

THE EFFECT OF PROFITABILITY AND LIQUIDITY ON VALUE COMPANIES WITH CAPITAL STRUCTURE AS INTERVENING VARIABLES

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ABSTRACT

The scope of this research is a study of the effect of profitability (ROE) and liquidity (CR) on firm value (PBV) with capital structure (DER) as an intervening variable at AKR Corporindo Tbk in 2016-2020. The purpose of this study was to determine the effect of profitability (ROE) and liquidity (CR) on firm value (PBV) with capital structure (DER) as an intervening variable that analyzes the pattern of relationships between variables in the variable's cause and effect and to know the fact and indirect. This research is quantitative research with a path analysis approach. The results from substructure one show that partially pro partial (ROE) has no significant effect on capital structure (DER). Liquidity (CR) partly has a negative and significant impact on capital structure (DER), and the combined product of profitability (ROE) and liquidity (CR) on capital structure (DER) is 79,8%. Partial profitability (ROE) has a positive and significant effect on firm value (PBV), liquidity (CR) partially has a negative and significant impact on firm value (PBV), and capital structure (DER) has and significant effect on firm value (PBV). The combined impact of profitability (ROE), liquidity (CR), and capital structure (DER) variables on firm Value (PBV) is 30,2%.

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1. INTRODUCTION

The great transformation of industry in Indonesia is developing very fast, along with advances in science and technology. This growth has resulted in fierce competition; therefore, each company must work effectively and practice the right strategy to survive and compete in its business activities. The rapid growth of a company should be an attraction to encourage increased investment and will impact the economic development of a country.

Every company certainly has targets to be achieved. One of the company's targets is to maximize the welfare of shareholders. Maximizing company value is very important for a company because maximizing company value means optimizing shareholder prosperity to describe the company's main objectives (Kurniasih and Ruzikna 2017). The greater the company's value, the more prosperity the company owner will receive. The company's value is considered to be of high value, able to reflect its performance so that it can influence investors' assumptions about the company (Prastuti and Sudiartha 2016).

The company value can be seen from the stock price. If a company has a high stock price reflecting the company is financially capable, this will foster confidence in investors that the company has a good chance of profit in the future. Meanwhile, according to (Massie, Tommy, and Koleangan 2017), company value is defined as the price that potential investors are willing to pay if a company is to be sold (Massie et al., 2017); the value of the company can reflect the value of assets owned by the company such as securities.

The following is the data on the calculation of profitability (ROE), liquidity (CR), capital structure (DER), and company value (PBV) at AKR Corporindo Tbk listed on the Indonesia Stock Exchange for the 2016-2020 period:

Table 1 Profitability (ROE), Liquidity (CR), Capital Structure (DER), and Company Value (PBV) Data on AKR Corporindo Tbk Companies Listed on the Indonesia Stock Exchange in 2016-2020:

Company Name	Year	Profitability	Liquidity	Capital Structure	Company Values
		ROE	CR	DER	PBV
AKR Corporindo Tbk	2016	0,1297	1,2709	0,9606	2,9833
	2017	0,1445	1,6238	0,8631	2,8233
	2018	0,1608	1,3976	1,0088	1,7350
	2019	0,0698	1,2370	1,1267	1,5753
	2020	0,0911	1,5763	0,7699	1,2094

Source: IDX (data has been processed) 2022

According (Lukviarman, 2006) revealed that the industry standard value that can be said to be good is with a profitability ratio (ROE) of 8.32%. Based on table 1, it can be seen that there was a phenomenon in 2019 that its profitability fell below the industry standard value, which was 7% from the previous year. In 2020, it only slightly increased by 0.79% from the industry standard value of 8.32%, meaning that the company's ability to generate profits in 2019 and 2022 has decreased from the previous year.

According to Riyanto (Fahmi 2013, 67) said, "if a company determines that the current (Fahmi, 2013, p. 67) ratio to be maintained is 3:1 or 300%, this means that every current debt of Rp 1.00 must be guaranteed with lanvar assets of Rp 3.00. Based on table 1, the current ratio of AKR Corporindo Tbk does not meet the ratio of 3:1, meaning that the company's ability to meet short-term obligations maturing is very low.

