



Effect of Current Ratio and Debt to Equity Ratio on Price to Book Value Moderating Return on Assets in Food and Beverage sub-sector Companies

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Abstract

This study aims to examine and analyze the effect of the Current Ratio and Debt to Equity Ratio on Price to Book Value with Return on Assets as a Moderating variable listed on the Indonesia Stock Exchange in the food and beverage sub-sector companies for the 2016-2020 period. The sample of the food and beverage sub-sector is 11 companies, over a period of 5 years. The simple technique is the Purposive Sampling Technique. The data collection technique is a documentation study with the type of data, namely secondary data. This research uses the Partial Least Square data analysis method. And the data is processed with Smart PLS. The results of this study indicate that the Current Ratio has no effect on Price Book Value, and Debt Equity Ratio has no effect on Price to Book Value. Then the results of this study also show that Return on Assets is not able to moderate the effect of the Current Ratio on Firm Value but Return on Assets is able to moderate the effect of the Debt to Equity Ratio on Firm Value. The amount of variation in PBV can be explained by the independent variable of 90.8% and 9.2% can be explained by other variables such as Total Asset Turnover and others.

Keywords: *Current Ratio; Debt to Equity Ratio; Price to Book Value; Return on Asset*

Introduction

In today's business world, economic changes are increasing and developing very rapidly. Many companies are engaged in various sectors resulting in competition between companies. Food and beverage companies are one sector of manufacturing companies. Food and beverage companies are one of the business sectors that continue to experience growth and over time with population growth, the volume of demand continues to increase.

Firm value is the investor's perception of the success of a company in managing its resources at the end of the current year as reflected in the company's stock price. A high company value is the desire of the company owners because a high value indicates the prosperity of shareholders is also high

(Hemastuti, 2014). Firm value is an investor's perception of the company, which is often associated with stock prices. Explaining that one of the things that investors consider in investing is the value of the company where the investor will invest (Suffah and Riduwan, 2016). The share price is based on the demand and supply of investors so that the share price can be used as a proxy for the value of the company.

Liquidity is the level of the company's ability to meet its financial obligations. Liquidity shows the ability of a company to meet its financial obligations that must be met immediately, or the company's ability to meet financial obligations when billed. (Munawir, 2007). If liquidity is high, the company uses its capital more than the use of debt (Seftianne and Handayani, 2011). Leverage is the company's ability to meet all obligations, namely short-term and long-term (Ukhriyawati and Putri, 2016). leverage is a ratio used to measure the extent to which the company's assets are financed with debt. This means the amount of debt used by the company to finance its business activities when compared to using its capital (Fahmi, 2014). The leverage ratio is the company's ability to pay its long-term obligations or obligations if the company is liquidated (Syafri, 2008). The leverage ratio describes how much-borrowed capital is used by the company in all of the company's operational activities (Syamsuddin, 2013).

Tests on the Debt to Equity Ratio against Price to Book Value have been carried out by several researchers but there is a gap in the results obtained. Yumiasih and Isbanah (2017) conclude that the Debt to Equity Ratio has no significant effect on Price Book Value. Pratama and Wiksuan (2016) found that the Debt to Equity Ratio has a positive effect on Price Book Value. Profitability is a financial performance ratio that is used as an indicator of a company's ability to use its capital to generate profits. Companies with high profitability show that their profits are growing. Return on Assets is used as a projected profitability ratio. Winarto (2015) found that profitability had a positive effect on firm value. Wulandari and Wiksuana, (2017), show that profitability has a negative and insignificant effect on firm value.

