ANALYSIS THE EFFECT OF CAPITAL STRUCTURE, INSTITUTIONAL OWNERSHIP, GROWTH FIRM, RISK BUSINESS ON FIRM PERFORMANCE IN MANUFACTURING FIRM LISTED AT THE INDONESIA STOCK EXCHANGE

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ABSTRACT. This study aims to analyze the effect of capital structure, institutional ownership, firm growth, and business risk toward firm performance as measured by ROA. The study was conducted at manufacturing companies listed on the Indonesia Stock Exchange in the period was 2014 to 2018. The data collection methods used in this study were documentation methods with secondary data on the firm’s financial statements. The data analysis technique used is multiple linear regression analysis. The results of this study indicate that business risk variables that influence the variable performance of the firm and have a positive relationship and and variables of institutional ownership, capital structure, firm growth, and firm performance have a path coefficient value with a calculated t value < from t table where Ho is accepted and that means the variable is not significant.

Keyword: Capital Structure, Institutional Ownership, Risk Business, Firm Performance

1. INTRODUCTION

The good condition of a country can be seen from various aspects, one of them is the economic aspect. The economy of a country can be said to be good if the state income obtained from various sectors has increased or in other words the income earned is greater than the costs incurred. One of the parties contributing to the progress of the country's economy are firm, both private-owned and state-owned firm. The main objective of the firm is to maximize prosperity and profits for its shareholders (Brigham and Houston, 2001 p. 52)

Capital structure and is the of core financial problems and there are a number of theories that explain this relationship. The theory of Modigliani-Miller (MM) (Modigliani and Miller, 1958), considered a basic theory, argues that firm are not influenced by their capital structure. However, this theory is based on the assumption that restrictions on perfect capital markets do not exist in the real world. To explain an imperfect market, the three main theories proposed as alternatives to MM theory are trade-off theory, pecking order theory and agency theory.

Trade-off theory (Kraus and Litzenberger, 1973; Myers, 1984) claims that a firm will exchange debt costs and benefits to maximize the value of the firm. The benefits of debt mainly come from the tax protector from decreasing income through interest payments (Miller and Modigliani, 1963). Debt costs are derived from the costs of direct and indirect bankruptcy through increased financial risk (Kim, 1978; Kraus and Litzenberger, 1973).

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That pecking order theory (Myers and Majluf, 1984; Ross, 1977) states that financing follows hierarchy: internal financing is used first, then debt is issued, and equity is issued when there are no more approximated debts. Agency theory, developed by Jensen and Meckling (1976), Jensen (1986) and Hart and Moore (1994), argues that an optimal capital structure to maximize the value of a firm must be one. which minimizes conflicts of interest among stakeholders.
Conflicts of interest between owner-managers and outsiders and also between controlling shareholders and minorities are at the heart of the corporate governance literature (Berle & Means, 1932; Jensen and Meckling, 1976; Shleifer and Vishny, 1986). Although there is relatively large literature on the effect of ownership on firm performance (see for example, Morck et al., 1988; McConnell and Servaes, 1990; Himmelberg et al., 1999), the relationship between ownership structure and capital structure remains largely unexplored. On the other hand, much literature is devoted to capital structure and its impact on corporate performance by Harris and Raviv (1991) and Myers (2001).

The emerging consensus from the corporate governance literature (Mahrt-Smith, 2005) is that the interaction between capital structure and ownership structure has an impact on corporate values. But theoretical arguments alone cannot predict this relationship clearly (Morck et al., 1988) and empirical evidence that we often seem contradictory. Some of these conflicting results arise from the empirical difficulties of researchers facing in obtaining a direct measure of the magnitude of agency costs that is not confounded by factors that are beyond management control (Berger and Bonaccorsi in Patti, 2006).

Decisions about the capital structure of a firm are very important. According to Weston and Brigham (1990), policies regarding capital structure involve a trade off between risk and rate of return, the addition of debt can increase the risk of the firm, but it can also increase the expected rate of return.

