Finance Studies*, 14 (02), 156-170. doi:10.34111/ijefs. 20220030

Indonesian commercial banks that are publicly traded. The article aids policymakers in formulating policies for raising the value of banks by improving earnings management and minimizing financial risk.

Keywords: Interest rate, return on assets, macroeconomic factor, earning management, return on equity, credit risk, financial risk, liquidity risk.

1. INTRODUCTION

The banking industry is considered the backbone of the economy since it enables both large and small firms to effortlessly satisfy their financial obligations and conduct financial transactions. Scholars and academics are captivated by the banks' firm value, financial strength (Jang 2020; Lestari & Hanifah, 2020). The firm value is the market worth of the firm's shares, which reflects the firm's managerial efficiency, business performance, and present financial status. The firm's value determines the beliefs of shareholders and investors regarding the firm's market viability, profitability, and safety of investment capital. The rising firm value assures investors of the safety of their capital and the likelihood of greater returns on their investments. This inspires investor confidence and aids in gaining their trust. In light of the increased firm value, interested parties keep their investments and make more investments.

In contrast, if the coin is flipped, it is evident that if a company's worth declines, it may incur significant losses. They may lose the confidence of investors and shareholders, resulting in decreased investment. The names Alenazi and Barbour (2019). To minimize contingent loss, banks and other organizations must know how they might maintain or increase their firm's value.

Several econometric variables, including interest rate, earnings management, and financial risk, impact the value of a company. If the econometric elements are positive, such as bank-favorable or rising interest rates, it assists the banks in maintaining their earnings and firm value (Mughtar, Ramadhani, Rasyimah, & Syamni, 2021). If banks have greater returns on assets (capacity of assets to generate more earnings) or returns on equity (capacity of equity without liabilities to generate more revenues), this indicates competent earnings management. As a result, dividends on shares increase, and the business value rises (Septiani, Ariyani, & Ispriyahadi, 2020). In addition, credit risk is the financial risk that arises when a borrower fails to return the amount borrowed or its interest, as well as liquidity risk, which occurs when a company cannot convert its assets into cash and carry out transactions, affects total earnings. Therefore, it decreases the firm's value (Batten, 2019). This study will investigate the effects of interest rate, ROA, ROE, credit risk, and liquidity risk on the firm value of listed Indonesian commercial banks. Indonesia is the largest economy in Southeast Asia and is one of the emerging market-based economies. The country's nominal GDP is projected to reach \$1.29 trillion in 2022. The significance of the Indonesian economy's banking sector cannot be overstated. Suaiba, Abdullah, Suyanto, and Karundeng (2021) are examples of

government, semi-government, private, and Islamic commercial banks in Indonesia. The commercial banks of Indonesia provide employment possibilities to a sizeable portion of Indonesia's male and female population. These banks contribute to the nation's gross domestic product and government revenues and support other economic sectors (Juliana, Faathir, & Sulthan, 2019).

The purpose of this study is to determine the impact of economic variables such as interest rate, earnings management, and ROA and ROE on the value of a company. One of its objectives is to examine the effects of financial risks such as credit risk and liquidity risk on the value of the company. Numerous scholars have researched the firm's value. Nonetheless, the present article represents a significant literary contribution. Firstly, the present study is far more exhaustive than previous research on business value. In the available literature, business value has been examined using either econometric factors, earnings management effectiveness, or financial risk management effectiveness. This gap is closed by the current study, which evaluates the impact of economic variables such as interest rate, earnings management such as ROA and ROE, and financial risks such as credit risk and liquidity risk on the value of a company. Second, the existing research has studied the firm value based on econometric characteristics, earnings management, and financial hazards for businesses in general. This study investigates the effects of econometric parameters, earnings management, and financial risks on bank company value. Thus, it contributes to the literature. Thirdly, many commercial banks in Indonesia must pay attention to the firm value to maintain the confidence of their shareholders and investors. Still, very few studies have been conducted on the interest rate, ROA, ROE, credit risk, liquidity risk, and firm value. The study examining these factors' effect on the firm value of Indonesian commercial banks closes a gap in the literature.

The remainder of the paper consists of the following sections: In the second section of the article, the relationship between interest rate, ROA, ROE, credit risk, liquidity risk, and firm value is reviewed. The third section of the paper briefly describes the approach used to collect data and examine variable relationships. In the fourth section of the study, research findings are extracted. Following this, the findings are reviewed in light of previous research findings. Implications, limitations, and restrictions follow the description of the study.