Method

2.1 Research Design

This research is associative because it aims to see the relationship between two or more variables on the company's PBV. With a conceptual framework as follows

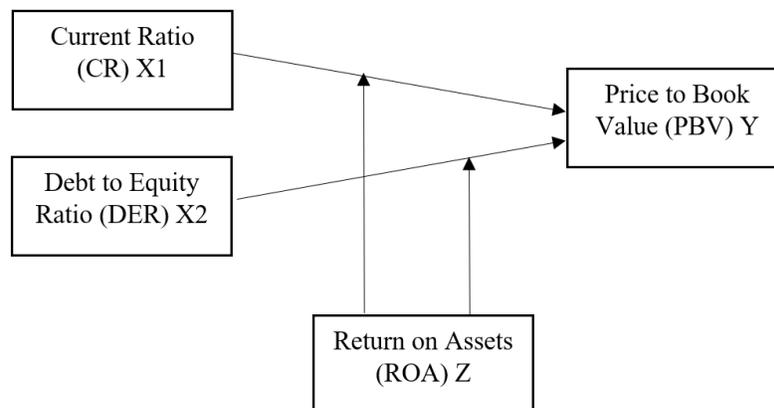


Figure 1. Conceptual Framework

2.2 Sample and Data Collection

Understanding the sample according to Sugiyono (Akdon and Sahlan, 2005:98) says "The sample is part of the number and characteristics possessed by the population". The sample in this study is the annual financial report of manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange for the 2016-2020 period with certain criteria. The sampling technique used in this study uses the Purposive Sampling Technique, which is a technique to determine the sample used following intentionally taking certain samples according to the research objectives and meeting all the requirements for sampling including:

1. Food and beverage sub-sector companies that have been listed on the Indonesia Stock Exchange until December 31, 2016-2020, respectively.
2. Food and beverage sub-sector companies with IPOs over the years 2016-2020.
3. Food and beverage sub-sector companies that issue financial reports as well as complete annual reports under the required data successively.

From a total population of 26, samples that meet the predetermined criteria are 11 companies.

2.3 Instruments

It is a matrix of data research and indicators for research.

Table 1. Operational Definition

Variabel	Definition	Indicators
Current Ratio	a ratio that measures the company's ability to meet its short-term debt by using its current assets.	$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$
Debt to Equity Ratio	a picture shown to determine the company's ability to fulfill obligations and the comparison between total liabilities and equity	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$
Price to Book Value	The value of the company as market value because the value of the company can provide maximum shareholder prosperity if the company's share price increases	$PBV = \frac{\text{Stock Price}}{\text{Book Value}}$
Return on Asset	a ratio that measures the company's ability to generate net income based on a certain level of assets	$ROA = \frac{\text{Net Profit}}{\text{Total Assets}}$

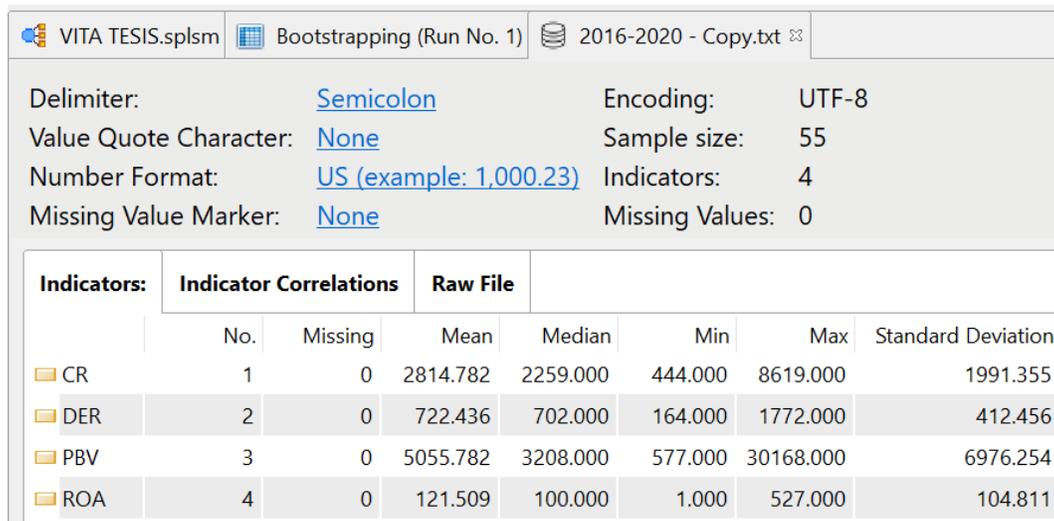
2.4 Analyzing of Data

Descriptive statistics are statistics that function to describe or provide an overview of the object under study through sample or population data as it is, without analyzing and making conclusions that apply to the public (Sugiyono, 2016). It also aims to analyze the general condition of the sample tested, namely the food and beverage sub-sector in Indonesia for the 2016-2020 period. The data analysis technique in this study used Partial Least Square (PLS). PLS is a Structural Equation Modeling (SEM) equation model with an approach based on variance or component-based structural equation modeling.

