FINANCIAL ANALYSIS OF LIQUIDITY, PROFITABILITY AND SOLVENCY WITH EVA AS A MODERATE VARIABLE IN IMPROVING ECONOMIC VALUE ADDED MANUFACTURING COMPANIES TIMES OF COVID-19 PERIOD 2019 -2020

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Abstract: The purpose of this study is to find out how financial performance can be applied as a measuring tool in increasing the Economic Value Added (VA) which contributes to the increase in Firm Value as measured by its PBV in Manufacturing Companies Listed on the IDX during the Covid-19 Period 2019 to 2020. The methodology used is the Quantitative Method by Calculating and Testing Data on X & Y variables from a population of 193 manufacturing companies listed on the IDX 2019-2020, with a sample of 36 companies that meet the sampling criteria and cover all of the variables studied are 72. Financial Liquidity Performance measured by CAR, Profitability through ROA, ROI & ROE, while Solvency is measured by DAR & DER. The Moderating EVA variable is measured by NOPAT – CAPITAL CHARGES, the Dependent Variable is the Economic Value Added (VA/ Value Added) Firm Value indicated by the increase in PBV (Price Book Value) as measured by the Market Price Per Common Share Divided by Book Value Per Share Normal. The research period is limited to the period before & after the recession which in this case is limited to the Covid19 period for the 2019-2020 period. Based on the results of the Multiple Regression Analysis Test, it shows that the regression equation is as follows: Y = 70,560 + 0.035X1 – 0.123X2 + 0.001X3 + 7.396 X4 + 1.196 X5 – 0.123 X6 + 0.034 X7 + E. Average PBV during the two years of covid 19 of 70,560 with the other variables at constant state. 7.396, t-count value = 9.956 > t-table 1.98422, significance 0.000 <0.05 or 5%. So ROE has a significant positive effect on PBV (Y2). While the CAR (X1) with Beta 0.035. T-count value = 1.137 < t-table significance 0, 260 > 0.05 or 5%. So CAR does not have a significant positive effect on PBV (Y2). Likewise ROA, ROI, DAR & DER are shown by Beta Values: (-0.123);0.001; 1.196, (-0.123) and EVA 0.034 with t-count value -1.034; 0.025; 1.547;0.802 and EVA t-count value 1.557 < t-table 1.98422. significance > 5%. So the independent variable has no positive effect on PBV (Y2). ROA (X2) & DER (X6) have a negative effect on PBV (Y2), meaning that if ROA & DER increase by one unit, then PBV decreases by one unit. On the other hand, if ROA & DER decrease by one unit, then Y (PBV) will increase by one unit. The results of the R-squared test are shown to be R 0.811a, R Square 0.658 and Adjusted Square 0.620, meaning that the model in this study can explain the influence of var X on Y by 62% of which 38% is influenced by variables outside the model. F test results of 17,576 significance 0.000 < 5% Then all X variables simultaneously have a significant positive effect on var Y. Based on the Sobel test results show that: All independent variables X (CAR, ROA, ROI, ROE, DAR & DER with EVA as the moderating variable) are not effective in moderating / mediating the dependent variable Y (PBV) which means it is important to select & test other moderating variables such as PER or Tobin’s which are expected to be more effectively used as moderating variables in increasing firm value (PBV), because these variables

Keywords: Financial Liquidity Ratio, Profitability and Solvency, EVA Moderating Variable; Value-Added Firm Value (PBV)
1. Introduction

Husnan (2014:7) defines company value as the price that prospective buyers can pay when the company is sold. A high company value will make an investor's trust in the company increase, to measure the high value of the company can be done in various ways and one of the measuring tools that can be used is price book value. Brigham and Houston (2011: 152) state that the higher the price book value (PBV), the greater the level of shareholder prosperity, so the company is said to have achieved one of its goals, namely the prosperity of its shareholders.

Liquidity is a ratio that shows the company's ability to meet obligations or pay short-term debt. The measurement used for liquidity is the cash ratio, which is used to assess the total cash and cash equivalents of a company and its current liabilities. The cash ratio is a form of refinement of the quick ratio or quick ratio that is used to measure the extent to which a company's finances consist of cash and cash equivalents. Profitability is a comparison to determine the company's ability to gain profit from income related to sales, assets, and equity based on certain measurement bases. The type of Profitability Ratio used by researchers in this study is Return On Assets (ROA). Return On Assets (ROA) is a type of profitability ratio that is able to assess the company's ability to generate profits from the operational assets used. ROA will assess the company's ability based on past profits so that it can be utilized in the future or the next period. Solvency is a ratio to assess the company's ability to pay off all of its obligations, both short-term and long-term, with guaranteed assets or assets owned by the company until the company closes or is liquidated. Solvency measurement in this research is using DAR (Debt to Assets Ratio) and DER (Debt to Equity ratio). Ratio of debt to assets. The higher the debt guaranteed by its assets, the worse the condition of the company, the smaller the ratio of debt to assets, the better the condition of the company. Meanwhile, the DER ratio describes the relative portion of equity and debt used to finance company assets. Economic Value Added (EVA) is the difference between operating profit after tax and the cost of capital. Performance can be measured using financial ratios by performing accounting treatment on financial statements made by the company or each division within the company. In addition to the Financial Ratios, the performance of the company or division can be measured using economic value added (EVA). The concept of EVA is the economic added value created by the company from its activities or strategies during a certain period.

