

Stock Price Impact of Liquidity, Solvency, and Profitability

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Abstract

The purpose of this study was to determine the effect of liquidity ratios, solvency, and profitability on stock prices in large trading sub-sector companies. The object of this research was carried out in large trading sub-sector companies listed on the Indonesia Stock Exchange from 2016 to 2020 as measured by using liquidity (CR), solvency (DAR), and profitability (ROE). The sampling method in this study using purposive sampling by taking a sample of 9 companies in accordance with the sample criteria. The results of simultaneous hypothesis testing show that liquidity, solvency and profitability have no effect on stock prices. While partially, only profitability has an influence on stock prices, liquidity and solvency variables have no effect on stock prices.

Keywords

Liquidity, Solvency, Profitability, Stock Price.

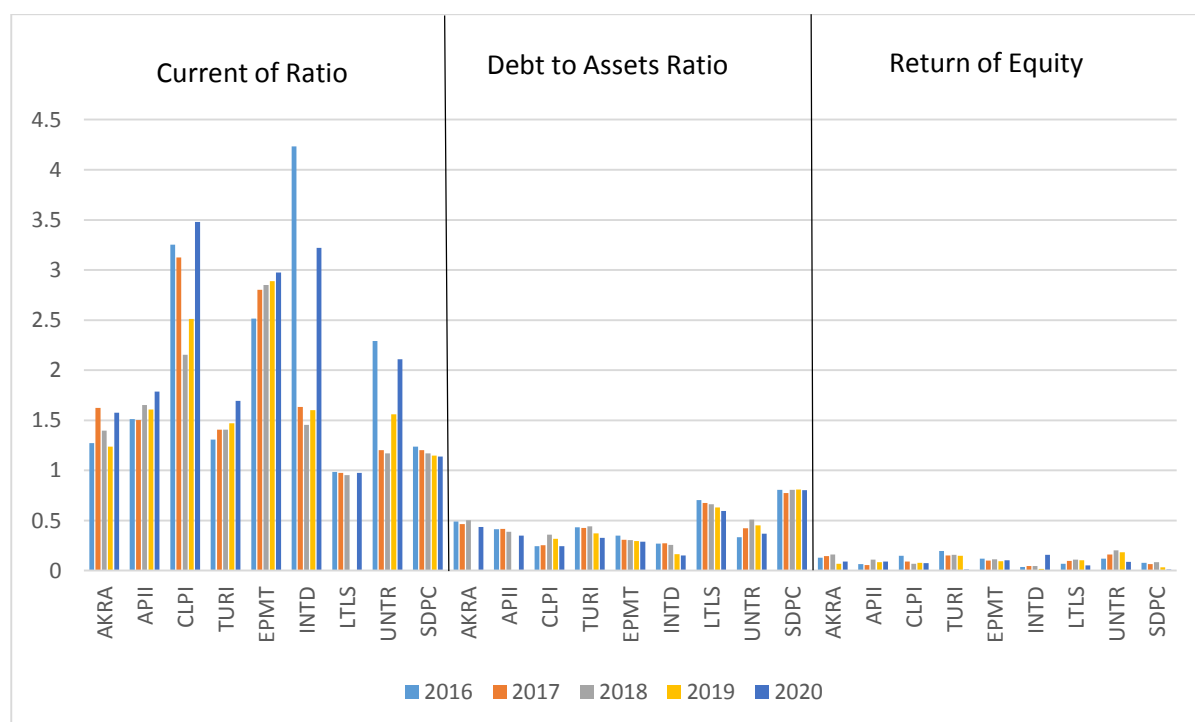
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Introduction