2. LITERATURE REVIEW

The importance of the firm's high value in recruiting shareholders, investors, and lenders and assuring their continued employment cannot be overstated. Some elements contribute to enhancing the business's worth, while others may pose a barrier to maintaining firm value (Clevelanda & Kharisma, 2019). For instance, economic elements such as the interest rate, financial management such as ROA and ROE, and financial hazards such as credit risk and liquidity risk contribute to the increase in business value.

In the following section, the relationship between the interest rate, ROA, ROE, credit risk, liquidity risk, and the firm's worth is determined by analyzing the perspectives of past authors.

Earnings for financial and banking institutions interest on loans. The interest rate determines the profitability of loaned funds. Corporations with high-interest rates can generate substantial profits and distribute more returns to shareholders. Therefore, the enterprises' financial market value is high (Boateng, Du, Bi, Kwabi, & Glaister, 2022). Pangestuti and Tindangen (2020) article explored the relationship between interest rate and company value. This study indicates that the amount of interest imposed on loans affects banks' earnings. When the interest rate rises, the loans issued to the general people may enable banks to earn more money. The increased earnings boost the bank's capacity to increase shareholder returns.

Consequently, the interest rate has a beneficial effect on the value of the company. Barua and Barua (2020) study the effects of interest rate and capital sufficiency on business value through empirical research. During covid-19, data on variables such as interest rate, capital adequacy, and company value were collected from the banking sector of Indonesia's growing economy. According to the study, the interest rate on money lent is directly related to firm value since it influences firm profitability; only if the interest rate is high can banks maintain large profits, dividends, and share prices. Thus, the firm's value is preserved.

As with other institutions, banks have earning management tasked with monitoring and maintaining the firms' revenue sources. The Return on Assets (ROA) is a metric used to measure the firm's profitability and a tool used by earning management executives to fulfill their tasks (Husna & Satria, 2019). Suppose the ROA for the current period is greater than the ROA for the preceding period. In that case, it indicates that banking firms are generating more money and that their capacity to make greater profits has increased. The firms with a higher performance of earning management, as evidenced by rising returns on assets, can pay substantial dividends on their shares, increasing their share prices and improving their performance (Sukmawardini & Ardiansari, 2018).

Similarly, Safitri and Nani (2021) research explores the relationship between earnings management and ROA regarding business value. To protect their reputation and the support of their stakeholders, financial institutions must maintain control over their earnings and revenue sources. If earnings management is good and the firm has strong returns on assets, its ability to pay dividends on its stock will improve. Thus, the companies' market value increases. Using multiple regression approaches, Jufrizen and Al Fatin (2020) explore the influences of ROA, debt to equity ratio, ROE, and firm size on the firm value of six pharmaceutical businesses listed on the Indonesia Stock Exchange over five years. The results indicated that firms with a high ROA would have a high value due to their strong profitability.

The return on equity (ROE) is a metric used to evaluate the firm's profitability and the success of its earnings management in producing and preserving profits. It is a more accurate indicator of the effectiveness of earnings management. If the ROE during a certain period grows dramatically, it indicates that the firm's earnings have increased and its ability to generate higher profits has improved. Therefore, the firm's value increases in the eyes of its stakeholders, particularly investors and stockholders (Pointer & Khoi, 2019). Oktarina (2018) research focused on ROE and company value. According to the study, the ROE ratio will improve if the firm's earning management is doing its obligations efficiently and if the firm is generating a larger profit with the existing equity. If the returns on equity are higher, so are the returns on the shares, which increases the company's market value. Sinaga, Lim, Andresen, and Waruwu (2022) quantified the effects of ROE, dividend policy, funding decisions, and business size on firm value in their study. For the investigation of the relationship between ROE, dividend policy, funding decisions, company size, and firm value, quantitative descriptive research and multiple linear regression were utilized on a sample of 37 companies listed on the Indonesia Stock Exchange. The analysis found that companies with a greater ROE, the ability to distribute higher profits on shares, and the capacity to pay interest on debentures have market value.