Data analysis is done by collecting the necessary data such as company financial statements, collected and processed using Microsoft Excel. Companies that meet the Purposive Sampling criteria are then tested using the Smart PLS application.

Results and Discussion

Descriptive statistical analysis is a statistic used in analyzing data by describing or describing the data that has been collected which aims to provide an overview or describe the data in variables seen from the average (mean), minimum, maximum and standard deviation values.



Indicators:	Indicator	Correlations	Raw File				
	No.	Missing	Mean	Median	Min	Max	Standard Deviation
CR	1	0	2814.782	2259.000	444.000	8619.000	1991.355
DER	2	0	722.436	702.000	164.000	1772.000	412.456
PBV	3	0	5055.782	3208.000	577.000	30168.000	6976.254
ROA	4	0	121.509	100.000	1.000	527.000	104.811

Figure 1. Descriptive Statistical Analysis

From the output Figure 1 shows the value of N (amount of data) to be studied is 55 samples. CR as protection from Liquidity has a mean value of 2.814 with a maximum value of 8619 at the company PT. Delta Djakarta Tbk in 2017 and a minimum score of 444 at the company PT. Mayora Indah Tbk in 2016 with a standard deviation of 1,991. Debt to Equity Ratio as protection from Leverage has a mean value of 722 with a maximum value of 1.772 at the company PT. Multi Bintang Indonesia Tbk in 2016 and a minimum score of 164 at the company PT. Ultrajaya Milk Industry and Trading Company Tbk in 2018 with a standard deviation of 412. Price to Book Value as protection from the value of the company has a mean value of 5,055 with a maximum value of 30,168 at the company PT. Multi Bintang Indonesia Tbk in 2016 and a minimum score of 577 at the company PT. Sekar Bumi Tbk in 2016 with a standard deviation of 6,976. Return On Assets as protection from profitability has a mean value of 121 with a maximum value of 527 at the company PT. Multi Bintang Indonesia Tbk and a minimum value of 1 at the company PT. Sekar Bumi Tbk in 2019 with a standard deviation of 104.

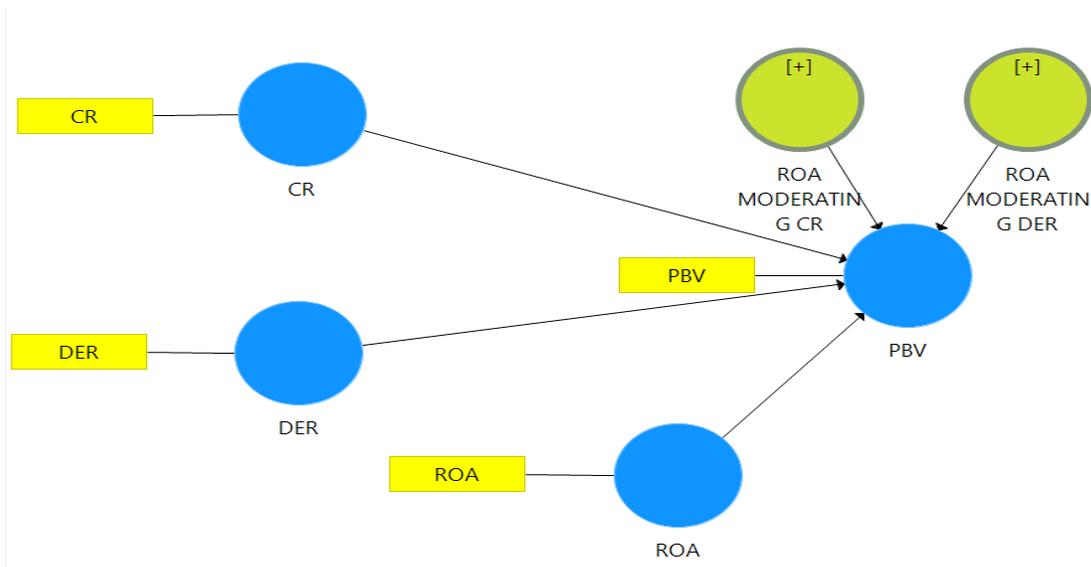


Figure 2. SmartPLS Results

*VITA TESIS.splsm Bootstrapping (Run No. 1) PLS Algorithm (Run No. 1)