The current economic conditions that have changed have had a lot of influence on the business world, including investors being more careful in investing in go public companies Soebyakto and Sinulingga (2018). Stock prices fluctuate and can change. The main purpose of going public is to obtain expansion funds to improve the company's capital structure with additional capital through investors who are interested in buying the shares offered (Hirdinis, 2019). In addition, another goal is to increase the shareholder value of the company. Shares are securities that record our ownership in a company that has rights or assets and also the income generated by the company in accordance with the portion of the shares purchased. Shares are issued when a company wants to raise capital from the public. Stock prices can fluctuate due to supply and demand. This study uses three types of financial ratios, namely: liquidity ratios, solvency ratios, and profitability ratios. According to Susanti, Latifa, and Sunarsi (2020), the liquidity ratio is an evaluation of the company's ability to repay its short-term debt with current assets in the company. Many companies go public that run business in the trade sector both locally and globally, thus creating a tight competition between companies. Companies in the Big Trading Sector listed on the Indonesia Stock Exchange. Based on data on the Indonesia Stock Exchange, there are 91 companies that are included in the Big Trading Sector. Information from the Minister of Finance of the Republic of Indonesia Fiscal Policy Agency, Center for Macroeconomic Policy 2012. The trade sector is classified as a tertiary sector. The trade sector grew by 9.2% in 2011, an increase from 8.7% in the previous year. In 2016 – 2018 the share price increased because it had a large profit. In addition, the influence of the relatively small market capitalization has pushed up stock prices during this time period. However, at the end of 2019 – 2020 there was a significant decline in share prices. The Covid-19 pandemic that has attacked all countries has caused several large trading sectors to suffer losses so that stock prices in several sectors experienced a significant decline.

Table 1
Graph of Liquidity Ratio, Solvency and Profitability.

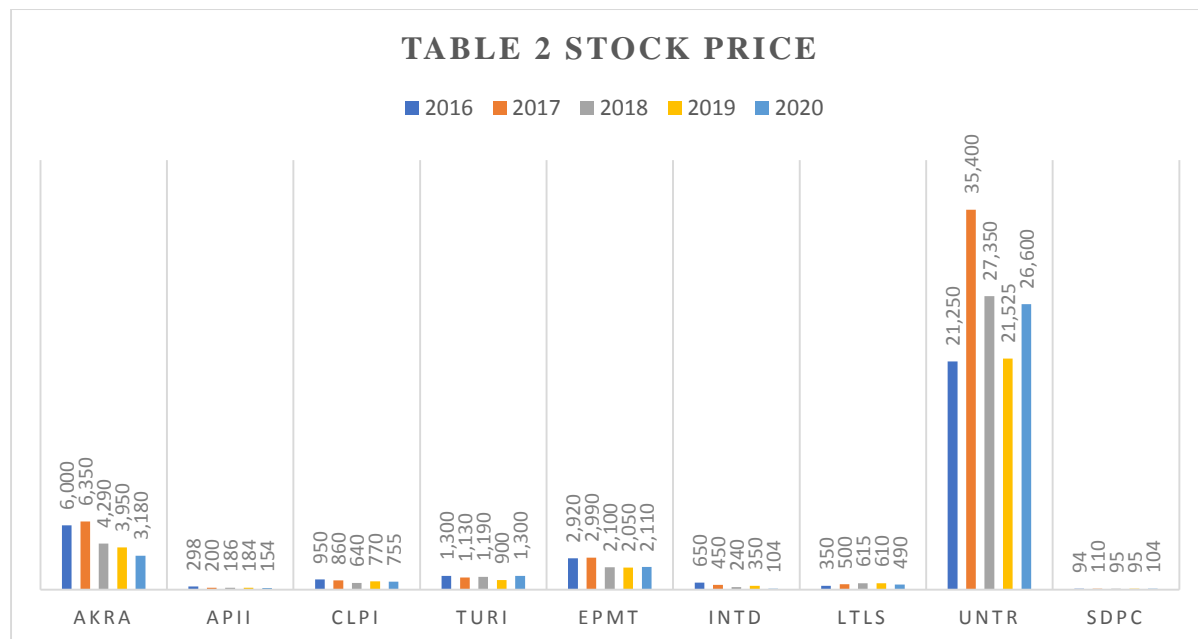


Source: Data Processing Results (2021)