According to (Nugroho 2012) revealed that investors tend to be more interested in a certain DER ((Nugroho, 2012) debt to equity ratio) value of less than 1 or 100% because more than 1 indicates the company's risk tends to be higher. If the DER is lower, then the company's ability to get profit is higher, and vice versa; if the higher the DER is, the company's ability to get profit will be lower. However, table 1 shows that there is a DER value of more than 1 or even reached 113%, which occurred in 2019, meaning that the risk of AKR Corporindo Tbk tends to be higher so that the company's ability to generate profits is lower.

According to (Setianto 2016), a low PBV ((Setianto, 2016) price to book value) indicates a decrease or movement in the quality and performance of the company concerned is getting weaker. The phenomenon that occurred in the company value of AKR Corporindo Tbk from 2016-2020 experienced a continuous decline while fostering investor confidence to invest by looking at the increasing company value. Still, the AKR Corporindo Tbk company value indicated by the PBV value is getting lower from 2016 to 2020. (Lukviarman, 2006)

From the description above, researchers are interested in researching to prove whether there is a significant positive and or negative influence of profitability and liquidity on the value of the company through the capital structure as an intervening variable based on the company's financial statements, assuming that the company's financial statements better describe the condition of the company. **"The Effect of Profitability and Liquidity on Company Value with Capital Structure as an Intervening Variable in AKR Corporindo Tbk Company Listed on the Indonesia Stock Exchange for the 2016-2020 Period"**.

Based on the background of the above problems, this study aims to determine the effect of profitability and liquidity on company value through the capital structure as an intervening variable in the AKR Corporindo Tbk company from 2016 to 2020.

According to (Sartono 2012, 107), the concept of company value is defined as the price that investors are willing to pay if a company is to be sold. (Sartono, 2012, p. 107)

According to Weston and Copeland (Fahmi 2013, 184), the concept of capital structure states that the profitability ratio is a ratio to assess the company's ability to seek profit. (Fahmi, 2013)

The concept of liquidity, according to (Fahmi 2013, 65), states that the liquidity ratio is the ability of an enterprise to meet its short-term obligations on time. For example, payment of electricity, telephone, PDAM water, employee salaries, technician salaries, overtime pay, telephone charges, and so on. (Fahmi, 2013)

2. METHOD

2.1 Jenis and Data Source

The type of research used is quantitative research on the path analysis approach. "pathway analysis is a technique for analyzing causal relationships that occur in multiple regressions if their free variables affect bound variables not only directly but also indirectly" (Sarwono 2012, 18)(Sarwono, 2012, p. 18)

The type of data used in this study used secondary data. The data needed include the financial statements of AKR Corporindo Tbk for 2016-2020. The source company's financial statement data were obtained from the www.idx.co.id website on the Indonesia Stock Exchange (IDX) in 2016-2020. Other data was obtained by taking the literature of the book and other sources relevant to the study to serve as the basis for discussion to support the success of this research.

The data collection techniques used in this study are as follows:

1. Documentation technique is a data collection technique by viewing and studying documents and records at the AKR Corporindo Tbk company for the 2016-2020 period, which is studied in the form of written sources, books, directories, and other data related to research. The data is in the form of annual financial statements of companies going public listed on the Indonesia Stock Exchange.
2. The next technique is literature study; this activity is carried out by collecting data from various literature in libraries and elsewhere. The literature used is not only limited to books but also in the form of documentation and written materials. The literature can be found in various theories, laws, propositions, principles, opinions, and ideas that can be used to analyze and solve the problem under study.

2.2 Analysis Method

The data analysis method is a process of researching data that has been collected and processed to answer problem formulation. So this study will test the influence of free variables (ROE and CR) on endogenous variables (DER), free variables (ROE and CR) on bound variables (PBV), exogenous variables (DER) on bound variables (PBV) and free variables (ROE and CR) through intervening variables (DER) on bound variables (PBV) both direct, indirect and total influences.

In this method of the path, the analysis uses substructure equations. So the substructure equation in this study is as follows:

1. $Z = \beta ZX_1 + \beta ZX_2 + e_1$ (substructure equation one)
2. $Y = \beta YX_1 + \beta YX_2 + \beta YZ + e_2$ (substructure equation two)

Calculating the indirect effect:

