EFFECT OF WORKING CAPITAL MANAGEMENT AND LEVERAGE ON COMPANY VALUE WITH PROFITABILITY AS MODERATING VARIABLES
(Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange)

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ABSTRACT

This study aims to determine how the influence of working capital management and leverage on firm value with profitability as a moderating variable. The research method used is quantitative data method. 1) Working Capital Management variable has a positive and significant effect on Firm Value. 2) Leverage variable has no significant effect on firm value. 3) Working Capital Management and Leverage variables have no simultaneous significant effect on Firm Value. 4) Profitability variable is a moderator variable that affects the relationship between Working Capital Management and Firm Value. 5) Profitability variable is not a moderator variable that can moderate the relationship between Leverage and Firm Value. Company value can be used as the basis for making investment decisions because this aspect measures the ability of the company's assets to generate a return on investment made in the company's asset instruments.

Keywords: Working Capital Management, Leverage, Profitability and Company Value.

INTRODUCTION

The value of the company is the same as the value of the shares or the price of the shares where a high company value will be willing to be paid by prospective buyers if the company is sold which is associated with the company's share price (Kusumajaya, 2011:33). The higher the share price in companies listed on the capital market, the higher the wealth of the owners of the company which is reflected in the higher value of the company. Companies that have valueiheight show igood performance achievement so that it becomes a desire ithe owners. The higher the valueicompany, the greater the prosperity that will be received by the owner of the company (Wiagustini, 2013:9).

The value of the company icould imeasured using ifinancial ratio, wrong ithe only one is price to book value (PBV). The PBV ratio isi comparison of the market value of a stock to the book value, iso that it can be seen whether the stock price level is overvalued or undervalued from the book value. The increase in the value of the company is not only determined by the long-term financial policy but the short-term financial policy of the company in this case working capital management.
The following is an average company value chart for the company iStock-listed manufacturers Indonesian Securities in the 2015-2019 period:

![Graph of Average Firm Value in Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) for the 2015-2019 Period.](image)

Based on Figure 1.1, it can be seen that the average development of company value as measured by the Price to Earnings Ratio or share price per share/earnings per share in manufacturing companies listed on the Indonesia Stock Exchange for the period 2016 to 2018.

Optimal working capital management means minimizing working capital requirements and maximizing company income. If there is too much working capital, it will lead to inefficiency which in turn will have a negative impact on profitability and firm value (Pandey 2010:39). Increasing company value is part of the company's corporate strategy and efficient working capital management is an important element in that strategy (Afza and Nasir: 2007:82).

Consequently, efficient working capital management is a very important factor in maintaining sustainability, liquidity, solvency, profitability and firm value.

![Development of Average Net Working Capital Manufacturing sector companies at PT. Indonesia Stock Exchange 2015-2019.](image)

**Average Working Capital (In Scale)**

Based on Figure 1.2 above, it shows that there is a fluctuating development of working capital in manufacturing sector companies on the Indonesia Stock Exchange from 2015-2019.
*Leverage* is an effect arising from the use of debt as a source of funding by the company, both short-term funding sources and long-term funding sources. The lower this ratio, the higher the level of corporate funding provided by shareholders. Each company has a different debt policy and debt level. The company's leverage can be influenced by various factors. These factors can be in the form of size, source, income, collateral level, cost of debt, opportunity growth, reputation and liquidity.

![Leverage Ratio Graph](image)

In Figure 1.3 it can be seen that the acquisition of leverage as measured by Total Debt/Total Equity in manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2019 period fluctuated, which experienced an increase and decrease. Kenaiiright and decrease iThis is due to various factors that influence it. Informationi about the cause of risingiThe decline in k can help investors in making investment decisions. The size is inseparable from the influence of market forces, namely high low permirequests and offers.

Profitability according to Saidi (2004: 120) in Martalina (2011: 104) is the ability of company in making a profit. Investors invest shares in companies to get returns, which consist of yields and capital gains. The higher the ability to earn profits, the greater the return expected by investors, thus making the value of the company gets better. Profitability is an ability the company earns profit in relation to sales, total assets or by capital (equity). In this case it can be explained to find out The profitability of a company is very important for investors and creditors.

