The Role of Managerial Ownership of The Factors That Affect Firm Value in Banking Companies in Indonesia

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Submitted: July 2022, Revised: December 2022, Accepted: February 2023

ABSTRACT
Objective of this research to prove the effect of intellectual capital, capital structure, and firm growth on firm value. In addition, to see the role of ownership of managerial in moderating the effect of these variables. This is a quantitative research of data obtained from the Indonesia Stock Exchange (IDX). This study’s population are banking companies listed on the IDX during 2016-2020. The technique of sampling used in this study is purposive sampling which resulted 76 observation data during the 2016-2020 period. The data that has been collected will be analyzed using multiple linear regression analysis. The program used in analyzing the data is Statistical Package for the Social Sciences (SPSS) ver. 26. The results obtained in this study are intellectual capital, capital structure, and firm growth simultaneously have an effect on firm value. Partially, intellectual capital and capital structure have no significant effect on firm value, while firm growth has a significant effect on firm value. In addition, managerial ownership is not able to moderate the effect of intellectual capital, capital structure, and firm growth on firm value. The implication of this study is that managerial ownership needs to be considered in terms of achieving common goals in order to increase firm value.

Keywords: Intellectual Capital, Capital Structure, Firm Growth, Managerial Ownership, Firm Value

1. INTRODUCTION

In the current period of globalization, firm competition is becoming more intense, with each company competing with the others to increase the value of the company. Moreover, as of July 30, 2021, it is known that the number of new investors in the capital market is increasing, requiring each firm to improve its value in order to attract new investors to include their capital in the company (https://economy.okezone.com/read/2021/08/05/278/2451420/ore-more-who-played-stock-number-of-investors-up-50). One of the company sectors that has a very competitive level of competition is banking companies. This is because the banking sector has a big role in driving the national economy because banking is included in the main driving sector for Indonesia's Gross Domestic Product (GDP) (https://keuangan.kontan.co.id/news/peran-perbankan-very-besar-dalam-moving-the-national economy).

In addition, the banking sector also occupies six of the twenty issuers with the largest market capitalization, where even four of the five largest market capitalizations are occupied by banking companies, namely “Bank Central Asia (BBCA), Bank Rakyat Indonesia (BBRI), Bank Mandiri (BMRI), and Bank Artos Indonesia (ARTO)” (https://newssetup.kontan.co.id/ news/begini-pandangan-analis-samuel-sekuritas-terhadap-bankkonvensional?page=all). Thus, this causes investors in Indonesia to have considerable interest in the banking sector. Firm value has a close relationship with stock prices because stock prices are an indicator that can reflect investors’ perspectives on company performance. Company value is frequently used as a measure of how the market evaluates the company as a whole, therefore company value is an important concept for shareholders [1]. Companies that have a high value illustrate that the company has good company performance.
Companies with good performance indicate that the management of company is able to manage assets, debt and equity to the maximum so that it affects the increase in company value. The decision of investors to invest in companies is that investors are more interested in the companies that have good asset, debt and equity management because this is expected to bring greater profits in the future. This proves that the value of the company can be influenced by various other factors.

Along with the times, companies that previously relied on labor have slowly shifted to starting to rely on science. With this change, the company must pay more attention to its intangible assets, including intellectual capital. Intellectual capital is a non-tangible asset. It can create added value for the company. With the creation of value added from intellectual capital, it can affect the increase in company value.

1.1. Related Work

In resource based theory, intellectual capital can make a company have the opportunity to increase its competitive advantage if a company’s intellectual capital is managed appropriately. This is in line with [2] intellectual capital affects firm value, in addition to having a positive relationship. However, contrary to the research of [3] which showed there was no impact between intellectual capital on firm value. The other factor can influence market considerations in assessing a company is the capital structure. The description of capital structure is the use of debt in the proportion of company funding [4]. Capital structure has a negative and significant effect on corporate value, according to research undertaken by [5]. It differs, however, from the findings of [6], which claim that capital structure has a significant and positive effect on corporate value. Meanwhile, studied conducted by [2] states that capital structure has no effect on company value.

The grow of company is what is expected by external and internal parties. This is because the company's growth indicates developments in a company as well as promising future prospects. In signaling theory, company growth is a signal issued to external parties by the company that describes the company's performance. Company growth has a significant and positive influence on firm value [7]. On contrary, the research conducted by [4] has different results, whereas company growth has no effect on firm value.