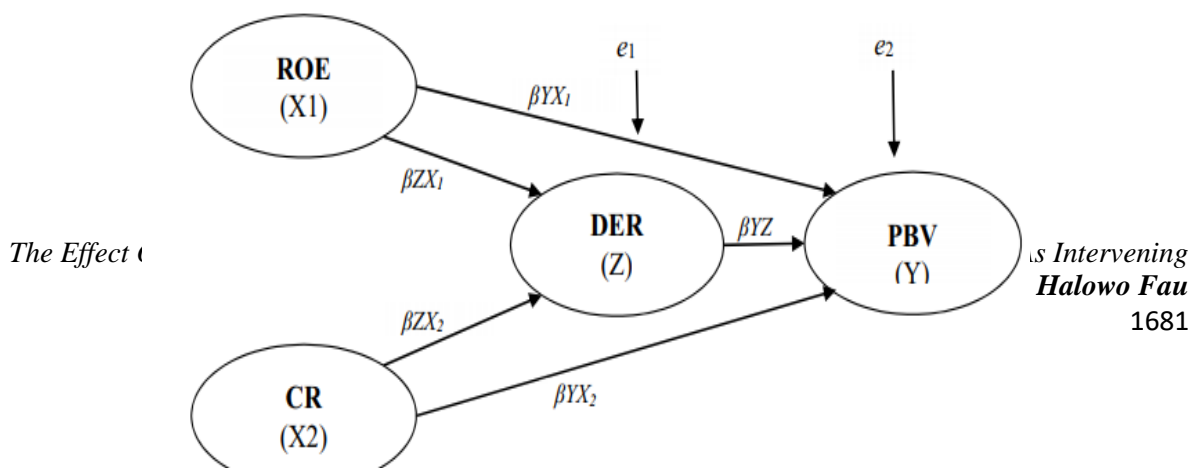
1. $IE = \beta ZX_1 \times \beta YZ$ (X1 against Y via Z)
2. $IE = \beta ZX_2 \times \beta YZ$ (X2 against Y via Z)

Calculating the total effect:

1. $TE = \beta ZX_1 + \beta YZ$ (X1 against Y via Z)
2. $TE = \beta ZX_2 + \beta YZ$ (X2 against Y via Z)

Here's a picture of the path diagram analysis based on the equations of substructure one and substructure two above:

Draw 1. Path Diagram of the Effect of Profitability (ROE) and Liquidity (CR) On Company Value (PBV) Directly and Indirectly Through Capital Structure (DER)



Source: Data processed by researchers, 2022

3. RELUST AND DISCUSSION

3.1. Relust

In this study, hypothesis testing was carried out in stages, namely by analyzing the path following the structural model; the first stage was the substructure model one, namely testing the effect of profitability (ROE) and liquidity (CR) on the capital structure (DER). The second stage is a substructure model of two, namely testing the effect of profitability (ROE), liquidity (CR), and capital structure (DER) on company value (PBV) both partially, combined, and total influence.

3.1.1 Calculation of Substructure One

- a. Effect of Exogenous Variable Profitability (ROE) on Endogenous Variable Capital Structure (DER)

Table 2 Effect of Profitability (ROE) and Liquidity (CR) Partially On Capital Structure (DER)
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1 (Constant)	1.636	.049		33.066	.000
Profitability	-.110	.254	-.027	-.430	.668
Likuidity	-.466	.033	-.885	-14.295	.000

a. Dependent Variable: Capital Structure

Source: Researchers 2022, using SPSS 25

- a. Profitability (ROE) partially had no significant effect on the capital structure (DER) with a result t of $-0.430 < t_{table} -1.67$. The value of the effect of profitability (ROE) on the capital structure (DER) was -0.027 and a significant value of $0.668 > 0.05$.
- b. Liquidity (CR) partially negatively and significantly affects the capital structure (DER) with a result t of $-14,295 > t_{table} -1.67$. The influence of liquidity variables on the capital structure (DER) is -0.885 , and the significant value is $0.000 < 0.05$.

- b. Effect of Exogenous Liquidity Variables (CR) on Endogenous Variables of Capital Structure (DER)

Table 3 Effect of Profitability (ROE) and Liquidity (CR) Combined on Capital Structure (DER)
Summary^b

		Adjusted R Square	Std. The error in the	Durbin - Watson
1	.893 ^a	.798	.0681761	1.743

a. Predictors: (Constant), Liquidity, Profitability

b. Dependent Variable: Capital Structure

Source: Researchers 2022, using SPSS 25

The effect of profitability (ROE) and liquidity (CR) together on the capital structure (DER) with R square values of 0.798 and 0.202 is another variable outside this study.