The manufacturing sector is still the biggest contributor to the national economy, including through increasing domestic value-added raw materials, absorbing local labor, and receiving foreign exchange from exports. Institute for Development of Economics and Finance (Indef) estimates that manufacturing industry growth throughout 2018 will grow stagnant at 5 percent. The manufacturing industry's share of GDP continued to decline below 20 percent. Therefore, to determine the firm performance of manufacturing companies, it needs to be examined from institutional ownership, capital structure, firm growth and business risk

2. LITERATURE REVIEW

The Trade-Off Theory approach states that in determining its capital structure policy, the firm will seek optimal capital structure by balancing the benefits and sacrifices generated from the use of debt so that the use of debt will increase the firm's value to a certain point, after that point the addition of debt will reduce the value firm (Dreyer, 2011). The Pecking Order Theory approach states that in placing its capital structure policy, the firm has a pattern of choosing funding sources, which prioritizes internal equity funding rather than external equity funding (Vanacker, T. R., & Manigart, S. 2010). The explanation above shows the two theories, using a different approach, so that both have differences in explaining the relationship of capital structure with determinant factors and the impact of capital structure on firm value.

Dam, & Scholtens, (2013) explained that institutional ownership is share ownership by institutional parties within a firm. Frim with high institutional ownership, the ability to take over inefficient firm is getting higher so that in the end this situation can force managers to be more efficient (Ongore, 2011). Xin's research (2014) states that in the Pecking Order Theory institutional ownership is a factor that affects the level of debt negatively. The results of the study support the opinion that institutional investors are substitutes who act as debt regulators on capital structure as found in several studies such as Michaely & Vincent (2012).

The firm growth shows the firm's ability to increase the size of the firm. In the Trade-Off Theory, growth has a negative influence on the level of debt (Zeitun & Tian, 2014). On the contrary, in the Pecking Order Theory approach, firm with high growth rates will expand by using external funds in the form of debt as found in the study, Chen & Chen (2011) and Hossain & Job (2012).

Firm performance can be said as a formal business carried out by the firm to evaluate the efficiency and effectiveness of firm activities that have been carried out for a certain period of time. The following are some theories relating to capital structure, namely:

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1. Modigliani · Miller (MM) Theory

The first modern capital structure theory began in 1958, by Franco Modigliani and Merton Miller. There are two types of MM theory, namely MM theory without taxes and MM theory with taxes (Ross et al, 2010). MM without tax theory says that the capital structure is not relevant in influencing the value of the firm, because it is assumed that there are no taxes and costs of bankruptcy. While MM theory with tax developed is considered unrealistic MM theory without tax, so that the tax element is included in the theory. Tax is a cash outflow carried out by the firm, in this case the firm always tries to minimize the value of the tax paid. Firm can save taxes by using debt, because the interest burden that comes from debt can reduce taxes.

2. Trade Off Theory

According to Ross et al (2010), static trade off theory states that firm will owe up to a certain level of debt, where tax savings (tax shields) from additional debt equals the cost of financial distress. Financial distress is the cost of bankruptcy (bankruptcy cost), and the agency cost (agency cost) increases due to the turnover of the credibility of a firm. The state trade off theory considers several factors, such as corporate tax, bankruptcy costs, and personal tax in the selection of capital structures.

The optimal debt level is achieved when tax savings (tax shields) reach the maximum amount of the cost of financial distress. This theory has the intention to balance the benefits and sacrifices that arise due to the use of debt. If the benefits are still greater than the sacrifice, then it is still allowed to use debt. However, if the opposite is the benefit obtained is smaller than the sacrifice then you should not owe.

3. Pecking Order Theory

This theory explains why firm have a sequence of preferences in choosing funding sources. As for some of the assumptions underlying this theory (Myers, 1984):

1. Firm prefer internal sources of funds (retained earnings and depreciation) compared to external funding sources (debt and equity).
2. If external funding is needed, the firm will choose the safest securities, namely: the least risky debt, then riskier debt, convertible securities, preferred stock, then common stock.
3. There is a constant dividend policy, with the determination of the amount of dividend payments that is consistent, not influenced by the firm's profits and losses
4. To anticipate cash shortages due to constant dividend policies, fluctuations in profit rates, and investment opportunities, the firm will take a more smooth investment portfolio.