At this time many companies that have gone public are running businesses in the trade sector both locally and globally, thus creating a tight competition between companies. To face this competition, companies must grow well and be able to maintain their advantages in order to provide benefits to the owners of capital and those who run or manage the company. Data from the Central Statistics Agency shows that there are three sectors that contributed greatly to Indonesia's economic growth in the first quarter of 2019 (www.katadata.ac.id), the three sectors were industry with a contribution of 20.07%, then trade 12.20%, and agriculture 12.65%. Trade growth with other countries slowed down. With China, the figure was 6.4% in the first quarter of 2019, from 6.8% in the same period a year earlier. Then, Singapore is also much lower, from 4.7% to 1.3%. Similar conditions also occurred for South Korea, its trade growth with Indonesia from 2.8% to 1.8%. Only with the United States alone there is a strengthening, from 2.6% to 3.2% (www.katadata.ac.id). Companies in the Big Trading Sector listed on the Indonesia Stock Exchange, based on data on the Indonesia Stock Exchange, there are 91 companies that are included in the Big Trading Sector. Information from the Minister of Finance of the Republic of Indonesia Fiscal Policy Agency, Center for Macroeconomic Policy 2012. The trade sector is classified as a tertiary sector. The trade sector grew by 9.2% in 2011, an increase from 8.7% in the previous year. In 2016 – 2018 the share price increased because it had a large profit.

In addition, the factor of the influence of market capitalization which is still relatively small has pushed up stock prices at that time. However, at the end of 2019 – 2020 there was a significant decline in share prices. This was due to the COVID-19 pandemic that attacked all countries, so that several large trading sectors suffered losses so that stock prices in several sectors experienced a significant decline. After conducting several studies related to stock prices, the results obtained still do not show consistency related to the theories of research results from conditions occurring in the large trading sector. These studies have been conducted with a discussion on the ratio of liquidity, solvency, and profitability, to stock prices have different results as well. The liquidity ratio is measured using the current ratio because this ratio provides information about the extent to which the company's current assets can cover its short-term liabilities or current liabilities. The greater the ratio between current assets and current liabilities, a company has a greater ability to cover its current debt obligations.

According to Nufus, SUPRATIKTA, MUCHTAR, and Sunarsi (2020), the solvency ratio shows the extent to which the company's ability to fulfill all its obligations with the guarantee of its assets. This ratio is to assess or measure the comparison between the amount of debt with the amount of capital or equity. So by using this ratio, you can find out how much capital is used as collateral for the company's debt. The solvency ratio is measured using the debt to assets ratio because this ratio measures the percentage of funds originating from debt. Profitability ratio is a ratio that describes the company's ability to generate profits by using the capital embedded in it. The profitability ratio is measured using return on assets because this ratio measures the return on profits for a year based on the capital invested in a company. According to Pattiruhu and PAAIS (2020) in his research stated that the ROE variable had an insignificant effect on closing stock prices. This indicates that the ROE variable is not suitable as a reference in making investment decisions because of its insignificant effect on closing stock prices.



Source: Data Processing Results (2021)

Literature Review

Stock price

Yu (2020) states that the stock price is the price of a share that occurs on the stock market at a certain time determined by market participants and is determined by the demand and supply of the shares concerned in the capital market. The share price is the price set by a company based on the influence of supply and demand for shares that occur between the seller and the buyer of shares. The stock price reflects the success of the company's management where this success will generate profits which will then provide satisfaction for rational investors (Hertina & Saudib, 2019). Stamoulis (2020): stock price is the price of a share that occurs in the stock market at a certain time determined by market participants and determined by the demand and supply of the shares concerned in the capital market. Christine and Apriliana (2021), states that partially liquidity and solvency have no effect on stock prices Sepindo, Suhendro, and Chomsatu (2020), tested the effect of liquidity, profitability, and solvency on stock prices and the results stated that liquidity had no significant effect on stock prices.