3.1.2 Calculation of Substructure Two

Table 4 Effect of Profitability (ROE) Liquidity (CR) and Capital Structure (DER) Partially On Company Value (PBV)

Coefficients^a

Model	Unstandardized Coefficients		Standardize Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.790	.188		4.200	.000
Profitabilitas	10.603	2.778	.451	3.816	.000
Likuiditas	-3.574	.924	-.752	-3.867	.000
Struktur Capital	-3.810	1.173	-.613	-3.250	.002

a. Dependent Variable: Company value

Source: Researchers 2022, using SPSS 25

- Profitability (ROE) partially had a positive and significant effect on the value of the company (PBV) with a research t value of 3,816 > t table 1.67. The effect of profitability (ROE) on the value of the company (PBV) is 0.451, and the sig value is 0.000 < 0.05.
- Liquidity (CR) partially negatively and significantly affects the value of the company (PBV) with a research t value of -3,867 > t table -1.67. The amount of liquidity (CR) effect on company value (PBV) is -0.752, and the sig is 0.000 < 0.05.
- The capital structure (DER) partially negatively and significantly affects the value of the company (PBV) with a research t value of -3,250 > t table -1.67. The magnitude of the capital structure (DER) effect on the company's Value (PBV) is -0.613, and the sig value is 0.002 < 0.05.

Table 5. Effect of Profitability (ROE), Liquidity (CR), and Capital Structure (DER) Combined on Company Value (PBV)

Model Summary^b

		Adjusted R Square	Std. An error in the	Durbin -
1	.549 ^a	.302	.264	.0632124
				2.624

a. Predictors: (Constant), Capital Structure, Profitability, Liquidity

b. Dependent Variable: Company Value

Source: Researchers 2022, using SPSS 25

- a. The effect of variable profitability (ROE), liquidity (CR), and capital structure (DER) simultaneously on the value of the company (PBV) with an R square value of 0.302 and 0.698 is another variable outside this research model.
- b. The effect of variable profitability (ROE), liquidity (CR), and capital structure (DER) simultaneously on the value of the company (PBV) with an R square value of 0.302 and 0.698 is another variable outside this research model.

3.2. DISCUSSION

This study uses a path analysis method which serves to determine the presence or absence of direct influences and indirect influences between variables can be seen in the table below:

Table 6. Correlation of each Variable

		Correlations			
		Company Values	Profitability	Liquidity	Capital Structure
Pearson Correlation	Company Values	1.000	.338	-.118	-.099
	Profitability	.338	1.000	.315	-.203
	Liquidity	-.118	.315	1.000	-.804
	Capital Structure	-.099	-.203	-.804	1.000
Sig. (1- tailed)	Company Values	.	.004	.186	.225
	Profitability	.004	.	.007	.060
	Liquidity	.186	.007	.	.000
	Capital Structure	.225	.060	.000	.
N	Company Values	60	60	60	60
	Profitability	60	60	60	60
	Liquidity	60	60	60	60
	Capital Values	60	60	60	60

In seeing whether the correlation coefficient is strong in research, it is necessary to interpret the value of the correlation coefficient using the Sarwono criteria (2012, 140), namely: (1) 0 = no correlation between two variables, (2) > 0 – 0.25 = very weak correlation, (3) > 0.25 – 0.50 = sufficient correlation, (4) > 0.50 – 0.75 = strong correlation and (5) > 0.75 – 0.99 = very strong correlation. Table 4.11 shows the correlation between the exogenous variable profitability (ROE) and the endogenous variable company value (PBV) of 0.338. This value means that the relationship between the exogenous variable profitability (ROE) and the Company Value (PBV) is sufficient and unidirectional because the result of the correlation coefficient is positive; unidirectional meaning that if the profitability (ROE) value is high, then the value of The company (PBV) is also highly valued and vice versa. Furthermore, the correlation between the exogenous liquidity variable (CR) and the endogenous variable of Company Value (PBV) of -0.118 means that there is no correlation between the two variables and not unidirectional because the result of the correlation coefficient is negative, not unidirectional meaning that if the liquidity (CR) value is high, then the Company Value (PBV) in the value is not high or vice versa. The correlation between the exogenous capital structure variable (DER) and the endogenous variable of company value (PBV) of -0.099 means that there is no correlation between the two variables and is not unidirectional due to the result of the negative correlation coefficient. It is not in the same direction that if the capital structure (DER) is high in value, then the Company Value (PBV) is low and vice versa.