A bank's primary functions are accepting deposits and lending to the general population. One of the things via which banks might generate profits is the bank credit. However, these credits are in jeopardy. According to Zhang, Cui, and Xie (2020), when credit risk apprehension or credit risk exposures increase, firms incur financial loss and the market value of their shares or securities declines. Capasso, Gianfrate, and Spinelli (2020) investigated the impact of credit risk on firm value in their article. The study suggests that banks and other financial organizations lend depositors' funds to individuals needing funds. The firms may face risks linked with these credits, including the likelihood of not receiving their money back. Rapid exposure to credit risk may affect profits, share return, and the market price. As a result, the value of a company declines as credit risk grows. The study by Jory, Khieu, Ngo, and Phan (2020) also indicates that the risk of losing the principal amount of credit, recovering the interest on the amount, and the additional costs of excessive cash flows pose challenges to the firm's financial worth. Thus, credit risk harms business value.

The banks that deal in money and have the principal functions of accepting deposits and granting loans require a substantial amount of cash on hand or assets that can be converted into cash instantly to sustain the organization's worth. But Liquidity risk is the possibility of incurring losses as a result of not being able to make payments when they are due or not being able to do so at a reasonable cost, reducing the value of the organization (Markonah, Salim, & Franciska, 2020). According to Effiong and Ejabu (2020), a company's liquidity is in jeopardy when its assets exceed its liabilities. Still, it is difficult to convert those assets into cash and lacks sufficient current assets to meet its

obligations. An asset is inadequately liquid and must be sold at a discount from its market price.

Consequently, the liquidity risk inhibits financial transactions, reduces total earnings, and lowers share values in the country. The link between liquidity risk and firm value is therefore negative. Sadiq et al. (2022) also investigate the relationship between liquidity risk and business value. According to this study, a bank's profitability is determined by the number of transactions it processes during a specific time frame. Businesses require immediate access to financial resources to conduct transactions. It becomes difficult for the company to undertake transactions and maintain profitability if its assets cannot be converted to cash immediately. Consequently, Liquidity risk decreases the firm's worth.

3. RESEARCH METHODOLOGY

The study investigates the impact of interest rate, ROA, ROE, credit, and liquidity risks on the firm value of listed commercial banks in Indonesia. The study has collected secondary data from the Bank Indonesia from 2011 to 2020. The study has taken the top twenty-five listed commercial banks concerning their assets. The study has established the equation with variables used in the study given below:

$$FVL_{it} = \alpha_0 + \beta_1 IR_{it} + \beta_2 ROA_{it} + \beta_3 ROE_{it} + \beta_4 CR_{it} + \beta_5 LR_{it} + e_{it} \quad (1)$$

Where;

- FVL = Firms' Value
- t* = Time Period
- i* = Countries
- IR = Interest Rate
- ROA = Return on Assets
- ROE = Return on Equity
- CR = Credit Risk
- LR = Liquidity Risk

The study has taken the firms' value as the dependent variable and measured it with the price book value ratio (market value to book value). In addition, the study has used three predictors: macroeconomic factors such as interest rate, earning management such as ROA and ROE, and financial risks such as credit risk and liquidity risk. The variables along with measurements are mentioned in [Table 1](#).

Table 1: Measurements of Variables

S#	Variables	Measurement	Sources
01	Firms' Value	Price book value ratio	Bank Indonesia

02	Macroeconomic Factors	Interest rate	Bank Indonesia
03	Earning Management	ROA ROE	Bank Indonesia
04	Financial Risk	Credit risk Liquidity risk	Bank Indonesia

The article has employed descriptive statistics to check the complete details of the variables used. In addition, the study also employed the correlation matrix to check the directional linkage among variables. Moreover, the article has also employed the variance inflation factor (VIF) to check the multicollinearity. The equations are mentioned below:

$$R^2_Y \longrightarrow Y_{it} = \alpha_0 + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + e_{it} \quad (2)$$

$$j = R^2_Y, R^2_{X1}, R^2_{X2}, R^2_{X3}, R^2_{X4}, R^2_{X5} \quad (3)$$

$$Tolerance = 1 - R_j^2 \quad VIF = \frac{1}{Tolerance} \quad (4)$$

Furthermore, the article has employed the Hausman test to verify the model's appropriateness. The probability value lower than 0.05 indicted FEM is suitable, but the probability value larger than 0.05 exposed random effect is suitable. Finally, the article has applied the FEM because the Hausman test result favors it. In addition, FEM permits the control for the time-invariant omitted variables. Moreover, FEM is also considered a suitable model when the variables are difficult to observe (Abe, Taniguchi, Kawachi, Watanabe, & Tamiya, 2021). The equation is mentioned below:

$$Y_{it} = \beta_{1i} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + u_{it} \quad (5)$$