Effect of Liquidity Ratio, Solvency Ratio, and Profitability Ratio on Stock Price

Brigham and Houston (2021), said that the liquidity ratio is a ratio that describes the company's ability to meet short-term obligations. According to Riyanto (2004), solvency is showing the company's ability to meet all its financial obligations if the company is liquidated. Rasio Profitabilitas. Melati and Munir (2020) argues that the Profitability Ratio is a ratio that describes the company's ability to generate profits by using the capital embedded in it. Hertina, Dewi, Arkananto, Yassar, and Wiherdianto (2021), examines the effect of liquidity, solvency, and market value on stock returns. The results of this study indicate that partially the three variables of liquidity, solvency, and market value have no significant effect on stock returns, while simultaneously investment opportunities and profitability have an effect on dividend policy. Kusnandar and Sari (2020), tested the effect of liquidity, solvency, profitability, market ratios, and firm size on stock prices. The results of this study show that partially the liquidity and profitability variables have no significant effect on stock prices, simultaneously liquidity,

solvency, profitability, market ratios, and firm size variables have a significant influence on stock prices.

Effect Of Liquidity Ratio, Solvency Ratio, And Profitability Ratio On Stock Price

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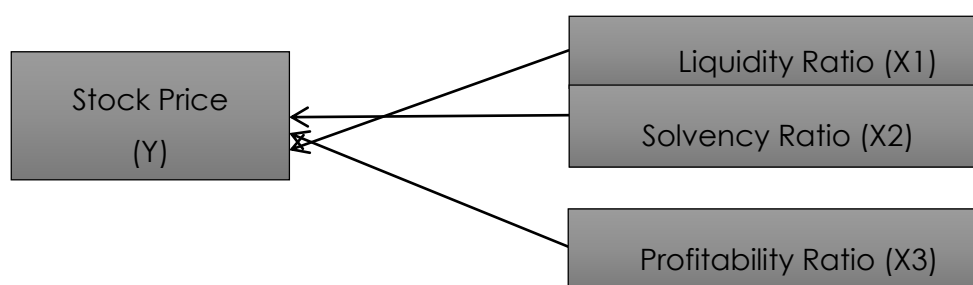
Effect of Liquidity Ratio on Stock Price

According to M Allo (2021), the liquidity ratio is a ratio that describes the company's ability to meet short-term obligations. Susanti et al. (2020) stated that the liquidity ratio is an evaluation of the company's ability to repay short-term debts with current assets in the company. The liquidity ratio is to measure the ability of a company in terms of liquidity or how a company is able to pay its short-term obligations. Sulistyanie and Sumantri (2020), examines the effect of financial ratios on LQ45 company stock prices for the 2011-2015 period. The financial ratios used to measure liquidity include the current ratio, debt equity ratio, total asset turnover, return on equity and earnings per share. used as the independent variable and Stock Price as the dependent variable. The sampling technique used was purposive sampling with a sample of 18 LQ45 issuers who met the research criteria in the year concerned. The results of this study indicate that the results of hypothesis testing debt equity ratio and earnings per share have a significant effect on stock prices, while the current ratio, total asset turnover and return on equity have no significant effect on stock prices. Sepindo et al. (2020), tested the effect of liquidity, profitability, and solvency on stock prices. The results of this study indicate that the variables ratio Current Ratio, Return on Assets and Debt to Equity Ratio are statistically significant simultaneously to predict stock prices to be traded.

The Effect of Solvency Ratio on Stock Price

According to Nufus et al. (2020), the solvency ratio shows the extent to which the company's ability to fulfill all its obligations is guaranteed by the assets it has. The solvency ratio is the level of a company's ability to pay off its short-term and long-term debt or its total debt with its capital or total assets. Widyastuti (2019), tested the analysis of financial performance on stock prices in food and beverage companies listed on the IDX from 2011 to 2015. The financial ratios used to measure liquidity include the current ratio, debt equity ratio, return on equity, debt to equity ratio, and total asset turnover. The results show that partially only return on equity and debt to equity ratio have a significant effect on stock prices, while simultaneously shows that the four variables used, namely the current ratio, return on equity, debt to equity ratio and total asset turnover have a significant effect on the stock price. significant to stock prices. Jihadi et al. (2021), examines the comparison of the effect of liquidity, solvency, and profitability on stock prices. The results show that DER & ROA have a significant effect on stock prices.