The Formulation of the problem is How is Financial Liquidity Performance (CAR); Profitability (ROA), ROI & ROE; Solvency (DAR) & DER Affect Firm Value (PBV)? Then How does EVA's financial performance as a moderating variable affect Firm value (PBV)? How is Financial Liquidity Performance (CAR); Profitability (ROA), ROI & ROE; Solvency (DAR) & DER With EVA As Moderating Variable Can Affect Economic Value Added (VA) Firm Value (PBV) And Finally Can Increase Firm Value of Manufacturing Companies Listed On IDX For The 2019-2020 Period? How is the Financial Performance of Liquidity, Profitability and Solvency with each indicator or variable X against Y Simultaneously without EVA as a Moderating Variable can affect Economic Value Added (Value Added or VA) Firm Value (PBV) and Increase FIRM VALUE of Manufacturing Companies That Listed on the IDX for the 2019-2020 period? Also How the Financial Performance of Liquidity, Profitability and Solvency with indicators or variables X against Y Simultaneously With EVA as a Moderating Variable can affect Economic
Value Added (Value Added or VA) Firm Value (PBV) and Increase FIRM VALUE of Manufacturing Companies Listed on the IDX 2019-2020 period?

This Research have purposes that is to know What is the Liquidity Financial Performance (CAR); Profitability (ROA), ROI & ROE and Solvency (DAR) & DER each have an effect on Firm Value (PBV) ? then does EVA Financial Performance as a moderating variable affect Firm value (PBV)? Also what is the Liquidity Financial Performance (CAR); Profitability (ROA), ROI & ROE Solvency (DAR), DER each with EVA as a Moderating Variable can affect Economic Value Added (VA) Firm Value (PBV) And Finally Can Increase Firm Value of Manufacturing Companies Listed on the IDX 2019-2020 period? And is the Financial Performance of Liquidity, Profitability and Solvency with each indicator or variable X against Y Simultaneously without EVA as a Moderating Variable can affect Economic Value Added (Value Added or VA) Firm Value (PBV) and Increase FIRM VALUE of Manufacturing Companies That Listed on the IDX for the 2019-2020 period? And then does the Financial Performance of Liquidity, Profitability and Solvency with indicators or variables X against Y Simultaneously With EVA as a Moderating Variable can affect Economic Value Added (Value Added or VA) Firm Value (PBV) and Increase FIRM VALUE of Manufacturing Companies Listed on the IDX 2019-2020 period?

This Research have benefits to creating / generating Financial Performance Values that meet good Accounting Economic Standards and economically benefit the Company and related parties such as Leaders, Employees and the wider community. Finally, it can reduce the layoff policy which causes a lot of unemployment but can actually develop into a in the creation of new jobs, also to evaluating Financial Performance Results Liquidity, Profitability and Solvency Without EVA as a moderating variable in order to increase the added value of a better economy, and evaluating the Financial Performance Results of Liquidity, Profitability and Solvency With EVA as a Moderating Variable in Increasing Better Economic Value Added and Finally Increasing FIRM VALUE of Manufacturing Companies Listed on the IDX for the 2019-2020 Period. The results of the Financial Performance Analysis mentioned above can have a positive impact on the company as indicated by the Increase in Value added/Economic Value Added Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019 to 2020 period as measured by EVA. The results of the analysis can also provide a positive contribution to the Company and the wider community in order to overcome the negative impacts of COVID-19, especially to improve income so that the results can be used as additions and payments for health costs for management employees and the user community at least to help in the field finance for the purchase of COVID-19 prevention tools. The results of the analysis can improve the welfare and prosperity of the stakeholders who are the relationship between the companies and their shareholders.

2. Research Model

The hypothesis in this study are as follows:

1) Financial Performance Liquidity : CAR or CR has a significant negative effect on the Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019-2020 period during the Covid 19 period.
2) Financial Performance Profitability: ROA has a significant positive effect on the Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019-2020 period during the Covid 19 period.

3) Financial Performance Profitability: ROE has a significant positive effect on the Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019-2020 period during the Covid 19 period.

4) Profitability Financial Performance: ROI has a significant positive effect on the Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019-2020 period during the Covid 19 period.

5) Financial Performance Solvency: DAR has a significant negative effect on the Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019-2020 period during the Covid 19 period (H6) (-): Financial Performance Solvency: DER has a significant negative effect on the Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019-2020 period during the Covid 19 period.