In addition to measuring the profit generated by the company, profitability is also used to assess the company's profit position in the previous period and the applicable period, assessing profit developments, and measuring the amount of net profit that will be generated by the company.
Based on Figure 1.4, it can be seen that the average development of profitability as measured by Profit after Tax/Total Assets in manufacturing companies listed on the Indonesia Stock Exchange for the period 2015 to 2016 has fluctuated.

In fact, to get maximum profit results, companies need funds obtained from the company's internal and external processes. Funds obtained from internal companies are in the form of sales made by the company, while funds obtained from external sources are in the form of loans (debts), investments and sales of company shares. To attract investors to invest, the company's assessment can be seen from the level of company profitability as measured by the return on investment in the form of assets (assets) and return on investment in the form of capital.

LITERATURE REVIEW
Working Capital Management

Mustafa (2017:69) Management Working capital addresses all aspects of managing current assets and current liabilities. Proper working capital is an important condition for the growth and success of a company for the long term, which will make a profit.

Working capital management is one aspect that must be considered in the company. If the company cannot maintain a satisfactory level of working capital, it is likely that the company will be in an insolvent state (unable to pay obligations that are due). Current asset must be big enough to get cover current liabilities so as to describe a satisfactory level of security (margin of safety).

The company finances and invests in managing and revolving capital, this can reflect the policies made by the company in implementing working capital management. Working capital management aims to manage current assets and current liabilities so as to obtain adequate net working capital and ensure a level of liquidity company (Martono and Harijito, 2001:84).

Leverage

Leverage is a ratio that projects the state of debt in the company's finances, the following is the understanding of leverage according to several experts: According to Kasmir (2014: 153) "Leverage is a solvency ratio or leverage ratio is a ratio used to measure the extent to which a company's activities are financed with debt." In line with what was expressed by Kasmir.
This leverage ratio compares the company's overall debt burden to its equity. With words: Otherwise, this ratio shows how many company assets owned by shareholders compared to assets owned by creditor (debtor). If shareholders have more assets, then the company is said to be less leveraged. However, if the creditor (the debtor) owns the majority of the assets, then the company in question is said to have a high level of leverage. The solvency ratio or leverage ratio is very helpful for management and investors to understand how the level of capital structure risk in his company. Leverage ratio and liquidity ratio are ratios to measure ability companies to fulfill their obligations, but both have differences in the period of fulfillment of their obligations. Where the leverage ratio is a ratio that measures the company's ability to meet its long-term obligations, while the liquidity ratio measures the company's ability to meet its short-term obligations or current liabilities such as trade payables and so on.

The value of the company

Score the company will be reflected in its share price. The market price of the company's shares that is formed between the buyer and the seller at the time of the transaction is called the market value of the company, because the stock market price is considered a reflection of the actual value of the company's assets. Value companies formed through stock market value indicators are strongly influenced by investment opportunities. Existence Investment opportunities can provide a positive signal about growth company in the future, so that it can increase the value of the company (Susanti, 2010:162).

The higher the stock price, the higher the prosperity of the shareholders, to achieve the value of the company, investors generally submit their management to the shareholders. Professional that enterprise value (EV) or also known as firm value (company value) is an important concept for investors, because it is an indicator for the market values the company as a whole.

3. IMPLEMENTATION METHOD

Design research is the entire procedure for planning, and implementing research which includes procedures for data collection and data processing that have been determined. In the implementation of a research, a researcher must develop a research design that is tailored to the type and purpose of the research. In accordance with the research objectives and the nature of the problem to be studied, this research uses quantitative and secondary data. This research places the effect of working capital management, leverage on firm value with profitability as a moderating variable.