Furthermore, the correlation between the exogenous variable profitability (ROE) to the endogenous variable of capital structure (DER) of -0.203 means that there is no correlation between variables and is not unidirectional because it is negative. Not being unidirectional means that the higher the profitability value (ROE), the lower the capital structure value (DER), and vice versa. The correlation value between the exogenous liquidity variable (CR) and the

endogenous variable of capital structure (DER) of -0.804 means that there is no correlation and is also not unidirectional. Not unidirectional means that if liquidity (CR) is high in value, then the capital structure (DER) is low and vice versa.

Direct Effect (DE)

Based on the calculations that have been done using SPSS software version 25, the value of the direct influence (direct effect) is as follows:

1. Effect of profitability (ROE) on capital structure (DER)
X1 to Z = **-0.430**
2. Effect of liquidity (CR) on capital structure (DER)
X2 to Z = **-14,295**
3. Effect of profitability (ROE) on company value (PBV)
X1 to Y = **3,816**
4. Effect of liquidity (CR) on company value (PBV)
X2 to Y = **-3.867**
5. Effect of capital structure (DER) on company value (PBV)

Indirect Effect (IE)

The results obtained from the calculation using SPSS version 25 of the indirect effect value are as follows:

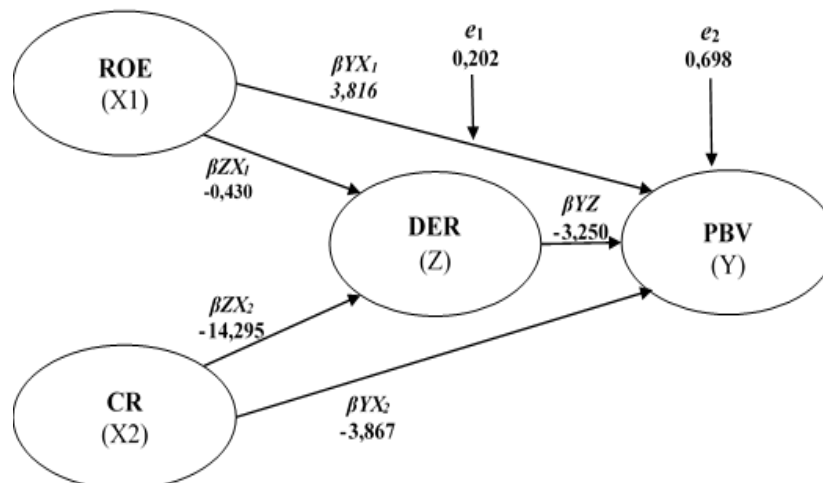
1. The effect of profitability (ROE) on company value (PBV) through the capital structure (DER):
 $\beta_{ZX1} \times \beta_{YZ} = -0.430 \times -3.250 = \mathbf{1.398}$
2. The effect of liquidity (CR) on company value (PBV) through the capital structure (DER):
 $\beta_{ZX2} \times \beta_{YZ} = -14,295 \times -3,250 = \mathbf{1,398}$

3.5 Total Effect (TE)

The total influence value based on the calculation results obtained by glorifying SPSS version 25 the total effect is, as follows:

1. The effect of profitability (ROE) on company value (PBV) through the capital structure (DER), namely: $\beta_{ZX1} + \beta_{YZ} = -0.430 + -3.250 = \mathbf{-3.68}$
2. The effect of liquidity (CR) on the value of the company (PBV) through the capital structure (DER), namely: $\beta_{ZX2} + \beta_{YZ} = -14.295 + -3.250 = \mathbf{-17.55}$

Draw 2. Path Analysis Diagram



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Source: Researcher, 2022.

From the path analysis diagram above, there are two structural equations, namely:

1. Substructure one: $Z = -0.430X_1 + -14.295X_2 + e_1$
2. Substructure two: $Y = 3.816X_1 + -3.867X_2 + -3.250Z + e_2$

4. CONCLUSION

The results of research that have been carried out regarding the effect of profitability (ROE) and liquidity (CR) on company value (PBV) through the capital structure (DER) as an intervening variable in AKR Corporindo Tbk companies listed on the Indonesia Stock Exchange for the period 2016 to 2020, can be concluded, as follows:

1. The effect of profitability (ROE) on the company's direct value (PBV) is 3,816.
2. The effect of liquidity (CR) on the value of the company (PBV) is partially -3,867.
3. The effect of capital structure (DER) with a direct company value (PBV) of -3,250.
4. The simultaneous effect of profitability (ROE), liquidity (CR), and capital structure (DER) on the value of the company (PBV) of 0.302.
5. While 0.698 is the influence of other variables outside the research model on company value (PBV).
6. The effect of profitability (ROE) with capital structure (DER) is -0.430.
7. The effect of liquidity (CR) with capital structure (DER) is -14,295.
8. The combined effect of profitability (ROE) and liquidity (CR) on the capital structure (DER) was 0.798.
9. Meanwhile, the influence of other variables outside the research model on the capital structure (DER) is 0.202.