4. Agency Cost Theory

According to Ross et al (2010), agency cost is costs arising from conflicts of interest between management and shareholders. These costs consist of two sources, namely inseparable costs associated with the use of agents or managers, such as the risk of the possibility that managers will use firm resources for their personal interests. The second source is, costs arising from business to reduce problems related to the use of agents (management), such as stock options to equalize the interests of management and shareholders.

The use of debt financing can help resolve the agency cost of external equity (Megginson, 1997). The use of debt will make managers more disciplined and effective at work because they are obliged to pay off payments that are due. On that basis, the shareholders will be willing to pay the firm's shares at a higher price. The use of debt will also make managers afraid to consume on their own behalf, because if they fail to repay the borrowed, they will lose their jobs.

5. Signaling Theory

This theory, which is based on asymmetrical information, has the main idea that management who has more information about the state of the firm will actually give a positive signal to outsiders (Megginson, 1997). This is done so that investors look at the value
of the firm which then leads to an increase in stock prices. Because investors realize that every management firm will do the same, investors will be skeptical about this.

Starting from this skepticism, firm management made signaling by making changes to their capital structure. The management of the firm will provide positive signals and outsiders by increasing the use of debt, which leads to an increase in their debt ratio. Management considers firm with low value will not do signaling in the same way, because they are more likely to go bankrupt. Therefore, the increase in debt made by the firm is considered as a positive signal by outsiders due to the increase in debt indicating that the firm is in a healthy condition.

3. DATA AND METHODOLOGY
3.1 Data
The data used in this study are secondary data from the financial statements of manufacturing companies from the Indonesia Stock Exchange. The data collection method used in this study is the documentation method. The documentation method is data collection with and published. Data collection is taken through financial reports published through the Indonesia stock exchange.

This study uses a sample of manufacturing firm listed on the Indonesia Stock Exchange (IDX) during the period of January 1, 2014 to December 31, 2018. The number of samples used in this study are as many as 9 manufacturing firm sector chemical and metal industrie sub sector metal industry, this sample selection is based on the selection process carried out by researchers . Firm sampled in the study are firm that consistently report their financial reports and are listed on the IDX from 2014 to 2018.

This study used 4 independent variables and 1 dependen variable namely institutional ownership, capital structure, firm growth, and business risk toward the firm performance.

3.2 Research Variables
Firm Performance
To measure the performance of the firm this study follows the research of King and Santor (2008) and Fosu's research (2013) which uses a market-based approach, namely return on assets (ROA). While the ROA used in this study as used by Fosu (2013) is measured by the formula:

\[ \text{ROA} = \frac{\text{EBITDA}}{\text{Total Asset}} \]

Capital Structure
The capital structure proxy used in the study is the debt to equity ratio as used in the research of Mamjudar and Chibber (1999), Abor and Biekpe (2006) and Hovey's research (2007). The debt value in the study is the sum of short term debt and long term debt, which is included in the category of debt is a bank loan and capitalized leased obligations.

Institutional Ownership
Institutional share ownership in this study is share ownership by financial institutional investors referring to Margaritis and Psillaki (2010) research. The proxies used are the percentage of shares held by financial institutions such as insurance firm, banks, pension funds, mutual funds and investments. The more effective supervision carried out by institutional investors, the more likely it is to discipline management performance to continue to strive to improve shareholder welfare and firm performance.

Firm Growth
The firm's growth proxy in this study follows the research of Maury (2005), King and Santor (2008) and the research of Attig, et al. (2009), namely by calculating the difference in total sales revenue (sales revenue) owned by the firm in the current period and the previous period divided by the sales revenue (sales revenue) of the previous period. This study predicts that growth has a positive effect on firm performance. Investors see sales growth as a sign that the firm has increased profits, this can attract investors to invest in the firm and improve firm performance.
Risk Business

Tian and Zeitun (2007) show that there is a significant negative relationship between risk and firm value because higher risk implies higher financial difficulties, thus reducing firm performance. Bloom and Milkovich (1998) observed that high-level risk might be related to poor firm performance because greater variability in corporate results increases the probability of a firm’s destruction. In addition, they show that high business risk makes it more difficult for firm to formulate strategies or actions in the future, thereby negatively affecting firm performance.