R Square

Matrix	R Square	R Square Adjusted
PBV	0.916	0.908

Figure 3. Koefisien Determinasi (R-Square)

Structural model analysis (Inner Model) can be done by looking at R2. Based on Figure 4, the R-Square Adjusted value has a value of 0.908. this shows that the Current Ratio (X1), Debt to Equity Ratio (X2) and Return On Assets (Z) in their influence on Price to Book Value, have an effect of 90.8% or 9.2% explained by other variables. Path Coefficients are useful for testing the hypothesis of the effect of variables X and Y on variable Y.

*VITA TESIS.splsm Bootstrapping (Run No. 1)

Path Coefficients

	Original ...	Sample ...	Standard ...	T Statistic...	P Values
CR -> PBV	0.009	0.012	0.076	0.117	0.907
DER -> PBV	0.260	0.277	0.075	3.465	0.001
ROA -> PBV	0.483	0.499	0.090	5.338	0.000
ROA MODERATING CR -> PBV	0.026	0.031	0.068	0.388	0.698
ROA MODERATING DER -> PBV	0.264	0.273	0.092	2.864	0.004

Figure 4 Path Coefficients

Based on the results of the Path Coefficients analysis in Figure 4, it can be seen that the hypothesis test of the effect of CR on PBV has a parameter coefficient value of 0.009 with a t-statistic significance of 0.117 less than 1.96 and a P value of 0.907 greater than 0.05. This shows that CR has no effect on PBV, so hypothesis H1 is rejected. The current ratio is a ratio to measure the company's liquidity by measuring the ability of the company's current assets to cover the company's current debt. The results of the study indicate that the Current Ratio has a positive and insignificant effect on PBV. The Current Ratio is important to consider in assessing whether the company's short-term operational activities are running smoothly. The better the CR shows the company is quite safe because it is able to overcome short-term debt with its current assets. This convinces investors to invest and can increase stock prices. This shows that there is a positive influence between the Current Ratio and PBV. The company's products in the food and beverage sector are the primary needs of the community. With companies that can still sell their products, the company will get cash or receivables which will later be used as payment instruments for short-term debt obligations. In addition, investors do not pay much attention to the level of company liquidity. Investors tend to focus only on the rate of return and the company's ability to generate profits. So this condition makes liquidity have no effect on firm value.

Signaling theory is related to CR, where the higher the company's ability to pay its short-term obligations, the better signal or good news to investors. This shows that the company is able to solve its debt problems. The results of this study are in line with the research of Fitirana (2020) and Hellyas (2021) which state that liquidity does not affect firm value. But it is inversely proportional to the research of Muwafick (2019) which states that the Current Ratio has an effect on firm value.

Based on the results of the Path Coefficients analysis in Figure 4, it can be seen that the hypothesis test of the effect of DER on PBV has a parameter coefficient value of 0.260 with a t-statistic significance of 3.465 greater than 1.96 and a P value of 0.001 less than 0.05. This shows that DER has an effect on PBV, then hypothesis H2 is accepted. Debt to Equity Ratio is a method to measure a company's business risk that can influence a good decision for the company, creditors, and investors. DER is a debt to equity ratio that compares the amount of debt to equity. Usually, DER is used for company operations and must have a proportional amount. Not only that, this DER is used to measure the company's investment.