Research Paradigm



Research Hypothesis

H₁: Liquidity ratios, solvency ratios and profitability ratios affect stock prices

H₂: Liquidity ratio affects stock prices

H₃: The solvency ratio has an effect on stock prices

H₄: Profitability ratios affect stock prices

Research Methods

The method used in this study is a descriptive method, with the research population being all large trading sub-sector companies listed on the Indonesia Stock Exchange in 2016 - 2020. The type of data used in this research is using secondary data, namely financial statement data in a company. The data used are financial statements for the period 2016 - 2020.

Sample selection criteria

1. Listed as a company listed on the Indonesia Stock Exchange from 2016 - 2020 and continuously reporting its finances.
2. Companies that submit complete data in the year concerned to measure the variables.
3. Companies that submit stock price data available in the year concerned.
4. Companies that submit financial reports from January to December in the year concerned.

Results and Discussion

Descriptive Statistical Analysis

Descriptive statistical analysis is used to provide an overview of the data for each variable used in the study. The variables used in this study are the liquidity ratio proxied by the current ratio, the solvency ratio proxied by the debt to assets ratio, the profitability ratio proxied by return on equity and stock prices (Y). The results of descriptive statistical analysis in this study are as follows:

F-Statistic Test

Table 2

F Test

R-squared	0.208125	Mean dependent var	4261.786
Adjusted R-squared	0.145608	S.D. dependent var	8565.819
S.E. of regression	7917.670	Akaike info criterion	20.88197
Sum squared resid	2.38E+09	Schwarz criterion	21.04747
Log likelihood	-434.5215	Hannan-Quinn criter.	20.94263
F-statistic	3.329121	Durbin-Watson stat	0.796210
Prob(F-statistic)	0.029551		

Source: Data Processing Results (2021)

The results of the statistical F_{test} obtained results of $3.329121 > 2.81154 F_{table}$. The probability value of $F_{statistic}$ is $0.029551 < 0.05$. This means that liquidity, solvency and profitability simultaneously have a significant influence on stock prices in large trading sub sector companies listed on the IDX in 2016 - 2020.

t - Statistic Test

Table 3

t Test

Dependent Variable: Y				
Method: Least Squares				
Date: 06/22/21 Time: 18:16				
Sample: 1 45				
Included observations: 42				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1966.346	5263.399	-0.373589	0.7108
X1	-85.56824	171.4382	-0.499120	0.6206
X2	-1849.990	7715.110	-0.239788	0.8118
X3	74790.36	26396.02	2.833395	0.0073

Source: Data Processing Results (2021)

Regression Equation:

$$Y = -1966,346 -85,56824 X_1 -1849,990 X_2 + 74790,36 X_3$$

Interpretation of the Regression Equation:

- The stock price has decreased by 85.56824 units, meaning that if the Current Ratio has increased by one unit, the stock price will decrease by 85.56824 units assuming other variables are considered stable.
- The stock price decreased by 1849,990 units, meaning that if the debt to assets ratio

increased by one unit, the stock price would decrease by 1849,990 units assuming the other variables were considered stable.

c. The stock price will increase by 74790.36 units, meaning that if the return on equity increases by one unit, the stock price will increase by 74790.36 units assuming the other variables are considered stable.

Research Discussion

The Effect of Liquidity on Stock Prices in Large Trading Sub-Sector Companies Listed on the Indonesia Stock Exchange in 2016 - 2020

Based on the results of the statistical t_{test} for the liquidity variable, it is $0.499120 < 2.01954 t_{table}$, with a probability value of $0.6206 > 0.05$. This means that the liquidity variable has no effect on stock prices in large trading sub-sector companies listed on the IDX in 2016 - 2020. The results of this study are in line with research conducted by Sepindo et al. (2020) which states that the t_{count} is 1.022 with a significant value of 0.313 and the t_{table} is 2.014. Because $t_{count} < t_{table}$ ($1.022 < 2.014$) and the significant value is greater than 0.05 ($0.313 > 0.05$), it can be concluded that CR has a positive and insignificant effect on stock prices. However, the results of this study are not in line with research conducted by Bustani, Kurniaty, and Widyanti (2021) which states that the Current Ratio variable shows a t_{count} value of 0.421 which is smaller than the t_{table} value of 2.02809. Then the significance value obtained is 0.676 which is greater than 0.05. This shows that partially CR has no effect on stock prices.