6) Financial Performance: EVA as a moderating variable has a significant positive effect on the Firm value (PBV) of Manufacturing Companies listed on the IDX for the 2019-2020 period during the Covid 19 period.

7) Liquidity Ratio Performance: CAR or CR with (EVA) as a Moderating Variable has a significant positive effect on the FIRM VALUE (PBV) of Manufacturing Companies Listed on the IDX for the 2019-2020 period.

8) Profitability Ratio Performance: ROA With (EVA) As Moderating Variable has a significant positive effect on FIRM VALUE (PBV) of Manufacturing Companies Listed on the IDX for the 2019-2020 period.

9) Profitability Ratio Performance: ROE With (EVA) as Moderating Variable has a significant positive effect on FIRM VALUE (PBV) of Manufacturing Companies Listed on the IDX for the 2019-2020 period.

10) Profitability Ratio Performance: ROI with (EVA) as a Moderating Variable has a positive effect on the FIRM VALUE (PBV) of Manufacturing Companies Listed on the IDX for the 2019-2020 period.

11) Solvency Ratio Performance: DAR With (EVA) as a Moderating Variable has a negative effect on the FIRM VALUE (PBV) of Manufacturing Companies Listed on the IDX for the 2019-2020 period.

12) Financial Ratio Performance: DER With (EVA) as a Moderating Variable has a significant negative effect on FIRM VALUE (PBV) of Manufacturing Companies Listed on the IDX for the 2019-2020 period.

13) Performance Ratios of CAR, ROA, ROE, ROI, DAR & DER Without EVA as Moderating Variables simultaneously have a significant positive effect on the FIRM VALUE (PBV) of Manufacturing Companies Listed on the IDX for the 2019-2020 period.

14) Financial Performance: CAR, ROA, ROE, ROI, DAR & DER With EVA as a moderating variable, it has a positive effect on Firm Value (PBV) simultaneously Manufacturing Companies listed on the IDX during the 2019 Covid-19 period -2020.

3. Research Method

The population in this study are Manufacturing Companies Listed on the Stock Exchange which have Complete Financial Statements for the 2019-2020 Period. While the sample is Manufacturing Companies Listed on the IDX for the 2019-2020 period which
has data related to the independent & dependent variables used in this study. Sampling data was obtained by random sampling that met the criteria verified by the relevant research team.

Looking at the p value, it can be seen that there is a significant positive effect both individually and simultaneously on CAR (X1), ROA (X2), ROI (X3), ROE (X4), DAR (X5), DER (X6) and EVA (X7)* in increase PBV Firm Value (Y). If p value \( \leq 0.05 \), then there is a significant effect between research variables, and conversely if p value > 0.05 then there is no effect between variables. Then also use the Sobel Test to test whether the moderating variable is effective in mediating the strength of the influence between the X variable and the Y variable. If the Z value of the Sobel test results and the p-value \( < 0.05 \) or 5%, then the role of the EVA moderating variable effectively mediates the effect of variable X on variable Y. On the other hand, if the Z value and p value > 0.05 or 5%, then EVA is not effective. Furthermore, to further prove that the research data shows normal data and validity, this study is equipped with CLASSIC ASSUMPTION TEST consisting of Normality Test, Autocorrelation Test, Multicollinearity Test and Heteroscedasticity Test.

4. Result

This study uses quantitative research using secondary data in the form of financial statements of manufacturing sector companies listed on the Indonesia Stock Exchange for the 2019-2020 period. The purpose of this study is to find out how financial performance is with financial ratio analysis. Liquidity: CAR, Profitability: ROA, ROI & ROE and Solvency: DAR, DER with EVA as a moderating variable in increasing the Firm Value (PBV) of Manufacturing Companies Listed on the Stock Exchange. Covid19 2019-2020 period. The results of this study are:

1) Data Description

The population used in this study were manufacturing companies listed on the Indonesia Stock Exchange during the Covid-19 period, 2019-2020 period. Which amounted to 193 companies. The sample selection process based on the specified criteria can be explained in the following table:

| NO | CRITERIA | NUMBER OF COMPANIES |
|----|----------|----------------------|
| 1  | Manufacturing Company listed on the Indonesia Stock Exchange for 2 consecutive years from 2019 to 2020. | 193 |
| 2  | Manufacturing companies listed on the Indonesia Stock Exchange that have complete financial reports for 2019 to 2020. | 160 |
| 3  | Manufacturing companies that issue financial statements using the rupiah currency. | 110 |
| 4  | Manufacturing companies whose financial statements contain data from the variables studied. | 36 |
|    | Total Companies Researched | 36 |
|    | Total Sample for 2 years of observation (36 x2) | 72 |
|    | Data not used in this study for 2 years | 121 |

Source: Data processed in 2021
Based on the table data above, the number of manufacturing companies listed on the IDX during the 2019-2020 period has complied with the criteria required in this study, namely 36 companies. This study uses a sample of data from the financial statements of manufacturing companies listed on the Indonesia Stock Exchange in 2019-2020. The Covid 19 period. The explanation of this research data is as follows:

a. Manufacturing companies listed on the BEI that match the variable criteria needed are 36 companies.

b. Manufacturing companies during the 2019-2020 period (2 years) were 72 companies.