The results of the study indicate that DER has a positive and significant effect on PBV. Signal theory explains that good financial statements can be a signal that the company is operating well. Managers must signal the condition of the company to the owner as a form of responsibility for managing the company. A good DER ratio is a positive signal to investors, but debt is a source of high-risk financing. A DER ratio that is too high can raise doubts in the eyes of investors because it is feared that the company has the potential to fail to pay and even go bankrupt so that it can harm investors. So investors focus on the rate of return on debt. So this condition makes Leverage affect the value of the company. This is in line with research by Darmayanti (2019) and Marhaenis (2021) which state that DER has a positive and significant effect on firm value. In contrast to research by Selvi and Ita (2019) which states that DER has no effect on firm value.

Based on the results of the Path Coefficients analysis in Figure 4, it can be seen that the ROA hypothesis test in moderating the effect of CR on PBV has a parameter coefficient value of 0.026 with a t-statistical significance of 0.388 smaller than 1.96 and a P value of 0.698 greater than 0.05. This shows that ROA cannot moderate the effect of CR on PBV, so hypothesis H3 is rejected. The results showed that ROA could not moderate the effect of CR on PBV. This research has not been able to strengthen the effect of liquidity on firm value through profitability. What investors pay attention to before investing in a company is that it tends to increase profitability. Increasing the profitability of a company will attract investors to invest in the company.

Based on the results of the Path Coefficients analysis in Figure 4, it can be seen that the ROA hypothesis test in moderating the effect of DER on PBV has a parameter coefficient value of 0.264 with a t-statistic significance of 2.864 greater than 1.96 and a P value of 0.004 less than 0.05. This shows that ROA can moderate the effect of DER on PBV, so hypothesis H4 is accepted. The results showed that ROA can moderate the effect of DER on PBV. if the company can maintain the proportion of its debt, the ROA value will be high. With a high ROA value, the company's main goal will be achieved, namely maximizing company value.

Conclusion

Based on the results of the study, several conclusions can be drawn as follows:

1. The Current Ratio has no significant effect on the PBV of the food and beverage sub-sector companies on the Indonesia Stock Exchange for the 2016-2020 period.
2. Debt to Equity Ratio has a significant effect on PBV in food and beverage sub-sector companies on the Indonesia Stock Exchange for the 2016-2020 period.
3. Return on Assets cannot moderate the effect of Current Ratio on PBV in food and beverage sub-sector companies on the Indonesia Stock Exchange for the 2016-2020 period.
4. Return on Assets can moderate the effect of the Debt to Equity Ratio on PBV in food and beverage sub-sector companies on the Indonesia Stock Exchange for the 2016-2020 period.

Based on the limitations of this study, the researcher gives several suggestions as material for consideration for research as follows: (1) For investors who want to invest in food and beverage sub-sector companies, they should pay attention to the DER ratio. whether the ratio can be used as a guide to determine companies that are worth investing in or not. (2) For companies in the food and beverage sub-sector to pay more attention to the DER ratio as a guideline for building a business that can be trusted by investors. (3) For further researchers, it is recommended to use a sample of companies in other sectors such as mining, and banking. And it is recommended to increase the number of independent variables that can affect the dependent variable such as dividend policy, and company growth.

References

- Adi, S. W., Putri, W. A. P., & Permatasari, W. D. (2020). Profitability, Leverage, Firm Size, Liquidity, and Total Assets Turnover on Liquidity, and Total Assets Turnover on Real Earnings Management (An Empirical Real Earnings Management (An Empirical Study on the Mining Company Classification Study on the Minin. *Riset Akuntansi Dan Keuangan Indonesia*, 5(2). <https://doi.org/10.23917/reaksi.v5i2.12403>
- Angeline, S., Sitorus, J. S., Sumbayak, M. I., & Purba, S. D. F. (2020). The Effect of Liquidity, Leverage, Profitability and Company Size on Stock Prices in Mining Companies Listed on the Indonesia Stock Exchange in the Period of 2013-2017. *JURNAL AKSI (Akuntansi Dan Sistem Informasi)*, Vol 5.
- Anggraeni, M. D. P., & Sulhan, M. (2020). The Effect of Profitability and Leverage on Firm Value With Dividend Policy As Moderating Variable. *Journal of Applied Management and Accounting Sciences (JIMAT)*, 11(1).