In the above-given equation, subscript (i) highlighted the individual bank and made the different banks according to their features. Moreover, FEM signifies a regression model in which the "group means are fixed." The equation for FEM with understudy variables is mentioned below:

$$FVL_{it} = \beta_{1i} + \beta_2 IR_{it} + \beta_3 ROA_{it} + \beta_4 ROE_{it} + \beta_5 CR_{it} + \beta_6 LR_{it} + u_{it} \quad (6)$$

Finally, the article has employed the robust standard error method to check the relationships between the variables used in the study. The equation for this test with understudy variables is mentioned below:

$$FVL_{it} = \beta_1 IR_{it} + \beta_2 ROA_{it} + \beta_3 ROE_{it} + \beta_4 CR_{it} + \beta_5 LR_{it} + \varepsilon_{it} \quad (7)$$

4. RESEARCH FINDINGS

The article has employed descriptive statistics to check the complete details of the variables used. The results indicated that the study had taken 250 (25 banks x 10 Years) observations. In addition, the results also exposed that the FVL average value was 0.510 percent, IR mean value was 8.291 percent, and ROA average value was 0.367 percent.

Moreover, the results also exposed that the ROE average value was 0.762 percent, CR mean value was 0.369 percent, and LR average value was 1.229 percent. These values are mentioned in [Table 2](#).

In addition, the study also employed the correlation matrix to check the directional linkage among variables. The results indicated that the interest rate, ROA, and ROE positively affect the firm value of listed commercial banks in Indonesia. The findings also indicated that the credit and liquidity risks negatively affect the firm value of listed commercial banks in Indonesia. These values are mentioned in [Table 3](#).

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
FVL	250	0.510	1.110	0.433	0.719
IR	250	8.291	0.282	6.192	11.092
ROA	250	0.367	1.022	0.192	0.762
ROE	250	0.762	0.219	0.443	0.910
CR	250	0.369	1.102	0.102	0.872
LR	250	1.229	0.271	1.002	1.762

Table 3: Matrix of Correlations

Variables	FVL	IR	ROA	ROE	CR	LR
FVL	1.000					
IR	0.453	1.000				
ROA	0.902	0.728	1.000			
ROE	0.664	0.763	0.267	1.000		
CR	-0.343	-0.112	-0.322	-0.228	1.000	
LR	-0.388	-0.531	-0.102	-0.770	0.373	1.000

Moreover, the article has also employed VIF to check the multicollinearity. The results indicated that the VIF values are lower than five and exposed no multicollinearity. These values are mentioned in [Table 4](#).

Table 4: Variance Inflation Factor

	VIF	1/VIF
IR	3.091	0.324
ROA	2.819	0.355
ROE	2.627	0.381

CR	2.281	0.438
LR	1.115	0.897
Mean VIF	2.387	.

Furthermore, the article has employed the Hausman test that verifies the model's appropriateness. The results indicated that the probability value is lower than 0.05, and exposed FEM is suitable. These values are mentioned in [Table 5](#).

The FEM results indicated that the interest rate, ROA, and ROE positively affect the firm value of listed commercial banks in Indonesia. The findings also indicated that the credit and liquidity risks negatively affect the firm value of listed commercial banks in Indonesia. These relationships are mentioned in [Table 6](#).

Table 5: Hausman Test

	Coef.
Chi-square test value	52.119
P-value	0.003

Table 6: Fixed Effect Model

FVL	Beta	SD.	t-value	p-value	LL.	UL.	Sig
IR	1.854	0.520	3.57	0.005	0.310	1.665	***
ROA	0.174	0.034	5.12	0.000	1.982	2.901	***
ROE	1.067	0.427	2.49	0.021	0.282	1.336	**
CR	1.543	0.654	2.36	0.027	1.664	2.907	***
LR	0.786	0.312	2.52	0.019	1.987	3.092	**
Constant	3.165	1.012	3.13	0.009	2.291	3.887	***
R-squared		0.545		Number of obs		150	
F-test		31.532		Prob > F		0.000	
*** $p < .01$, ** $p < .05$, * $p < .1$							

The robust standard error results also indicated that the interest rate, ROA, and ROE positively affect the firm value of listed commercial banks in Indonesia. The findings also indicated that the credit and liquidity risks negatively affect the firm value of listed commercial banks in Indonesia. These associations are mentioned in [Table 7](#).