2) Data Analysis Method

**Descriptive statistics.** This study uses descriptive statistics to provide an initial description of the variables studied. The measurements used in this analysis are the minimum value, maximum value, average value, and standard deviation. The results obtained as follows:

| Variable (X) | N  | Minimum | Maximum  | Mean     | STD Deviation |
|--------------|----|---------|----------|----------|---------------|
| CAR (X1)     | 72 | 0.00    | 4636.00  | 319.2917 | 575.17959     |
| ROA (X2)     | 72 | -51.00  | 916.00   | 35.2500  | 141.54806     |
| ROI (X3)     | 72 | 0.00    | 2715.00  | 400.0694 | 593.87987     |
| ROE (X4)     | 72 | -8.00   | 145.00   | 12.2083  | 23.39371      |
| DAR (X5)     | 72 | 0.00    | 109.00   | 37.0972  | 22.85481      |
| DER (X6)     | 72 | 0.00    | 576.00   | 84.0139  | 112.94864     |
| EVA (X7)     | 72 | -3747.00| 1833.00  | 375.9722 | 762.03783     |
| PBV (Y)      | 72 | 34.00   | 1213.00  | 214.9444 | 223.79876     |

**Valid N (Listwise)**

Source: Data processed in 2021

Based on table 4. This research produces the following data that is **Firm Value (PBV)**

The results of descriptive statistics show that the PBV (Price Book Value) during the 2019-2020 period during the covid 19 period has a minimum value of 0.34 owned by the DPNS Company in 2019, while the maximum value of 12.13 is owned by the UNVR Company in 2019. The average value of 2.15 with a standard deviation of 3.506. **CAR (X1)** The results of descriptive statistics show that the CAR (Current Asset Ratio) during the 2019-2020 period during the covid 19 period has a minimum value of 0.00 which is owned by the FASW Company in 2019, while the maximum value of 46.36 is owned by the SMSM Company. The average value is 3.28 with a standard deviation of 11.85. **ROA (X2).** The results of descriptive statistics show that ROA (Return On Asset) during the 2019-2020 period during the covid 19 period has a minimum value of -0.51 owned by BOLT Company in 2020, while the maximum value of 9.16 is owned by TSPC Company in 2020. Average value an average of 0.35 with a standard deviation of 2.57653. **ROI (X3).** The results of descriptive statistics show that the ROI (Return On Investment) during the 2019-2020 period during the covid 19 period has a minimum value of 0.13 owned by STAR Company in 2019, while the maximum value of 27.15 is owned by BTON Company in 2019. The average value an average of 8.00 with a standard deviation of 8.5886. **ROE (X4).** The results of descriptive statistics show that ROE (Return On
Equity) during the 2019-2020 period during the covid 19 period has a minimum value of -0.08 owned by BOLT Company in 2020, while the maximum value of 1.45 is owned by UNVR Company. The average value is 0.12 with a standard deviation of 0.4408. **DAR(X5)**. The results of descriptive statistics show that the DAR (Debt to Asset Ratio) during the 2019-2020 period during the covid 19 period has a minimum value of 0.00 owned by STAR Companies in 2020, while the maximum value of 1.09 is owned by PEHA Companies in 2019 & MYOR 2020. The average value is 0.37 with a standard deviation of 0.3. **DER(X6)**. Descriptive statistical results show that DER (Debt to Equity Ratio) during the 2019-2020 period during the covid 19 period has a minimum value of 0.00 owned by STAR Companies in 2020 and ICBP while the maximum value of 5.76 is owned by BUDI Companies in 2020. The average value an average of 0.84 with a standard deviation of 1.087. **EVA (X7) as Moderating Variable**. The results of descriptive statistics show that EVA (Economic Value Added) during the 2019-2020 period during the covid 19 period has a minimum value of -37.47 owned by TRST Company in 2020, while a maximum value of 18.33 is owned by PEHA Company in 2020. Average value the average is 3.76 with a standard deviation of 14.