The increase in corporate value can be achieved maximally if there is cooperation between the external parties which is principal (shareholders) and the internal parties which is agent (management) in making decisions. However, it is undeniable that in a company there are often differences in interests between the two parties. The existence of share ownership by the management is one way that can create a unity of purpose between the management and the shareholders.

1.2. Contribution

This research’s results are expected to be useful for various investors, companies and academics. Investors can evaluate the studied variables as signals for investment in the banking industry. For the company as an evaluation to improve the variable that does not contribute to increasing the value of the firm, as well as assessing the extent to which managerial ownership increases the value of the firm in banking companies.

1.3. Paper Structure

The paper is organized as follows. Theoretical review and hypothesis development are described in section 2. Section 3 will describe the methodology of this research. Then, Section 4 discusses the test results, conclusion, and limitation.
2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Theoretical Review

2.1.1. Signaling Theory

According to the assumptions of Professor Franco Modigliani and Merton Miller, there is symmetric information in which the shareholders and management of the company have the same information about the condition of the company [8]. However, there is often a difference in the information held between shareholders and management, which is called asymmetric information. This is because the management as an internal company has better information than the investors. Therefore, the signaling theory explains that the company provides important information to external parties through a signal in the form of financial statement information availability.

2.1.2. Resource-Based Theory

This theory argues that a company has a good opportunity to gain competitive advantage if the company has strategic resources [9]. In creating distinctive competencies, what is needed by the company is not only having resources but also needs to be complemented by the company's capability to manage these resources. The combination of assets and the capability to manage, it will make the company more ready to compete with other companies because the company can optimize the creation of value added from these resources.

2.1.3. Trade Off Theory

According to [8], the trade off theory is a theory of capital structure which explains that there is an exchange made by the company between tax benefits and a problem that arises from the potential for bankruptcy. This theory explains the high debt level which owned by the company is directly linked to the company’s likelihood of financial difficulties that may be experienced by the company. The advantages and disadvantages obtained from the use of debt are the basis for the trade off theory model [10].

2.1.4. Firm Value

Firm value is a description of capital owners' views on grade of success of management in improving company performance which is closely related to company value [11]. The present worth of the free cash flow generated by a corporation for its investors over time is known as a firm value [8]. The higher the value of a company, the higher the stock price of the company's stock [12]. So, it may be stated that the company’s value and share prices have a close relationship, with the company’s value describing the wealth of its shareholders.

2.1.5. Intellectual Capital

The International Federation of Accountants (IFAC) states that intellectual capital is intellectual property, intellectual assets, of knowledge assets which can be interpreted as capital owned by knowledge-based companies [13]. Intellectual capital is knowledge which has been translated into value and is useful for improving company performance so that it can increase intangible assets such as information [12]. In general, customer capital, human capital, and structural capital are the three basic components of intellectual capital. Customer capital is a good relationship owned by the company with outside company parties such as suppliers, customers, government, community, and so on. Human capital is the knowledge, skills and sources of innovation owned by a company which is represented by the employees of the company. Structural capital is the ability of a company to maximize the intellectual abilities of its employees. In addition, structural capital is also a supporter of human capital optimization.
2.1.6. Capital Structure

The capital structure as a combination of debt, shares, and capital used by the company in financing the company's assets. The combination of these three things can create an optimal capital structure that can maximize the intrinsic value of the stock. Capital structure can also be defined as a percentage of each type of capital provided by investors [8]. The capital structure is often used to finance the company's project activities as well as the company's long-term funding.

2.1.7. Firm Growth

Company growth is how far the company positions itself in the overall economic system or in similar industries[14]. Companies with great potential in creating future cash flows and with a high market capitalization rate are companies that have high growth rates. This indicates that companies with high growth have a more favorable position in the competition because it will be accompanied by increased sales, profits and market share.

2.1.8. Managerial Ownership

Managerial ownership is the percentage of company share owned by manager who are actively involved in company decision-making [15]. Managerial ownership is one tool that can be used to reduce agency problems in a company. This is because managerial ownership is expected to reduce management attitudes that tend to be selfish. In addition, managerial ownership can also be a medium for the company's internal control.

2.2. Hypothesis Development

Companies need two main capitals in order to compete with other companies, namely the ability to manage the resources they have and the advantages of the resources themselves. With the two primary capitals, the company can build value, which will provide favorable signals to investors, encouraging them to invest more in the company as a kind of appreciation [16]. The higher of investment in the company, the higher the stock price, it will increase the firm value of the company. These findings are confirmed by research from [2] which shows that intellectual capital has a significant and positive impact on firm value.