The Effect of Solvency on Stock Prices in Large Trading Sub-Sector Companies Listed on the Indonesia Stock Exchange 2016 - 2020

Based on the results of the statistical t test for the solvency variable, it is $0.239788 < 2.01954 t_{table}$, with a probability value of $0.8118 > 0.05$. This means that the solvency variable has no effect on stock prices in large trading sub-sector companies listed on the Indonesia Stock Exchange in 2016 -2020. The results of this study are in line with research conducted by Shahnia, Purnamasari, Hakim, and Endri (2020) which states that based on the results of the multiple regression test calculation, it is known that the β DAR coefficient is negative at -2.390 and the value $-t_{count} < -t_{table}$ is $-2.390 < -2.015$, with a significance of $0.026 < 0.05$. This means that DAR has a negative and significant effect on stock prices in banking companies listed on the Indonesia Stock Exchange. However, the results of this study are not in line with research conducted by Malini (2019). The test results in this study show the regression coefficient value with a negative sign of -1.093, with a significance level of $-0.070 < 0.05$, t_{count} of $-1.093 < t_{table}$ 1.667, and a significance (Sig.) of $0.278 > 0.05$, which means it has no significant effect. The test results found that the Debt to Assets Ratio had a negative and insignificant effect on stock prices in LQ-45 index companies on the Indonesia Stock Exchange for the period 2011-2013. This study found that the Debt to Assets Ratio had a negative and insignificant effect on stock prices so that the hypothesis in this study which stated that the Debt to Assets Ratio had a negative and significant effect on stock prices was rejected.

The Effect of Profitability on Stock Prices in Large Trading Sub-Sector Companies Listed on the Indonesia Stock Exchange in 2016 – 2020

The results of the statistical t_{test} for the profitability variable are $2.833395 > 2.01954 t_{table}$, with a probability value of $0.0073 < 0.05$. This means that the profitability variable has an influence on stock prices in large trading sub-sector companies listed on the Indonesia Stock Exchange in 2016 – 2020. The results of this study are in line with research conducted by Pattiruhu and PAAIS (2020) which states that the t test between ROE and stock prices shows $t_{count} = 1.098$. While t_{table} ($\alpha = 0.05$; db residual = 100) is 1,984. Because $t_{count} < t_{table}$ that is $1.098 < 1.984$ or $sig. t > =$

0.05 then ROE has no significant effect on stock prices. However, the results of this study are not in line with the research conducted by Yuninda and Kusumawardhani (2021) which states that the Effect of Return on Equity on Stock Prices, obtained t_{count} of -0.486 and t_{table} of 2.027, it can be concluded that $t_{\text{count}} < t_{\text{table}}$ or $-0.486 < 2.027$. This means that there is no significant effect between Return on Equity and Stock Price.

Conclusion

1. The test results simultaneously state that liquidity, solvency and profitability have a significant effect on stock prices in large trading sub-sector companies listed on the Indonesia Stock Exchange for the period 2016 - 2020.
2. The test results using the t_{test} , show that the statistical t_{table} value for the liquidity variable is $0.499120 < 2.01954 t_{\text{table}}$, with a probability value of $0.6206 > 0.05$, meaning that the liquidity variable has no effect on stock prices in large trading sub-sector companies listed on the Indonesia Stock Exchange for the period 2016 - 2020.
3. The test results using the t_{test} show that the value of the statistical t_{test} for the solvency variable is $0.239788 < 2.01954 t_{\text{table}}$ with a probability value of $0.8118 > 0.05$, meaning that the solvency variable has no effect on stock prices in the company. large trading sub-sectors listed on the Indonesia Stock Exchange for the period 2016 - 2020.
4. The test results using the t_{test} show that the statistical t_{test} value for the profitability variable is $2.833395 > 2.01954 t_{\text{table}}$, with a probability value of $0.0073 < 0.05$. This means that the profitability variable has an influence on stock prices in large trading sub-sector companies listed on the Indonesia Stock Exchange for the period 2016 - 2020.