- Chen, S., Siera, F. T., Damanik, R. P., & Rahmi, N. U. (2021). Influence of company size, profitability, dividend policy, and liquidity on company value in manufacturing companies. *Journal of Economics, Finance and Management Studies*, 4(8). <https://doi.org/10.47191/jefms/v4-i8-34>
- Desiko, N. (2020). The Influence of Credit Risk, Market Risk and Liquidity Risk on Banking Financial Performance (Study on Conventional Commercial Banks listed on the Indonesia Stock Exchange for the period 2014-2018). *Journal Competency of Business*, 4(1). <https://doi.org/10.47200/jcob.v4i1.676>
- Dewi, C. R., & Fachrurrozie, F. (2021). The Effect of Profitability, Liquidity, and Asset Structure on Capital Structure with Firm Size as Moderating Variable. *Accounting Analysis Journal*, 10(1). <https://doi.org/10.15294/aaj.v10i1.44516>
- Dirman, A. (2020). Financial Distress: The Impact of Profitability, Liquidity, Leverage, Firm Size and Free Cash Flow. *International Journal of Business, Economics and Law*, 22(1).
- Febrinta Br Bukit, R. C., Muda, I., & Abubakar, E. (2021). The Effect of Profitability and Liquidity on Firm Value with Leverage as Moderating Variable in Companies That are Joined in LQ45 and Listed on the Indonesia Stock Exchange for the Period 2007-2019. *International Journal of Research and Review*, 8(7). <https://doi.org/10.52403/ijrr.20210748>
- Fitriana, F., Mus, A. R., & Budiandriani, B. (2021). Effect of Liquidity, Solvency and Profitability on Stock Prices in Construction and Building Companies listed on the Indonesia Stock Exchange. *PARADOX: Journal of Economics*, 4(1). <https://doi.org/10.33096/paradoks.v4i1.770>
- Ginting, Milawati Br; Muda, I. S. (2018). Effect of Liquidity, Leverage and Firm Size on Going-Concern Audit Opinion With Profitability As Moderating Variables in Manufacturing Companies Listed in IDX Period 2009-2018. *Photosynthetica*, 2(1).
- Hapsoro, D., & Falih, Z. N. (2020). The Effect of Firm Size, Profitability, and Liquidity on The Firm Value Moderated by Carbon Emission Disclosure. *Journal of Accounting and Investment*, 21(2). <https://doi.org/10.18196/jai.2102147>
- Hasanudin, Nurwulandari, A., Adnyana, I. M., & Loviana, N. (2020). The effect of ownership and financial performance on firvalue of oil and gas mining companies in Indonesia. *International Journal of Energy Economics and Policy*, 10(5). <https://doi.org/10.32479/ijeep.9567>
- Monalisa, S. M., & Ety, H. (2016). The Effect of Liquidity and Profitability on Firm Value (Empirical Study on Manufacturing Companies in the Metal Sector and the Like Listed on the Indonesia Stock Exchange), *Scientific Journal of Accounting and Technology*, 8(2).
- I, N. K., Endiana, I. D. M., & Pramesti, I. G. A. A. (2021). Effect of Firm Size, Profitability, Dividend Policy, Environmental Accounting, Leverage and Liquidity on Firm Value. *Charisma Journal*, 3(1).
- Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The Effect of Liquidity, Leverage, and Profitability on Firm Value: Empirical Evidence from Indonesia. *Journal of Asian Finance, Economics and Business*, 8(3). <https://doi.org/10.13106/jafeb.2021.vol8.no3.0423>
- Kumalawati, I., & Primasari, N. S. (2017). Influence of Insider Ownership, Profitability, Size and Leverage on Dividend Policy. *Conferences.Unusa.Ac.Id*, 1(1).