Table 7: Robust Standard Error

FVL	Beta	S.D.	t	P>t	L.L.	U.L.
IR	1.652	0.439	3.763	0.012	0.773	1.763
ROA	2.009	0.829	2.423	0.031	0.918	1.227

ROE	0.872	0.329	2.650	0.042	0.273	1.372
CR	0.228	0.027	8.444	0.000	1.272	2.901
LR	2.192	0.729	3.007	0.025	1.225	2.228
_cons	3.102	1.103	2.812	0.037	1.872	3.199

5. DISCUSSIONS

The results indicated that the econometric element, interest rate, has a positive relationship with a bank's market value. These results are consistent with Syaifuddin's assertion that the interest rate on loans impacts banks' profits. The loans offered to the general people can generate greater profits for banks when the interest rate rises. The rising profits increase the banks' capacity to increase shareholder returns. Consequently, the interest rate enhances the value of the company. These results concur with [Colantoni and Tron \(2021\)](#) findings about the impact of interest rates on business value. The study hypothesizes that financial institutions, such as banks, provide a client with a loan in exchange for a payment known as interest. A rise in the interest rate on these loans enhances the firm's income and improves its financial standing. This causes the firms' market worth to increase. Therefore, interest rate greatly increases the value of businesses. The results revealed a favorable relationship between the return on assets (ROA) and the firm value of a bank. These results are consistent with [Wahyuni and Hariyanto \(2022\)](#) assertion that financial institutions must manage their earnings and sources of earnings to preserve their reputation and stakeholders' support. If the firm's earnings management is effective and it has a high return on assets, the firm's ability to pay dividends on its shares increases. Thus, the market worth of the firm increases. These findings concur with [Idris, Buchdadi, Muttaqien, and Hariguna \(2020\)](#) findings about the significance of ROA in business value. The study hypothesizes that the firm's market value increases when earnings management is effective and a high ROA is achieved.

The results indicated that the return on equity (ROE) positively correlated with a bank's market value. According to [Mahayati, Fatonah, and Meilisa \(2021\)](#), if the ROE ratio reveals higher returns, it suggests that the firm's earning management is performing its functions efficiently and that the firm is generating higher profits utilizing the available equity. If returns on equity are greater, returns on shares grow, and the company's market value rises. These outcomes are also consistent with [Dahar, Yanti, and Rahmi \(2019\)](#). They demonstrate that if the equity from the shareholders or owners alone generates higher profits due to the effective management of the sources of income, the available financial resources should be distributed among the shareholders when a company earns more profits and is willing to pay more for its shares, its market value increases.

The results indicated that credit risk, a sort of financial risk, positively correlated with a bank's market value. According to [Zamore, Ohene Djan, Alon, and Hobdari \(2018\)](#), financial institutions such as banks use their deposits to provide loans to individuals

needing financial resources. There may be dangers associated with these credits, such as the possibility of not obtaining the loaned amount returned. The rapid exposure to credit risk can diminish profitability, share return, and market share values. Consequently, as credit risks increase, the firm's value declines. These outcomes are also consistent with [Waitherero, Muchina, and Macharia \(2021\)](#), who found that enterprises with high credit risk exposures have lower earnings and shareholder value. The results indicated that liquidity risk, a type of financial risk, positively correlated with a bank's market value. These findings are consistent with [Huang and Mazouz \(2018\)](#) conclusion that the profitability of banking firms depends on the number of transactions they conduct within a given period. For doing deals, firms demand instant financial resources. If a company cannot promptly convert its assets to cash, it becomes difficult to conduct transactions and maintain profitability. Therefore, liquidity risk diminishes the firm's worth. These findings are also consistent with [Guijarro, Moya-Clemente, and Saleemi \(2019\)](#) assertion that when firms' liquidity risk increases, their financial condition deteriorates, and they lose market value.