Reference

- Brigham, E. F., & Houston, J. F. (2021). *Fundamentals of Financial Management*: Cengage Learning. Retrieved from <https://books.google.com.pk/books?id=9uUXEAAAQBAJ>
- Bustani, B., Kurniaty, K., & Widyanti, R. (2021). The Effect of Earning Per Share, Price to Book Value, Dividend Payout Ratio, and Net Profit Margin on the Stock Price in Indonesia Stock Exchange. *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship*, 11(1), 1-18. doi:<http://dx.doi.org/10.30588/jmp.v11i1.810>
- Christine, D., & Apriliana, T. (2021). The Influence of Profitability, Technical Analysis Education and Liquidity Toward Stock Price: An Empirical Study on Banking Sector in Indonesia. *Review of International Geographical Education Online*, 11(1), 583-588. doi:<https://rigeo.org/submit-a-manuscript/index.php/submission/article/view/361>
- Hertina, D., Dewi, I., Arkananto, R. P., Yassar, M. Z., & Wiherdianto, A. R. (2021). Stock Returns Impact of Earning Per Share and Return on Equity Companies Listed on the LQ45 Index. *Psychology and Education Journal*, 58(3), 278-286. doi:<https://doi.org/10.17762/pae.v58i3.2708>
- Hertina, D., & Saudib, M. H. M. (2019). Stock Return: Impact of Return on Asset, Return on Equity, Debt to Equity Ratio and Earning Per Share. *International Journal of Innovation, Creativity and Change*, 6(12), 93-104. Retrieved from https://ijicc.net/images/vol6iss12/61207_Hertina_2019_TD_R.pdf
- Hirdinis, M. (2019). Capital structure and firm size on firm value moderated by profitability. *International Journal of Economics and Business Administration*, 7(1), 174-191. Retrieved from <https://www.um.edu.my/library/oar/handle/123456789/43966>
- Jihadi, M., VILANTIKA, E., HASHEMI, S. M., ARIFIN, Z., BACHTIAR, Y., & SHOLICHAH, F. (2021). The

- effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), 423-431. doi:<https://doi.org/10.13106/jafeb.2021.vol8.no3.0423>
- Kusnandar, K., & Sari, M. (2020). THE EFFECTS OF LIQUIDITY, SOLVENCY, AND PROFITABILITY ON STOCK PRICE (A STUDY IN PT TELEKOMUNIKASI INDONESIA TBK. PERIOD OF 2004-2018). *Journal of Accounting and Finance Management*, 1(2), 262-274. doi:<https://doi.org/10.38035/jafm.v1i2.30>
- M Allo, Y. R. (2021). The Analysis of Financial Statements Performance: Case Studies PT. Bank Negara Indonesia (Persero). *Golden Ratio of Finance Management*, 1(2), 87-100. Retrieved from <https://goldenratio.id/index.php/grfm>
- Malini, H. (2019). Efficient market hypothesis and market anomalies of LQ 45 index in Indonesia stock exchange. *Sriwijaya International Journal of Dynamic Economics and Business*, 3(2), 107-121. doi:<https://doi.org/10.29259/sijdeb.v3i2.107-121>
- Melati, R., & Munir, A. (2020). CORPORATE REPORTING IN COMPARISON OF FINANCIAL PERFORMANCE OF PT MAYORA INDAH TBK AND PT SIANTAR TOP TBK AS AN ALTERNATIVE INVESTMENT. *Journal of Management and Leadership*, 3(1), 15-28. Retrieved from <https://jurnal.tau.ac.id/index.php/jml/article/view/143>
- Nufus, K., SUPRATIKTA, H., MUCHTAR, A., & Sunarsi, D. (2020). Analysis of Financial Performance: Case Study of PT. X Employee Cooperative. *Utopía Y Praxis Latinoamericana*, 25(Esp. 10), 429-444. doi:<https://doi.org/10.5281/zenodo.4155737>
- Pattiruhu, J. R., & PAAIS, M. (2020). Effect of liquidity, profitability, leverage, and firm size on dividend policy. *The Journal of Asian Finance, Economics, and Business*, 7(10), 35-42. doi:<https://doi.org/10.13106/jafeb.2020.vol7.no10.035>
- Riyanto, S. (2004). The Urgency of Refugee Legislation in Indonesia and the Present Obstacles. *Indonesian Journal of International Law*, 2(1), 391-40. doi:<https://dx.doi.org/10.17304/ijil.vol2.1.78>
- Sepindo, Y., Suhendro, S., & Chomsatu, Y. (2020). THE EFFECT OF LIQUIDITY RATIO, PROFITABILITY AND SOLVENCY ON STOCK PRICE IN CONSTRUCTION AND BUILDING COMPANIES LISTED ON INDONESIA STOCK EXCHANGE PERIOD 2014-2018. Paper presented at the PROCEEDINGS INTERNATIONAL SEMINAR ON ACCOUNTING SOCIETY. Retrieved from <http://www.openjournal.unpam.ac.id/index.php/PISA/article/view/8832>
- Shahnia, C., Purnamasari, E., Hakim, L., & Endri, E. (2020). Determinant of profitability: Evidence from trading, service and investment companies in Indonesia. *Accounting*, 6(5), 787-794. doi:<http://dx.doi.org/10.5267/j.ac.2020.6.004>
- Soebyakto, B. B., & Sinulingga, A. (2018). Company characteristics and risk management disclosure: empirical study of manufacturing companies listed on the Indonesia stock exchange. *Problems and Perspectives in Management*, 16(2), 396. doi:[https://www.doi.org/10.21511/ppm.16\(2\).2018.36](https://www.doi.org/10.21511/ppm.16(2).2018.36)
- Stamoulis, D. S. (2020). Information systems for the social administration using the soft systems methodology. *International Journal of Applied Systemic Studies*, 9(1), 1-10. doi:<https://doi.org/10.1504/IJASS.2020.108655>
- Sulistyanie, A., & Sumantri, M. B. A. (2020). The Effect of Return On Equity (ROE), Debt Equity Ratio (DER), and Earning Per Share (EPS) on Share Prices in LQ45 Indexed Companies on the Indonesia Stock Exchange for the 2015-2018 Period. *Technium Romanian Journal of Applied Sciences and Technology*, 2(7), 209-221. Retrieved from <https://techniumscience.com/index.php/technium/article/view/2029>
- Susanti, N., Latifa, I., & Sunarsi, D. (2020). The Effects of Profitability, Leverage, and Liquidity on Financial Distress on Retail Companies Listed on Indonesian Stock Exchange. *Jurnal Ilmiah Ilmu Administrasi Publik*, 10(1), 45-52. doi:<https://doi.org/10.26858/jiap.v10i1.13568>
- Widyastuti, M. (2019). Analysis of liquidity, activity, leverage, financial performance and company value in food and beverage companies listed on the Indonesia Stock Exchange. *SSRG International Journal of Economics and Management Studies (SSRG-IJEMS)*, 6(5), 52-58. Retrieved from http://www.internationaljournalsrrg.org/IJEMS/archive_details?page=Volume6-Issue5-2019

- Yu, J. N. (2020). *Research on Financial Portfolio Analysis in the New Era*. Paper presented at the Journal of Physics: Conference Series. Retrieved from <https://iopscience.iop.org/article/10.1088/1742-6596/1437/1/012055/meta>
- Yuninda, Y., & Kusumawardhani, R. (2021). THE EFFECT OF ROA, CAPITAL, GROWTH ASSETS, LDR AND DER ON SHARE PRICES IN REGISTERED BANKING SECTORS IN INDONESIA STOCK EXCHANGE PERIOD 2010-2018. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 5(3), 38-51. Retrieved from <http://www.jurnal.stie-aas.ac.id/index.php/IJEBAR/article/view/1566>