**Multiple Regression Analysis.** Multiple linear regression test is used to determine the relationship between the independent variable and the dependent variable has a positive or negative direction to predict the value of the dependent variable, if the value of the independent variable increases or decreases. The form of the equation used in this study is as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \epsilon \]

**Description:**
- \( \alpha \) : Constant
- \( \beta_1-\beta_7 \) : Regression coefficient of each variable
- \( X_1 \) : CAR, CR
- \( X_2 \) : ROA
- \( X_3 \) : ROE
- \( X_4 \) : ROI
- \( X_5 \) : DAR
- \( X_6 \) : DER
- \( X_7 \) : EVA
- \( Y \) : FIRM VALUE (PBV)

The results of the multiple linear regression test for the following equation:

| Model | Unstandardized Coefficients | Standardized Coefficients | Unstandardized | Standardized | Coefficients | Sig. |
|-------|-----------------------------|----------------------------|----------------|-------------|--------------|------|
|       |                |                           |                |             |              |      |
| 1. (Constant) | 70.560 | 38.581 | 1.829 | .072 |
| CAR(X1) | .035 | .031 | .090 | 1.137 | .260 |
| ROA (X2) | -.123 | .119 | -.078 | -1.034 | .305 |
| ROI (X3) | .001 | .030 | .002 | .025 | .980 |
| ROE (X4) | **7.396** | .743 | .773 | **9.956** | .000 |
| DAR (X5) | 1.196 | .773 | .122 | 1.547 | .127 |
| DER (X6) | -.123 | .153 | -.062 | -1.802 | .426 |
| EVA (X7) | .034 | .022 | .117 | 1.557 | .125 |

**Source:** data processed 2021
The results from the table above show that the regression equation is as follows:

\[ Y = 70.560 + 0.035X_1 - 0.123X_2 + 0.001X_3 + 7.396X_4 + 1.196X_5 - 0.123X_6 + 0.034X_7 + \varepsilon \]

The interpretation of the above equation is as follows by **The constant (Alpha)** is 70,560, meaning that the constant value is positive which indicates that if the variables CAR, ROA, ROI, ROE, DAR, DER and EVA are constant or constant (no change), then the average PBV for two years covid 19 is 70,560. **CAR coefficient (X1).** The CAR coefficient (X1) is 0.035, meaning that if the CAR increases by one unit while the other variables remain constant, then the CAR variable can make a positive contribution to the PBV (Price Book Value) of 0.035. **ROA coefficient (X2).** The ROA coefficient (X2) is (- 0.123) meaning that if the ROA decreases by one unit while the other variables remain constant, then the ROA variable can make a negative contribution to the PBV (Price Book Value) of (-0.123). **ROI coefficient (X3).** The ROI coefficient (X3) is 0.001 meaning that if the ROI increases by one unit while the other variables remain constant, then the ROI variable can make a positive contribution to the PBV (Price Book Value) of 0.001. **ROE coefficient (X4).** The ROE coefficient (X4) is 7,396 meaning that if the ROE increases by one unit while the other variables remain constant, then the ROE variable can make a positive contribution to the PBV (Price Book Value) of 7,396. **DAR coefficient (X5).** The DAR coefficient (X5) is 1.196, meaning that if the DAR increases by one unit while the other variables remain constant, then the DAR variable can make a positive contribution to the PBV (Price Book Value) of 1.196. **DER coefficient (X6).** The DER coefficient (X6) is (-0.123) meaning that if the DER decreases by one unit while the other variables are fixed, then the DER variable can make a negative contribution to the PBV (Price Book Value) of (-0.123). **EVA coefficient as moderating variable (X7).** The coefficient of EVA (X7) is 0.034, meaning that if EVA increases by one unit while the other variables remain constant, then the EVA variable can make a positive contribution to the PBV (Price Book Value) of 0.034.

Hypothesis testing using **Coefficient of Determination Test (R2).** The coefficient of determination test is used to find out how much research is capable of explaining the variant of the dependent variable. The higher the value of the coefficient of determination, the greater the influence given by the results of the coefficient of determination as follows:

| Model | R | R Square | Std. Error of The estimate |
|-------|---|----------|--------------------------|
| 1     | .811* | .658 | 137.88819 |

a. Prediktors : (Constant), EVA (Y1), CAR (X1), ROE (X4), DER(X6), ROA (X2), DAR (X5), ROI (X3)

b. Dependent Variabel : PBV (Y2)

Source: data processed 2021

The results of the coefficient of determination test in the table above, show that the R2 value is: 0.620, this indicates that the independent variables consisting of CAR, ROA, ROI, ROE, DAR, DER and EVA have an influence contribution to Firm value
(PBV) of 0, 620 or 62% while the 38% is influenced by variables outside the studied. The second test using Simultaneous Significance Test (F Test). The F statistic test is used to determine whether the independent variables contained in this study have a simultaneous effect on the dependent variable. The test in this study uses a significance level of 5% or 0.05, if the significance is greater than 0.05 then the independent variable has no effect on the dependent variable. In addition to using the significance level, this test uses a comparison of the calculated F with the F table. If F count is greater than F table, the independent variable simultaneously affects the dependent variable. The results of the F test are as follows:

Table 5. F Test
ANOVA

| Model       | Sum of Squares | df  | Mean Square | F      | Sig. |
|-------------|----------------|-----|-------------|--------|------|
| Regression  | 2339255.973    | 7   | 334179.425  | 17.576 | .000^a |
| Residual    | 1216841.805    | 64  | 19013.153   |        |      |
| TOTAL       | 3556097.778    | 71  |             |        |      |

a. Predictor (Constanta), EVA (Y1), CAR (X1), ROE (X4), DER (X6), ROA (X2), DAR (X5), ROI (X3)
b. Dependent Variable: Firm value (PBV)

Source: data processed 2021

The results of the F test in the table above show that the calculated F value is 17, 576 and the significance level is 0.000. This means that the significance value of 0.000 is below 0.05 or (0.000 < 0.05), and the calculated F value is 17, 576 > from F table 1, 98422. This test states that the independent variables consist of CAR, ROA, ROI, ROE, DAR, DER and EVA have a significant effect on PBV (Price Book Value). ANOVA LINEARITY TEST table showing the Independent Variables between the combination groups as follows: (See attachment). And The Third, we use Individual Parameter Significance Test (T Test). The t test is used to find out how much the independent variable individually explains the variation of the dependent variable. The test in this study uses a significance value level of 5% or 0.05, if the significance value is less than 0.05, then there is an influence of the independent variable on the dependent variable. In addition to using the level of significance, this study uses a comparison of the value of t count with t table, if t count is greater than t table then there is an effect of the independent variable on the dependent variable. The results of the individual parameter significant test are as follows:

Table 6. T Test Coefficients

| Model Significance Result | T count | T table  |
|---------------------------|---------|----------|
| 1 (Constant)              | 1.829   | 1.98422.072 |
| CAR (X1)                  | 1.137   | 1.98422.060 | No Effect |
| ROA (X2)                  | -1.034  | 1.98422.305 | No Effect |
The description about this table is **Variable CAR (X1) against (Y) PBV.** CAR shows that the significance value is 0.60 > 0.05 with T count 1.137 < T table 1.98422 it can be concluded that Hypothesis 1 which states that CAR has a negative effect on PBV is not proven it means Ha is rejected and H0 is accepted. **Variable ROA (X2) Against (Y) PBV.** ROA shows that the significance value is 0.305 > 0.05 with T count -1.034 < T table 1.98422. So Hypothesis 2 which states that ROA has a significant positive effect on PBV is not proven, meaning that Ha is rejected and H0 is accepted. **Variable ROI (X3) Against (Y) PBV.** ROI shows that the significance value is 0.980 > 0.05 with T count 0.025 < from T table 1.98422, So the hypothesis which states that ROI has a significant positive effect is not proven, meaning that Ha is rejected and H0 is accepted. **Variable ROE (X4) Against (Y) PBV.** ROE shows that the significance value is 0.000 <0.05 with a T count of 9956 > T table 1.98422, so the hypothesis which states that ROE has a significant positive effect is proven, meaning that Ha is accepted and Ho is rejected. **Variable DAR (X5) Against (Y) PBV.** DAR shows that the significance value is 0.127 > 0.05 With T count 1.547 < 1.98422. Hypothesis 5 which states that DAR has a significant negative effect on PBV is not proven, meaning that Ha is rejected and H0 is accepted. **Variable DER (X6) Against (Y) PBV.** DER shows that the significance value is 0.426 > 0.05 with T count -0.802 < 1.98422. Hypothesis 6 which states that DER has a significant negative effect is not proven, meaning Ha is rejected and H0 is accepted. **Variable EVA (X7) Against (Y) PBV.** EVA shows that the significance value is 0.125 > 0.05 with a T count of 1.557 < 1.98422. Hypothesis 7 which states that EVA has a significant positive effect is not proven, meaning Ha is rejected and H0 is accepted.