6. IMPLICATIONS

The consequences of this work are both theoretical and empirical. The literary contributions of this investigation serve as a guide for the authors. This study investigates the impact of interest rate, ROA, ROE, credit risk, and liquidity risk on the value of a company. This paper, unlike earlier research, provides simultaneous analysis of these elements' impact on company performance. This study investigates the effects of interest rate, ROA and ROE, credit risk, and liquidity risk on the firm value of Indonesian banking firms. The article aids policymakers in formulating policies for raising the value of banks by improving earnings management and minimizing financial risk. The empirical significance of the current study is also substantial in rising economies such as Indonesia. This study investigates how all financial institutions, including banks, might increase their worth from the perspective of their owners and investors. The research is a collection of instructions for financial management on establishing policies to increase and maintain the interest rate on money given to increase the firm's value.

Similarly, the report recommends that bank administrators use effective rules for earnings management, thereby increasing both ROA and ROE. This increases the firms' market worth. The financial risks provide a significant barrier to the value preservation of businesses. The present study provides guidelines for mitigating liquidity and credit risk, aiding in the preservation of business value.

7. CONCLUSION AND LIMITATIONS

The purpose of the study was to analyze the impact of interest rate, financial management (such as ROA and ROE), and credit risk and liquidity risk on company value. The authors gathered quantitative data on the interest rate, ROA, ROE, credit risk,

liquidity risk, and firm value from listed Indonesian commercial banks. The research demonstrated that interest rate, ROA, and ROE positively correlate with business value. The increase in the interest rate enhances the firm's financial situation and income. This increases the market worth of the company. Therefore, interest rate greatly increases the value of businesses. When earnings management is successful and delivers a high ROA, the company's market value increases. The results indicated that a company's stock market value is greater when it generates bigger profits and is prepared to pay higher dividends on its shares. The results demonstrated a negative relationship between credit risk, liquidity risk, and the value of a company. Companies with high credit risk exposures have lower profits and shareholder value. As the liquidity risk increases, the firms' financial status deteriorates, and their market value decreases.

The writers impose certain restrictions. In the future, it is up to the authors to investigate the extent, dependability, and repercussions of removing these limits. The study focuses solely on earnings management, financial hazards, and the firm's interest rate. These characteristics cannot be used alone to determine the firm's value. The future study must examine the elements such as innovation adoption, learning management, and marketing closely related to business value. In addition, the information on the Indonesian banking sector comes from the interest rate, ROA, ROE, credit risk, and liquidity risk of firm value. The research cannot be generalized as evidence from a specific economy. Therefore, the writers must submit a study on the same nexus that includes evidence from multiple nations.

REFERENCES

- Abe, K., Taniguchi, Y., Kawachi, I., Watanabe, T., & Tamiya, N. (2021). Municipal long-term care workforce supply and in-home deaths at the end of life: Panel data analysis with a fixed-effect model in Japan. *Geriatrics & Gerontology International*, 21(8), 712-717.
- Alenazi, H., & Barbour, B. (2019). The relationship between dividend policy and firm value within Qatari banks. *QScience Connect*, 2019(1), 5. doi:<https://doi.org/10.5339/connect.2019.5>
- Barua, B., & Barua, S. (2020). COVID-19 implications for banks: evidence from an emerging economy. *SN Business & Economics*, 1(1), 19. doi:<https://doi.org/10.1007/s43546-020-00013-w>
- Batten, J., & Vo, X. V. (2019). Liquidity and firm value in an emerging market. *The Singapore Economic Review*, 64(02), 365-376. doi:<https://doi.org/10.1142/S0217590817470063>
- Boateng, A., Du, M., Bi, X., Kwabi, F. O., & Glaister, K. W. (2022). Ownership Type, Home-Country Government-Directed Investment Policies and Firm Value in Strategic Sectors: Evidence from Chinese Acquiring Firms. *British Journal of Management*, 33(3), 1412-1431. doi:<https://doi.org/10.1111/1467-8551.12538>