H1: Intellectual capital has a significant and positive effect on firm value.

Company activities that are financed using debt are things that are mostly done by large companies. This is because a big companies require substantial funds so that they require financial assistance from external parties. However, the existence of debt will put the company in a quite dangerous condition even though the use of debt can be profitable to a certain degree. This is because the company has the possibility of experiencing financial difficulties if the use of debt is done excessively. In accordance with signaling theory, the risk of bankruptcy because of the high level of debt will be a negative signal for external parties. That way, the greater the debt, the greater the danger of bankruptcy which can decline the firm value of the company [17]. [5] claims that capital structure has a significant and negative effect on corporate value, however [6] claims that capital structure has a significant and positive effect on corporate value. Meanwhile, research of [2] states that capital structure has no significant effect on company value.

H2: Capital structure has a significant and negative effect on firm value

Companies with a positive growth rate will make investors more motivated to buy company shares because investors think that is the positive signal from the company which is the company has a high rate of return. This is because high growth will be accompanied by an increase in profits so that the greater the dividends that can be given by the company. That way, the high growth rate will have an impact on raising the quantity of investment, which will in turn increase the company’s worth. Although, this is in contrast to the research of [4], which claims that company growth has no significant effect on firm value.
**H3**: Firm growth has a significant and positive effect on firm value

The management will be more assisted in the efficient use of company assets with managerial ownership in a company. This shows that the relationship and involvement of management in managing intellectual capital can improve the performance of intellectual capital itself in creating added value for the company. The more value added created by the company, it will be a good signal for investors. So that with increased intellectual capital performance it will increase the perception of the value of the company [18].

**H4**: Managerial ownership strengthens the influence of intellectual capital on firm value

Capital structure is a decision in the company's funding using debt. With managerial ownership in a company, managers who hold company shares will have a dual role, namely as principal and also as agent [19]. With this dual role, the union of interests between shareholders and company management can be realized. Therefore, in using debt to improve company performance, the management will be more careful in order to achieve maximum shareholder prosperity and company value.

**H5**: Managerial ownership strengthens the effect of capital structure on firm value

The company's growth is an indication of the company's capability to maintain its position in an economic development and industry in which the company operates [14]. Without managerial ownership, management tends to focus more on the commissions earned from their hard work in running the company than on the prosperity of the shareholders. Therefore, the existence of managerial ownership in a company is expected to reduce the opportunistic attitude of managers. Thus, managers will switch to projects with large risks but can increase company growth which can increase company value and shareholder wealth. In line with signaling theory, the increasing of company growth will give a positive signal and will cause an increase in company value.

**H6**: Managerial ownership strengthens the effect of firm growth on firm value.

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### Figure 1 Research Model

**3. METHODOLOGY**

This research is a quantitative descriptive. This research’s population is banking companies listed on the Indonesia Stock Exchange (IDX) in the period 2016 to 2020. The analysis uses multiple linear regression. The sample is determined using a non-probability sampling method with a purposive sampling approach with the following criteria (1) publishing audited financial statements consistently, (2) earned successive profits, and (3) experienced positive asset growth during the 2016-2020 period.

https://doi.org/10.24912/ijaeb.11.733-742
The operationalization of variables and measurements in this study is displayed in Table 1 below.

### Table 1 Operational Variable and Data Measurement

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>References</th>
<th>Formula</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value Added Capital Employed (VACA)</td>
<td></td>
<td>VACA = VA / C E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value Added Human Capital (VAHU)</td>
<td></td>
<td>VAHU = VA / H E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value Added Structural Capital (STVA)</td>
<td></td>
<td>STVA = SC / V A</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Capital Structure (DER)</td>
<td>Arastika &amp; Khairunnisa (2020)</td>
<td>DER = Total Liabilities / Total Equity</td>
<td>Ratio</td>
</tr>
<tr>
<td>3</td>
<td>Firm Growth (FG)</td>
<td>Arastika &amp; Khairunnisa (2020)</td>
<td>FG = Total Assets (2) / Total Assets (1)</td>
<td>Ratio</td>
</tr>
<tr>
<td>4</td>
<td>Managerial Ownership (MO)</td>
<td>Dewi &amp; Samia (2017)</td>
<td>NO = Shares of Managerial Ownership / Outstanding Shares</td>
<td>Ratio</td>
</tr>
<tr>
<td>5</td>
<td>Firm Value (FV)</td>
<td>Sayyidah &amp; Safi (2017)</td>
<td>Tobin's q = Market Value Equity + Debt / Total Assets</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