**ANOVA Linearity Test Results (F Test).** Based on the results of the Anova Linearity Test (F test) the following results were obtained of **Variable CAR (X1) among the combined group against PBV (Price book value),** CAR shows that the significance value is 0.030 <0.05 with calculated F value 4.577 < F table 17.576, meaning that CAR has no significant positive effect on PBV (Price Book Value) . So Hypothesis 1 which states that CAR has a significant negative effect is not proven, meaning that Ha is rejected and H0 is accepted. **Variable ROA (X2) between the combined group Against PBV (Price book value),** ROA shows that the significance value is 0.000 < 0.05, with an F value of 3919. 666 > 17,576, which means that ROA has a significant positive effect on PBV (Price book value). Then Hypothesis 2 which states that ROA has a significant positive effect is proven, meaning that Ha is accepted and H0 is rejected. **The ROI variable (X3) between the combination groups on PBV (Price Book Value),** ROI shows that the significance value is 0.017 < 0.05, with an F value of 32,923 > 17,576, meaning that ROI has a significant positive effect on PBV (Price book value). So H3 which states that ROI has a
significant positive effect on PBV is proven to mean that Ha is accepted and H0 is rejected. **Variable ROE (X4)** Among the combination group Against PBV (Price book value). ROE shows that the significance value is 0.000. With an F value of 597.013 > 17.576. This means that ROE has a significant positive effect on PBV (Price book value), so it can be concluded that Hypothesis 4 which states that ROE has a significant positive effect on PBV is proven, meaning Ha is accepted and H0 is rejected. **Variable DAR (X5)** Among the combination group against PBV (Price book value). DAR shows that the significance value is 0.042 < 0.05 with an F value of 1.303 < 17.576. This means that DAR has no significant positive effect on PBV (Price book value), so it can be concluded that Hypothesis 5 which states that DAR has a negative effect on PBV is not proven, meaning Ha is rejected and H0 is accepted. **Variable DER (X6)** Among the combinations of PBV (Price book value). DER shows that the significance value is 0.396 > 0.05, with an F value of 1.316 < 17.576. This means that DER has no positive and insignificant effect on PBV (Price book value), so it can be concluded that Hypothesis 6 which states that DER has a significant negative effect is not proven. Ha is rejected and H0 is accepted. **Variable EVA (Y1)** Among the combination group Against (Y2) PBV. (Price Book value). EVA shows a significance value of 0.887 > 0.05, with an F value of 0.555 < 17.576. This means that EVA has no effect and is not significant on PBV (Price book value). So Hypothesis 7 which states that EVA has a significant positive effect is not proven, meaning Ha is rejected and H0 is accepted.

**SOBEL TEST Result.** According to Ghozali (2013), the Sobel test is carried out by testing the strength of the indirect effect between the variables X to Y via M. The mediating effect shown by the multiplication coefficient \((ab)\) needs to be tested with the Sobel test as follows:

\[
Z = \frac{ab}{\sqrt{(b^2SE_a) + (a^2SE_b)}};
\]

Where:
- \(a\) = Regression coefficient of the independent variable on the mediating variable.
- \(b\) = Regression coefficient of the mediating variable on the dependent variable.
- SE_a = Standard error of estimation of the influence of the independent variable on the mediating variable.
- SE_b = Standard error of estimation of the effect of the mediating variable on the dependent variable.

In this study, the Sobel test used an online application sourced from [http://quantpsy.org/sobel/sobel.html](http://quantpsy.org/sobel/sobel.html). The results of the Sobel Test are as follows:

a. **The role of EVA mediates the effect of CAR on PBV**

| Input | Test statistic | Std. Error | p-value |
|-------|---------------|------------|---------|
| \(a\) | -0.057 | \(-0.31628712\) | 0.00630756 | 0.75178459 |
| \(b\) | 0.035 | \(-0.24096192\) | 0.00827932 | 0.80968463 |
| \(\varepsilon_a\) | 0.173 | \(-0.60087241\) | 0.00332017 | 0.54792497 |
| \(\varepsilon_b\) | 0.031 | | | |

**Source: Data processed 2021**

The results of the test of the indirect effect of CAR on PBV through EVA with the Sobel Test above, obtained the \(z\) value (-0.3163) with \(p (0.751785) > 0.05\).
or (5%). These results prove that EVA is not effective in mediating the effect of CAR on PBV.

b. **The role of EVA mediates the effect of ROA on PBV.**

**Table 8. ROA SOBEL TEST Result**

| Input | Test statistic | Std. Error | p-value |
|-------|---------------|------------|---------|
| a -0.349 | 0.839705 | 0.1350052 | 0.40107378 |
| b -0.123 | 0.73135293 | 0.153034 | 0.4645361 |
| sa 0.659 | 1.0193011 | 0.11477715 | 0.30915909 |
| sb 0.115 | | | |

Test results The indirect effect of ROA on PBV through EVA with the Sobel Test above, obtained the value of z (0.83971) with p (0.401074) > 0.05 or (5%). These results prove that EVA is not effective in mediating the effect of ROA on PBV.

c. **The role of EVA mediates the effect of ROI on PBV.**

**Table 9. ROI SOBEL TEST Result**

| Input | Test statistic | Std. Error | p-value |
|-------|---------------|------------|---------|
| a 0.112 | 0.03329025 | 0.0036435 | 0.97344313 |
| b 0.001 | 0.01825651 | 0.0061348 | 0.96543422 |
| sa 0.171 | NaN | NaN | NaN |
| sb 0.030 | | | |

Test results The indirect effect of ROI on PBV through EVA with the Sobel Test above, obtained the z value (0.033290) with p (0.973443) > 0.05 or (5%). These results prove that EVA is not effective in mediating the effect of ROI on PBV.

d. **The role of EVA mediates the effect of ROE on PBV.**

**Table 10. ROE SOBEL TEST Result**

| Input | Test statistic | Std. Error | p-value |
|-------|---------------|------------|---------|
| a 1.140 | 0.27236453 | 0.5664511 | 0.7654174 |
| b 7.396 | 0.27100149 | 31.1125424 | 0.76539689 |
| sa 4.184 | 0.27374835 | 30.7999689 | 0.76427802 |
| sb 0.743 | | | |

Test results The indirect effect of ROE on PBV through EVA with the Sobel Test above, the value of z (0.27236453) is obtained with p (0.78634174) > 0.05 or (5%). These results prove that EVA is not effective in mediating the effect of ROE on PBV.
e. The role of EVA mediates the effect of DAR on PBV.