Data collection technique

In this study, researchers conducted several methods of data collection in accordance with the problem under study. Technique The data collection used in this research is the documentation study method.(Sugiyono, 2016:131). Documentation Study is a data collection technique that is not directly addressed to the object of research. Documentation method is data collected from evidence and documents related to the object of research, in this study in the form of financial statements (financial statements) which were reviewed by the author to be used as material in this study. This method is done by collecting data according to the object to be studied. This method can be done by studying or examining various sources related to research through books, journals and various other written sources as well as on the internet.
Analysis method

The method used to support this research is a quantitative and in-depth method. This research uses multiple linear regression model. Multiple linear regression model is a statistical testing that aims to analyze the effect of the independent variable on the dependent variable. The equations that can be arranged in this study are as follows:

\[ Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \epsilon_{it} \]

RESULTS AND DISCUSSION

The data obtained were then tested using the classical assumption test in order to get good results. After the classical assumption test is carried out, the data is analyzed using multiple linear regression analysis techniques and performs hypothesis testing to see the effect of the dependent variable on the independent variable and determines the coefficient of determination to see how big the contribution of the independent variable is to the dependent variable and finally testing the moderating variable.

Classic assumption test

Before testing the hypothesis in this study, the classical assumption will be tested first. The classical assumption test consists of normality test, multicollinearity test and heteroscedasticity test.

a. Normality test

Normality test is used to test whether the regression model has a distribution inormal or not. The assumption of normality is very important requirements on significance test (significance), the significance used is = 5% regression coefficient. Ghazali (2012: 92) states that a good regression model is a regression model that has a normal distribution or is close to normal, so it is feasible to do statistical testing. The normality test used in this study was the Jarque-Bera test. The results of the Jarque-Bera test in this study are as follows:

Source: Data processed from attachment (2021)

**Figure 4.1 Normality Graph**

Based on the picture above, it can be seen that the Jarque-Bera test value is 1,896.702 and the probability value is 0.000000 where this value is below the standard error tolerance value (5%). Therefore, it can be concluded that the normally distributed residuals can be rejected, in other words, the assumption of normally distributed residuals is not met.

b. Multicollinearity Test

Multicollinearity test aims to test whether in the regression there is a correlation between the independent variables (Independent). If the correlation matrix between the
independent variables is below 0.8 then multicollinearity does not occur, whereas if the correlation between the independent variables is above 0.8 then multicollinearity occurs.

Table 4.1 Multicollinearity Test Results

<table>
<thead>
<tr>
<th>NILAI_PERUSA</th>
<th>HAAN_Y</th>
<th>MODAL_KERJA</th>
<th>LEVERAGE</th>
<th>PROFITABILITAS_Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>1</td>
<td>0.0085179773</td>
<td>0.133654557</td>
<td>0.00968218954</td>
</tr>
<tr>
<td>MODAL_KERJA</td>
<td>0.0085179773</td>
<td>1</td>
<td>0.495088128</td>
<td>0.09646174003</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>0.13365455796</td>
<td>0.4950881283</td>
<td>1</td>
<td>0.12760047307</td>
</tr>
</tbody>
</table>

Source: Data processed from attachment 4 (2021)

Based on table 4.6 above, it shows that this model does not show symptoms of multicollinearity by looking at the output between the independent variables in the regression, there is no output that exceeds 0.8.

c. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance and residuals from one observation to another, if the variance of the residuals from one observation to another is fixed then it is called homoscedasticity, and if it is different it is called heteroscedasticity (Ghozali, 2012:101).

Table 4.2. Glejser Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>22.57903</td>
<td>5.335733</td>
<td>4.231664</td>
<td>0.0000</td>
</tr>
<tr>
<td>MODAL_KERJA_X1</td>
<td>0.324657</td>
<td>0.325454</td>
<td>0.997550</td>
<td>0.3197</td>
</tr>
<tr>
<td>LEVERAGE_X2</td>
<td>-7.459352</td>
<td>2.955184</td>
<td>-2.524175</td>
<td>0.1124</td>
</tr>
<tr>
<td>PROFITABILITAS_Z</td>
<td>2.131336</td>
<td>0.672492</td>
<td>0.450634</td>
<td>0.6492</td>
</tr>
</tbody>
</table>

Source: Data processed from attachment 4 (2021)

Based on the table above, it can be seen that all independent variables in the Glejser test are above 0.05. However, the correlation between profitability and liquidity variables has multicollinearity problems because the correlation matrix is smaller than 0.05.

d. Test Autocorrelation

The autocorrelation test aims to test in a model whether or not there is a correlation between the confounding error in period t and the error in period t-1. Ghozali (2012:124) states that a good regression model is a model that does not have autocorrelation in it.
The autocorrelation test can be seen from the value of Durbin Watson in this study. The value of Durbin Watson in this study is 1.693488 and the number of samples is 40 (n), the number of independent variables is 2 (k=2), then the Durbin-Watson value, DW 1.693488 greater than the upper limit (du) 1.6000 and less (dl) 1.3908, with the table value at a significance level of 5%, it can be concluded that there is no autocorrelation in this regression model, or the calculation can be concluded that the DW value lies in test area, with an upper limit value (du) of 1.6000 and a lower limit (dl) of 1.3908.