- Capasso, G., Gianfrate, G., & Spinelli, M. (2020). Climate change and credit risk. *Journal of Cleaner Production*, 266, 121634. doi:<https://doi.org/10.1016/j.jclepro.2020.121634>
- Clevalda, D. K., & Kharisma, D. B. (2019). Perlindungan hukum terhadap nasabah dompet digital oleh bank Indonesia. *Jurnal Privat Law*, 9(1), 1-9. doi:<https://doi.org/10.20961/privat.v9i1.41483>
- Colantoni, F., & Tron, A. (2021). Effects on Firm Value in the Italian Market. *Tron, A., & Colantoni, F.(2021). The use of corporate derivatives: Effects on firm value in the Italian market. Corporate Ownership & Control*, 19(1), 55-68. Retrieved from <https://ssrn.com/abstract=3933829>
- Dahar, R., Yanti, N. S. P., & Rahmi, F. (2019). Pengaruh Struktur Modal, Ukuran Perusahaan dan Return On Equity Terhadap Nilai Perusahaan Property And Real Estate yang Terdaftar di Bursa Efek Indonesia. *Jurnal Ekonomi dan Bisnis Dharma Andalas*, 21(1), 121-132. Retrieved from <http://www.jurnal.unidha.ac.id/index.php/JEBD/article/view/22>
- Effiong, S., & Ejabu, F. E. (2020). Liquidity risk management and financial performance: are consumer goods companies involved. *International Journal of Recent Technology and Engineering*, 9(1), 580-589. Retrieved from <https://www.researchgate.net/profile/Sunday-Effiong/publication/341134267>
- Guijarro, F., Moya-Clemente, I., & Saleemi, J. (2019). Liquidity Risk and Investors' Mood: Linking the Financial Market Liquidity to Sentiment Analysis through Twitter in the S&P500 Index. *Sustainability*, 11(24), 7048. doi:<https://doi.org/10.3390/su11247048>
- Huang, W., & Mazouz, K. (2018). Excess cash, trading continuity, and liquidity risk. *Journal of Corporate Finance*, 48, 275-291. doi:<https://doi.org/10.1016/j.jcorpfin.2017.11.005>
- Husna, A., & Satria, I. (2019). Effects of return on asset, debt to asset ratio, current ratio, firm size, and dividend payout ratio on firm value. *International Journal of Economics and Financial Issues*, 9(5), 50. doi:<https://doi.org/10.32479/ijefi.8595>
- Idris, F., Buchdadi, A., Muttaqien, M., & Hariguna, T. (2020). The role of the board of director with political connection for increasing the firm value. *Accounting*, 6(7), 1285-1290. doi:<http://dx.doi.org/10.5267/j.ac.2020.8.023>
- Jory, S. R., Khieu, H. D., Ngo, T. N., & Phan, H. V. (2020). The influence of economic policy uncertainty on corporate trade credit and firm value. *Journal of Corporate Finance*, 64, 101671. doi:<https://doi.org/10.1016/j.jcorpfin.2020.101671>
- Jufrizen, J., & Al Fatin, I. N. (2020). Pengaruh Debt To Equity Ratio, Return On Equity, Return On Assets Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan Farmasi. *Jurnal Humaniora: Jurnal ilmu sosial, ekonomi dan hukum*, 4(1), 183-195. doi:<https://doi.org/10.30601/humaniora.v4i1.677>
- Juliana, J., Faathir, M., & Sulthan, M. (2019). Implementasi Etika Bisnis Islam Pelaku Usaha Mikro: Studi Kasus Pada Pelaku Usaha Mikro Syariah Puspa Bank

Indonesia Wilayah Jawa Barat Di Bandung Tahun 2017. *Strategic: Jurnal Pendidikan Manajemen Bisnis*, 19(1), 36-43.
doi:<https://doi.org/10.17509/strategic.v19i1.17663>