Table 11. DAR SOBEL TEST Result

| Input   | Test statistic | Std. Error | p-value  |
|---------|----------------|------------|----------|
| a 1.693 | Sobel test: 0.37727424 | 5.2669251 | 0.70596861 |
| b 1.196 | Aronian test: 0.31966729 | 6.3347323 | 0.74922056 |
| s = 4.352 | Goodman test: 0.48419939 | 4.18180185 | 0.62824401 |
| sb 0.773 | Reset all | Calculate | NaN       |

The results of the test of the indirect effect of DAR on PBV through EVA with the Sobel Test above, obtained the z value (0, 37727424) with p (0, 70596981) > 0.05 or (5%). These results prove that EVA is not effective in mediating the effect of DAR on PBV.

f. The role of EVA mediates the effect of DER on PBV.

Table 12. DER SOBEL TEST Result

| Input   | Test statistic | Std. Error | p-value  |
|---------|----------------|------------|----------|
| a -0.465 | Sobel test: 0.44866042 | 0.12747949 | 0.65367654 |
| b -0.123 | Aronian test: 0.31219013 | 0.15320557 | 0.75489603 |
| s = 0.660 | Goodman test: NaN | NaN | NaN |
| sb 0.153 | Reset all | Calculate | NaN       |

Test Results The indirect effect of DER on PBV through EVA with the Sobel Test above, obtained the z value (0, 44866042) with p (0,65367664) > 0.05 or (5%). These results prove that EVA is not effective in mediating the effect of DER on PBV.

5. Conclusion

Based on the results of the research and discussion conducted, it can be concluded as follows:

The CAR variable can have a significant positive effect on firm value, meaning that the higher the CAR, the higher the firm value. However, CAR can also not have a significant positive effect, meaning that the higher the CAR will not affect the value of the company. ROA can have a significant positive and negative effect on PBV, meaning that the higher the ROA, the higher the firm value, but it can also have a negative effect if the higher the ROA actually lowers the firm value. ROI has a positive but not significant effect, meaning that the higher the ROI, the higher the firm value is not necessarily. ROE has a very significant positive effect on PBV or firm value. This means that the higher the ROE, the higher the PBV so that the value of the company is also high. DAR & DER have no significant positive effect but DAR has no significant negative effect on PBV or firm value. This means that the higher the DAR & DER, the lower the firm value. Likewise, if DAR is increased, the value of the company will decrease. But if the DER is increased, the value of the company will increase. Whatever the EVA value is, it will not affect the stock price compared to the book value per common share. If the EVA value increases or decreases, it will not affect the Company Value. EVA as a moderating variable is not effective in moderating between variables X and Y, namely between CAR, ROA, ROI, ROE, DAR & DER variables on PBV.
Limitation in this study are Researchers can only prove hypotheses 3, 4, 5 & 6 where this hypothesis can prove that ROI, ROE, have a significant positive effect on PBV. Meanwhile, DAR & DER have a significant negative effect on PBV. Hypotheses 1, 2 & 7 are not proven, where the findings of CAR, ROA & EVA do not have a significant positive effect on PBV, so it is important to re-examine with variations of other indicator variables such as Cash ratio, Quick asset test ratio to measure company liquidity. While ROA and EVA also do not have a significant positive effect on PBV to measure the company's profitability, other profitability variables besides ROA can be found, such as Profit margin, Net Profit Margin & Gross Profit Margin can be considered for future research that profitability indicators are very diverse. Hypotheses 8 to 15, namely EVA as the moderating variable is expected to moderate the effect of variable X on variable Y. The findings show that EVA moderating variable is not effective in moderating the effect of variable X on variable Y. So it can be tested in choosing other moderating variables that very influential on firm value such as PER (Price Earning Return or Share) in addition to EVA.

Based on the results of the research above, it can be recommended as Researchers can add more independent variables to clarify the measurement of ITEM indicators of Liquidity, Profitability and MODERATING. Choosing a moderating variable other than EVA that has an effect on firm value, that is, it can be tested for the PER (Price Earning Per Share) variable or Income per share. Develop test tools other than Zobel Test and Multiple Regression with other moderating variables.

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