Multiple Linear Regression Analysis

The method used to support this research is a quantitative method and in this study using multiple linear regression models. Multiple linear regression model is a statistical test model that aims to analyze the effect of the independent variable on the dependent variable. Based on the model selection above, the best model is the Random Effect Model (REM). The results of panel data regression with the Random Effect Model (REM) are as follows:

Based on the table above, the regression equation model that can be arranged in this study is as follows: Firm Value = 24.37 + 0.40 Working Capital Management - 5.94 Leverage + 1.07 Profitability + e
**Determination Test**

The coefficient of determination is used to see how much the independent variable contributes to the dependent variable. In other words, the value of the determinant coefficient is used to measure the contribution of the studied variables X and Y as the dependent variables.

**Table 4.5 Determination Test**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.210309</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.380024</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>21.92013</td>
</tr>
<tr>
<td>F-statistic</td>
<td>0.747284</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.525127</td>
</tr>
</tbody>
</table>

Based on table 4.9, it can be seen that the adjusted R square value is 0.380 or 38.0%, this shows that the test determination carried out to determine good accuracy in the analysis indicated by the magnitude of the coefficient of determination adjusted R square.

**Hypothesis testing**

1. **t test (Partial)**

   The t test is used to see the effect of the independent variable on the dependent variable partially. The results of hypothesis testing carried out, it can be concluded that the partial test in this study is feasible to use if the decision-making criteria with the ttable value then also look at the probability value.

   **Table 4.6. Partial Test (t)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>24.37114</td>
<td>7.219734</td>
<td>3.375629</td>
<td>0.0009</td>
</tr>
<tr>
<td>MODAL_KERJA_X1</td>
<td>0.402925</td>
<td>0.414109</td>
<td>2.972993</td>
<td>0.0001</td>
</tr>
<tr>
<td>LEVERAGE_X2</td>
<td>-5.947743</td>
<td>4.085061</td>
<td>-1.455974</td>
<td>0.0470</td>
</tr>
<tr>
<td>PROFITABILITAS_Z</td>
<td>1.074494</td>
<td>8.971674</td>
<td>0.119765</td>
<td>0.9048</td>
</tr>
</tbody>
</table>

Source: Data processed from attachment 4 (2021)

   a. The Effect of Working Capital Management (X1) on Firm Value (Y).

      Based on the test results using the Eviews 10 application, it is known that the t count value of Working Capital Management is 2.972993 significantly 0.0001. The t table value in this study is calculated by df = 40 - k (38) which is 2.0243 with a significance of 0.05. So it can be seen that working capital management has a positive and significant effect on firm value. This is indicated by the results of the t count (2.972993) > t table (2.0243) and the significant value is 0.0001 < 0.05.

   b. The Effect of Leverage (X2) on Firm Value (Y).

      Based on the test results using the Eviews 10 application, it is known that the t count value of Leverage is -1.455974 significantly 0.0470. The t table value in this study is calculated by df = 40 - k (38) which is 2.0243 with a significance of 0.05. So it can be seen that Leverage has a negative and insignificant effect on Firm Value. This is indicated by the results of the t count (-1.455974) < t table (2.0243) and significant value 0.0470 < 0.05. So it can
be concluded that the leverage variable has no significant effect on firm value in manufacturing companies listed on the Indonesian stock exchange.

2. F Test (Simultaneous)

The f test is used to see the effect of the independent variable on the dependent variable simultaneously or simultaneously.