From the results of the research that has been described, the suggestions given by the researchers include the following:

1. This study only uses profitability variables with return on equity (ROE) proxies, liquidity with current ratio (CR) proxies, and capital structures with debt to equity ratio (DER) proxies so that for future research, it is expected to add other variables and representatives that are suspected to affect the company's indigo such as managerial ownership, investment opportunities, dividend policies, and other financial ratios.
2. The object of research conducted only uses the AKR Corporindo Tbk company listed on the Indonesia Stock Exchange from 2016 to 2020, so for further research, use other companies other than the AKR Corporindo Tbk company.
3. Further research is in order to improve the limitations that exist in the study and increase the number of samples and observation years to obtain more comprehensive results.

REFERENCES

- [1] Fahmi, Irham. 2013. Pengantar Manajemen Keuangan Teori dan Soal Jawab. Bandung: Alfabeta.
- [2] Kurniasih, Binti, dan Ruzikna. 2017. "Pengaruh Struktur Modal dan Keputusan Investasi Terhadap Nilai Perusahaan Pada Industri Makanan dan Minuman Yang Terdaftar di BEI." JOM FISIP 4(2): 1-14.
- [3] Lukviarman, Niki. 2006. Dasar-Dasar Manajemen Keuangan. Padang: Andalas University Press.
- [4] Massie, Juan V, Parengkuan Tommy, dan Rosalina A M Koleangan. 2017. "Analisis Finansial Terhadap Nilai Perusahaan (Studi Pada Perusahaan-Perusahaan Consumer

- Goods Sub Sektor Makanan dan Minuman Yang Terdaftar di BEI Tahun 2011-2016)." Jurnal EMBA 5(3): 4485-94.
- [4] Nurwulandari, A. (2021). Effect of liquidity, profitability, and firm size on firm value with capital structure as intervening variable. ATESTASI: Jurnal Ilmiah Akuntansi, 4(2), 257-271.
- [5] Nugroho, Asih Suko. 2012. Tesis Universitas Diponegoro "Analisis Faktor-Faktor Yang Mempengaruhi Struktur Modal Perusahaan Properti Yang Go-Public Di Bursa Efek Jakarta Untuk Periode Tahun 1994 - 2004."
- [6] Prastuti, Ni Kadek Rai, dan I Gede Merta Sudiarta. 2016. "Pengaruh Struktur Modal, Kebijakan Deviden dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur." E-Jurnal Manajemen Unud 5(3): 1572-98.
- [7] Salim, M. N., & Susilowati, R. (2019). The Effect of Internal Factors on Capital Structure and Its Impact on Firm Value: Empirical Evidence From The Food and Beverages Industry Listed on Indonesia Stock Exchange 2013-2017. International Journal of Engineering Technologies and Management Research, 6(7), 173-191.
- [8] Sartono, Agus. 2012. Manajemen Keuangan Teori dan Aplikasi. Edisi 4. Yogyakarta: BPFE.
- [9] Sarwono, Jonathan. 2012. Path Analisis dengan SPSS: Teori, Aplikasi, Prosedur Analisis untuk Riset Skripsi, Tesis dan Disertasi. Jakarta: PT. Alex Media Komputindo.
- [10] Sari, I. A. G. D. M., & Sedana, I. B. P. (2020). Profitability and liquidity on firm value and capital structure as intervening variables. International research journal of management, IT and Social Sciences, 7(1), 116-127.
- [11] Setianto, Buddy. 2016. Berinvestasi di Reksa Dana Mengenal Jenis, Metode Valuasi, Kinerja dan Strategi Seleksi Bonus Daftar Semua Jenis Reksadana Terbaik. Jakarta: Bumisaka Kurnia
- [12] Sucipto, A., & Chasanah, N. (2019). Effect Of Liquidity Ratio, Profitability, And Solvency On Stock Return With Capital Structure As An Intervening Variable (Study On Food And Beverage Sub Sector Listed In Indonesia Stock Exchange (Idx) Period 2013-2017). Ekspektra: Jurnal Bisnis dan Manajemen, 3(1), 52-68.