Source: Compiled by Author

### 4. RESULT, CONCLUSION AND LIMITATION

#### 4.1. Result of the Test

Test of Descriptive statistical explains the data in terms of standard deviation, maximum-minimum value, and mean. Table 2 shows the dependent variable of firm value with a minimum value of 0.90648, a maximum value of 1.87818, a mean of 1.0789387, with a standard deviation of 0.15493762. Intellectual capital as the dependent variable has a minimum value of 1.47022, a maximum of 4.80117, mean 2.9728939, with a standard deviation of 0.76773119. Meanwhile, capital structure as an independent variable shows a minimum value of 1.59374, a maximum value of 11.33034, a mean of 5.8629099, with a standard deviation of 2.21219897. While the other independent variables, company growth has a minimum value of 0.00179, a maximum value of 0.43458, a mean of 0.1363597, then a standard deviation of 0.0001401, and a standard deviation of 0.00022606.

### Table 2 Descriptive Statistical Test Result

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Value</td>
<td>76</td>
<td>0.90648</td>
<td>1.87818</td>
<td>1.0789387</td>
</tr>
<tr>
<td>Intellectual Capital</td>
<td>76</td>
<td>1.47022</td>
<td>4.80117</td>
<td>2.9728939</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>76</td>
<td>1.59374</td>
<td>11.33034</td>
<td>5.8629099</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>76</td>
<td>0.00179</td>
<td>0.43458</td>
<td>0.1363597</td>
</tr>
<tr>
<td>Managerial Ownership</td>
<td>76</td>
<td>0.00000</td>
<td>0.00104</td>
<td>0.0001401</td>
</tr>
</tbody>
</table>

Source: SPPS V.26

Test of classical assumption consists of normality, autocorrelation, heteroscedasticity, and multico-linearity test.

Normality test using the One Sample Kolmogorov-Smirnov test shows the Asymp value. Sig (2-tailed) is 0.060, more than 0.05 which indicates that the data are normally distributed.
Heteroscedasticity test using Glejser test. The test results show the significance values of Intellectual Capital, Capital Structure, Firm Growth, and Managerial Ownership are 0.932, 0.222, 0.085, and 0.071, where the value is more than 0.05, indicating that the data in this study is homoscedastic. The multicollinearity test shows the tolerance values for the variables of intellectual capital, “capital structure, firm growth, and managerial ownership” are 0.811, 0.903, 0.928, and 0.842. In addition, the VIF values for the variables of “intellectual capital, capital structure, firm growth, and managerial ownership” are 1,233, 1.108, 1.078, and 1.187. The data in this study does not exhibit multicollinearity difficulties because the figure between 0.1 and 10.

In this study, the autocorrelation test was performed using the Durbin-Watson test. The results of the Durbin Watson test show the number 1,070 which indicates that the research data does not have autocorrelation because the Durbin-Watson value is between -2 to 2.

After that, the coefficient of determination test was carried out to find out the amount of the contribution of the independent variable in order to explain the dependent variable. The results of the coefficient of determination test show that the value of Adjusted R Square is 0.080. This illustrates that the dependent variable used, namely intellectual capital, capital structure, and firm growth, is only able to explain the dependent variable, namely firm value of 8%, and 92% explained by factors other than the variables used in this study.

Furthermore, regression testing was also carried out. The independent variable’s effect on the dependent variable is tested first, followed by the moderating variable’s role as a moderating variable between the independent variables and the dependent variable. The equation used in this study are:

\[
\text{Tobin's Q} = 1,112 + 0.009 \text{IC} - 0.014 \text{CS} + 0.370 \text{FG} + e \\
\text{Tobin's Q} = 1,094 + 0.004 \text{IC} + 50.419 \text{IC.MO} + e \\
\text{Tobin's Q} = 1,206 - 0.017 \text{CS} -16,121 \text{CS.MO} + e \\
\text{Tobin's Q} = 1,035 + 0.471 \text{FG} - 581,784 \text{FG.MO} + e
\]

The results of the test of the influence of the independent variable on the dependent variable are as follows:

<table>
<thead>
<tr>
<th>Source: SPPS V.26</th>
</tr>
</thead>
</table>

From Table 3, it can be seen the Intellectual Capital (sig. IC 0.722 with a positive direction), Capital Structure (sig. SC 0.084 with a negative direction) shows a value of more than 0.05 (with a 95% confidence level). The results of IC on Firm Value in this study are same as the research of [3] but different from the research of [2] and [16]. Meanwhile, the results of CS on Firm value are as same as the research of [4] but are not in line with the research of [5]. Meanwhile, the growth of the company (Sig. FG 0.027 with a positive direction) shows this variable has an impact on firm value. These findings are consistent with the findings of [7], but not with the findings of [20] and [4]. The next test is to analyze the role of the moderating variable. The results of the test of the role of the moderating variable on the independent variables are shown in Tables 4, 5, and 6.

https://doi.org/10.24912/ijaeb.11.733-742
Table 4 t-test results of “Managerial Ownership” moderate the influence of Intellectual Capital on Firm Value

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1,094</td>
<td>0.078</td>
<td>14,009</td>
<td>0.000</td>
</tr>
<tr>
<td>1 IC - MO</td>
<td>0.004</td>
<td>0.026</td>
<td>0.020</td>
<td>0.154</td>
</tr>
<tr>
<td>IC - MO</td>
<td>50,419</td>
<td>138,034</td>
<td>0.271</td>
<td>0.365</td>
</tr>
</tbody>
</table>

Source: SPPS V.26

Legends: MO = Managerial Ownership

Table 5 t-test results of “Managerial Ownership” moderate the influence of Capital Structure on Firm Value

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1,206</td>
<td>0.055</td>
<td>21,950</td>
<td>0.000</td>
</tr>
<tr>
<td>1 CS</td>
<td>-0.017</td>
<td>0.009</td>
<td>0.237</td>
<td>-1.934</td>
</tr>
<tr>
<td>CS - MO</td>
<td>-16,121</td>
<td>49,227</td>
<td>0.121</td>
<td>0.327</td>
</tr>
</tbody>
</table>

Source: SPSS V.26

Table 6 t-test results of Managerial Ownership moderate the influence of Firm Growth on Firm Value

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1,035</td>
<td>0.034</td>
<td>30,747</td>
<td>0.000</td>
</tr>
<tr>
<td>1 FG</td>
<td>0.471</td>
<td>0.180</td>
<td>0.319</td>
<td>2.611</td>
</tr>
<tr>
<td>FG - MO</td>
<td>-581,784</td>
<td>926,927</td>
<td>-0.149</td>
<td>-0.628</td>
</tr>
</tbody>
</table>

Source: SPSS V.26

From the tables above, Managerial Ownership (MO) weakens the influence of IC (IC-MO: 0.716 with positive direction; CS-MO with negative direction: 0.744; and FG (FG - MO: 0.532 with negative direction) on Firm Value.

4.2. Conclusion

No effects of Intellectual capital on firm value because of the reduced role of human capital because at this time banking is in a transformation period towards digital banking so that the burden of human capital shifts to technology development. This condition is in accordance with Resource Based Theory where companies change the advantages of human capital towards technology. The capital structure in this study shows that the company maintains the composition of debt with owned equity. By maintaining the composition of debt (trade off theory) so that the interest expense can be controlled. Thus, this capital structure does not affect Firm Value.

Furthermore, the impact of a positive relationship between firm growth and firm value shows the higher company’s growth, the higher the company’s firm value. This variable provides a positive signal for investors to consider in making investment decisions.
The role of Managerial ownership in this study weakens the influence of Intellectual Capital, Structure Capital and Firm Growth factors on Firm Value. This can indicate that the role of the manager as the owner has minimized the information asymmetry between the capital owner and management so that the transformation of banking operations towards digitalization and increasing debt is known by all parties. Including the company's operating strategy in increasing growth.

4.3. Limitation and Suggestions

The limitation in this research is the limited observation period in the 2016 to 2020 period in the banking industry, which simultaneously occurs when the company transforms from human-based to digital technology. Based on these limitations, further research can be carried out on other industrial sectors that did not experience significant transformation, the period was extended with relatively the same conditions from environmental influences and economic policies from the government.

The suggestion is the result from this research are expected to be useful for various investors, companies and academics. Investors can evaluate the studied variables as signals for investment in the banking industry. For the company management, this research can be as an evaluation to improve the variable that does not contribute to increasing the value of the company, as well as assessing the extent to which managerial ownership increases the company value in banking companies.

ACKNOWLEDGMENT

This work was supported by the Undergraduate Accounting Program, Faculty of Economics and Business, Universitas Tarumanagara, West Jakarta, Indonesia.

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