Table 4.7. Simultaneous Test Results (F)

<table>
<thead>
<tr>
<th>Source: Data processed from attachment 4 (2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
</tr>
<tr>
<td>S.E. of regression</td>
</tr>
<tr>
<td>F-statistic</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
</tr>
</tbody>
</table>

Based on the test results using the Eviews 10 application, it is known that the Fcount value is 0.747284 with a significant 0.525127. The ftable value in this study calculated by df = 40-k-1 (37) is 3.25 with a significance of 0.05. So it can be seen that Working Capital Management and Leverage have a positive and insignificant effect simultaneously on Firm Value. This is indicated by the results of the tcount (0.747284) < t table (3.25) and significant value 0.525127 > 0.05. So it can be concluded that the variables of Working Capital Management and Leverage have no simultaneous significant effect on firm value in manufacturing companies listed on the Indonesia Stock Exchange.

Moderate Effect Test

Moderating variables or moderating variables are variables that can influence (strengthen or weaken) the relationship between the independent variable and the dependent variable. (Erlina, 2011:88). The moderating variable (Z) in this study is Profitability which will be tested whether it can affect the relationship between the dimensions of the Working Capital Management and Leverage variables on Firm Value.

Table 4.8 Results Moderate Effect Test

<table>
<thead>
<tr>
<th>Source: Data processed from attachment 4 (2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>MODAL_KERJA_X1</td>
</tr>
<tr>
<td>LEVERAGE_X2</td>
</tr>
<tr>
<td>PROFITABILITAS_Z</td>
</tr>
<tr>
<td>MODAL_KERJA_X1*PROFITABILITAS_Z</td>
</tr>
<tr>
<td>LEVERAGE_X2*PROFITABILITAS_Z</td>
</tr>
</tbody>
</table>

It is known that the MRA coefficient value from the interaction of Working Capital Management_Profitability to Firm Value is negative, namely -4.515549 with Tcount = 1.327373 < 2.0243 and p-value 0.0159 <0.05, this indicates that the Profitability variable is a
b. Profitability (Z) Moderates Leverage Relationship (X2) to Firm Value (Y).

It is known that the MRA coefficient value from the Leverage_Profitability interaction with the Firm Value is positive, namely 10.28593 with Tcount 0.809362 < 2.0243 and p-value 0.4193 > 0.05, this shows that profitability is not a moderating variable that can moderate the relationship between Leverage and Firm Value.

Discussion

Working capital management in the company will always rotate in accordance with the company's operating turnover. The working capital turnover period begins when capital is invested into working capital components, through the operating process until the funds return to cash, the shorter the operating process, the faster the working capital turnover rate.

Companies that have debt will have a burden if fixed finance, interest and credit returns and thus lead the company into liquidation. As a result, companies have a tendency to pay more dividends if low to maintain liquidity and flow position good cash. By adapting agency theory, the existence of dividends paid by the company becomes a substitute mechanism for controlling agency conflicts due to the acquisition of leverage and profitability.

One of the means is An economy that is managed together to maximize profit and value is a company. The success of a company can be seen from the ability in working capital management and leverage management in seeing future opportunities. To achieve the company's goals, a good management of the company's working capital is needed.

CONCLUSION

To complete this research, there are several additional aspects proposed in the suggestions in this study, namely as follows:
a) Expected on Manufacturing Company listed on the Indonesia Stock Exchange to always maintain the value of the company, and this research should be used as a strategy or as material for consideration so that Manufacturing companies pay attention to company values in carrying out company activities. This means that the Manufacturing Company, while maintaining good corporate values. This is in order to be able to significantly increase the value of the company.
b) Paying attention to Working Capital Management, Leverage, Profitability and especially Company Value because this aspect is very attractive to investors in conducting technical analysis and predicting the movement of the company's stock price. It will be even more interesting if the company has a good corporate value. So that investors can find out risk analysis and predict the value of the company, of course investors will be interested in investing their funds in the company.
c) Company value can be used as the basis for making investment decisions because this aspect measures the ability of the company's assets to generate a return on investment made in the company's asset instruments.
d) It is recommended for further researchers to expand the scope of the object of research so that later the results of this study can contribute thoughts, information and considerations to the manufacturing company in determining policies, in making working capital
management strategies and leverage so that the company able to increase the value of the company.

REFERENCES

Books


Susanti, I., (2010), Personnel and Academic Information System at SMA NEGERI 19 Surabaya Based on PHP, ITS, Surabaya.

Journal