- Mahayati, F., Fatonah, S., & Meilisa, R. (2021). Pengaruh return on equity (ROE) dan debt to equity ratio (DER) terhadap nilai perusahaan (PBV) pada perusahaan manufaktur sub sektor logam dan sejenisnya yang terdaftar di BEI. *Valuasi: Jurnal Ilmiah Ilmu Manajemen dan Kewirausahaan*, 1(1), 258-267.
doi:<https://doi.org/10.46306/vls.v1i1.26>
- Markonah, M., Salim, A., & Franciska, J. (2020). Effect of profitability, leverage, and liquidity to the firm value. *Dinasti International Journal of Economics, Finance & Accounting*, 1(1), 83-94. doi:<https://doi.org/10.38035/dijefa.v1i1.225>
- Muchtar, D., Ramadhani, D., Rasyimah, R., & Syamni, G. (2021). Determination of Firm Value in the Goods and Consumption Sector. *International Journal of Business Economics (IJBE)*, 3(1), 35-46. Retrieved from <http://jurnal.umsu.ac.id/index.php/ijbe/article/view/7439>
- Oktarina, D. (2018). The analysis of firm value in Indonesia Property and Real Estate Companies. *International Journal of Research Science & Management*, 5(9), 85-92. Retrieved from <http://www.ijrsm.com/issues%20pdf%20file/Archive-2018/September-2018/10.pdf>
- Pangestuti, D. C., & Tindangen, A. M. L. (2020). The Influence of Internal and External Factors on Firm Value. *European Journal of Business and Management Research*, 5(5). doi:<https://doi.org/10.24018/ejbmr.2020.5.5.492>
- Pointer, L. V., & Khoi, P. D. (2019). Predictors of return on assets and return on equity for banking and insurance companies on Vietnam stock exchange. *Entrepreneurial Business and Economics Review*, 7(4), 185-198.
doi:<https://doi.org/10.15678/EBER.2019.070411>
- Sadiq, M., Alajlani, S., Hussain, M. S., Ahmad, R., Bashir, F., & Chupradit, S. (2022). Impact of credit, liquidity, and systematic risk on financial structure: comparative investigation from sustainable production. *Environmental Science and Pollution Research*, 29(14), 20963-20975.
doi:<https://doi.org/10.1007/s11356-021-17276-x>
- Safitri, V. A. D., & Nani, D. A. (2021). Does Good Corporate Governance and Eco-Efficiency Really Contribute To Firm Value? an Empirical Study in Indonesian State-Owned Enterprises (Soes). *Akuntabilitas*, 15(1), 73-88.
doi:<https://doi.org/10.29259/ja.v15i1.12526>
- Septiani, M., Ariyani, N., & Ispriyahadi, H. (2020). The effect of stock prices, return on assets, and firm size on dividend payout ratio: evidence from Indonesian financial service companies. *Diponegoro International Journal of Business*, 3(1), 17-27. Retrieved from <https://d1wqtxts1xzle7.cloudfront.net/69327197/4488>
- Sinaga, A. N., Lim, E., Andresen, K., & Waruwu, T. C. (2022). The Effect of Dividends, Firm Size, Funding Decisions and Return on Equity on Firm Value With

Liquidity as Moderating Variables in Manufacturing Companies on The Indonesia Stock Exchange for The Period of 2018-2020. *Journal of Research in Business, Economics, and Education*, 4(3), 18-33.
doi:<https://doi.org/10.55683/jrbee.v4i3.388>

- Suaiba, H. R., Abdullah, J., Suyanto, M. A., & Karundeng, D. R. (2021). Pengaruh Budaya Organisasi, Motivasi Dan Lingkungan Kerja Terhadap Kinerja Pegawai Pada Kantor Perwakilan Bank Indonesia Provinsi Gorontalo. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 5(3), 1545-1568.
doi:<https://doi.org/10.31955/mea.v5i3.1468>
- Sukmawardini, D., & Ardiansari, A. (2018). The influence of institutional ownership, profitability, liquidity, dividend policy, debt policy on firm value. *Management Analysis Journal*, 7(2), 211-222. Retrieved from <https://journal.unnes.ac.id/sju/index.php/maj/article/view/24878>
- Wahyuni, W., & Hariyanto, D. (2022). The Effect of Return on Assets and Return on Equity on Company Value with Dividends as Intervening Variables in Manufacturing Companies in the Basic and Chemical Industry Sectors Listed on the Indonesia Stock Exchange in 2017-2020. *TechHub Journal*, 2(1), 27-48. Retrieved from <https://techhubresearch.com/index.php/journal/article/view/27>
- Waitherero, K. F., Muchina, S., & Macharia, S. (2021). The role of liquidity risk in augmenting firm value: lessons from savings and credit cooperatives in Kenya. *International Journal of Financial, Accounting, and Management*, 2(4), 295-304. doi:<https://doi.org/10.35912/ijfam.v2i4.340>
- Zamore, S., Ohene Djan, K., Alon, I., & Hobdari, B. (2018). Credit Risk Research: Review and Agenda. *Emerging Markets Finance and Trade*, 54(4), 811-835. doi:<https://doi.org/10.1080/1540496X.2018.1433658>
- Zhang, X., Cui, C., & Xie, D. (2020). Are Dividends All for Rewarding Investors? Evidence from Payouts Induced by Return on Equity Targets. *China Journal of Accounting Studies*, 8(3), 470-494. doi:<https://doi.org/10.1080/21697213.2021.1926412>