- Kurniawan, K., & Mulyanta, S. (2021). The Effect of Leverage, Profitability and Liquidity on Firm Value in Mining Companies for the 2015-2017 Period. *STATERA: Journal of Accounting and Finance*, 3(1). <https://doi.org/10.33510/statera.2021.3.1.43-50>
- Lestari, S. P., & Khafid, M. (2021). The Role of Company Size in Moderating the Effect of Profitability, Profit Growth, Leverage, and Liquidity on Earnings Quality. *Accounting Analysis Journal*, 10(2).
- Mahardikari, A. K. W. (2021). Effect of Profitability, Liquidity, Leverage, Dividend Policy, Firm Size, and Firm Growth on Firm Value. *Journal of Management Science*, 9(2). <https://doi.org/10.26740/jim.v9n2.p399-411>
- Marhaenis Handoko Putro, G., & Wany, E. (2021). Dividend Policy as an Intervening Relationship between Financial Ratios and Firm Value on the IDX. *Accounting: Journal of Integrative Accounting*, 7(1). <https://doi.org/10.29080/jai.v7i1.400>
- 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). <https://doi.org/10.38035/dijefa.v1i1.225>
- Munawar, A. (2019). The Effect Of Dividend Policy, Profitability, Liquidity And Firm Size On Firm Value In Manufacturing Companies Of Food And Beverage Subsectors. *International Journal of Science and Research (IJSR)*, 8(10).
- Pandapotan, J., & Lastiningsih, N. (2020). The Effect of Capital Structure, Liquidity, and Company Size towards Profitability. *Journal of Economics and Behavioral Studies*, 12(4(J)). [https://doi.org/10.22610/jebis.v12i4\(j\).3060](https://doi.org/10.22610/jebis.v12i4(j).3060)
- Pramana, I. W. S., & Darmayanti, N. P. A. (2020). Profitability, Asset Structure and Firm Size Influence on the Capital Structure of Automotive Companies. *Udayana University Management E-Journal*, 9(6). <https://doi.org/10.24843/ejmunud.2020.v09.i06.p04>
- Rachmawati, D., & Pinem, D. B. (2015). The Effect of Profitability, Leverage, and Firm Size on Firm Value. *Equity*, 18(1). <https://doi.org/10.34209/equ.v18i1.456>
- Rahmi, N. U., Cenora, C., & Michella, M. T. The Effect of Liquidity, Solvency, Financial Condition and Company Size on Going Concern Audit Opinion on the Property and Real Estate Sector Listed on IDX. <https://doi.org/10.47191/jefms/v4-i6-22>
- Rechiwati, & bin Abad, T. (2018). Effect of Institutional Ownership on Underpricing : Studies on the Company ' S Ipo on the Stock Exchange in 2007-2011. *The International Journal of Social Science, Education, and Human Science*, 1(1).
- Runis, A., Samsul Arifin, D., Masud, A., & Kalsum, U. (2021). The Influence of Liquidity, Leverage, Company Size and Profitability on Financial Distress. *International Journal of Business and Social Science Research*. <https://doi.org/10.47742/ijbssr.v2n6p2>
- Sari, I. A. G. D. M. (2020). Profitability and liquidity on firm value and capital structure as intervening variable. *International Research Journal of Management, IT and Social Sciences*. <https://doi.org/10.21744/irjmis.v7n1.828>

- Sukarya, I. P., & Baskara, I. G. K. (2018). The Effect of Profitability, Leverage and Liquidity on Company Value in the Food and Beverages Sub-Sector. *Udayana University Management E-Journal*, 8(1). <https://doi.org/10.24843/ejmunud.2019.v08.i01.p16>
- Suratmi, & Yustina Rahmawati, I. (2020). The Effect of Profitability Ratio, Liquidity Ratio, Leverage Ratio, and Company Size on Sukuk Rating Corporation During 2014-2017 Periods. *SHS Web of Conferences*, 86. <https://doi.org/10.1051/shsconf/20208601027>
- Tumanan, N., & Dyah Ratnawati. (2021). Effect of Liquidity, Profitability, Leverage on Firm Value, CSR as Moderator. *E-Business: Scientific Journal of Economics and Business*, 14(1). <https://doi.org/10.51903/e-bisnis.v14i1.380>
- Zuhroh, I. (2019). The Effects of Liquidity, Firm Size, and Profitability on the Firm Value with Mediating Leverage. *KnE Social Sciences*, 3(13). <https://doi.org/10.18502/kss.v3i13.4206>

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