![Figure 1. Framework](image)

The function of multiple linear regression analysis is to see the influence of independent variables on the dependent variable. The data analysis model is used to determine the effect of bound independent variables and to test the presumed truth used multiple linear regression equation models as follows:

\[ Y = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + e \]

Where:
- \( Y \) : Firm Performance
- \( \beta_0 \) : Regression constants
- \( \beta_1 \) : Regression coefficient X
- \( X_{1i} \) : Institutional ownership
- \( X_{2i} \) : Capital Structure
- \( X_{3i} \) : Business risk
- \( X_{4i} \) : Growth Firm
- \( e \) : Standard error

Based on the research model above, there are four hypotheses used in this study to see the influence of institutional ownership, capital structure, firm growth, and business risk variables on firm performance, namely:

1. Ownership of firm performance
   - Ho: Institutional ownership has no influence (positive / negative) on firm performance
   - Ha: Institutional ownership has an influence (positive / negative) on firm performance

2. Capital structure of firm performance
   - Ho: Capital structure has no influence (positive / negative) on firm performance
   - Ha: Capital structure has an influence (positive / negative) on firm performance

3. Firm growth towards firm performance
   - Ho: The growth of the firm has no influence (positive / negative) on firm performance
   - Ha: The growth of the firm has an influence (positive / negative) on firm performance

4. Business risks to firm performance
   - Ho: Business risk has no influence (positive / negative) on firm performance
   - Ha: Business risk has an influence (positive / negative) on firm performance

Hypothesis testing

a. Coefficient of Determination (R^2)
The coefficient of determination ($R^2$) basically measures how much the model's ability to explain the dependent variable. The greater the coefficient of determination (close to one), it can be said that the effect of the independent variable ($X$) is large on the dependent variable ($Y$).

b. Partial Test ($t$ Test). Partial test ($t$ test) aims to see the effect of:
- If the value of $t$ count > value of critical $t$, then $H_0$ is rejected or accepts $H_a$ means variable it's significant.
- If the value of $t$ count < critical $t$ value, then $H_0$ is accepted or rejects $H_a$ means variable it's not significant.

4. RESULT AND DISCUSSION

Multiple Linear Regression Analysis

Multiple linear regression analysis is used to analyze data consisting of more than one independent variable. The results of multiple linear regression analysis can be seen in the table below:

<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>1</td>
<td>(Constant)</td>
<td>-9.697</td>
<td>8.209</td>
<td>-1.181</td>
</tr>
<tr>
<td></td>
<td>X1_InstitusionalOwnership</td>
<td>.078</td>
<td>.078</td>
<td>.158</td>
</tr>
<tr>
<td></td>
<td>X2_CapitalStructure</td>
<td>-.019</td>
<td>.015</td>
<td>-.206</td>
</tr>
<tr>
<td></td>
<td>X3_BusinessRisk</td>
<td>.790</td>
<td>.372</td>
<td>.310</td>
</tr>
<tr>
<td></td>
<td>X4_GrowthFirm</td>
<td>-.001</td>
<td>.001</td>
<td>-.118</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y_FirmPerformance

Based on the output results in the table above can be arranged multiple linear regression, as follows:

$$Y = -9.697 + 0.078 \, X_1 - 0.19 \, X_2 + 0.790 \, X_3 - 0.01 \, X_4$$

Discussion based on the results of multiple regression analysis as follows:

a. The constant of -9.697 shows if institutional ownership, capital structure, business risk, and firm growth value is 0, the firm's performance is -9.697.

b. The regression coefficient of institutional ownership variable is 0.078 which means that if the institutional ownership variable increases 1 unit then the performance of the firm will increase by 0.078 assuming other variables are considered constant.

c. The capital structure regression coefficient of -0.019 means that if the capital structure variable has a 1 unit increase, the firm's performance will decrease by -0.019 assuming other variables are considered constant.

d. Regression coefficient of business risk variable is 0.790, meaning that if the business risk variable has a 1 unit increase, the firm's performance will decrease by 0.790 assuming other variables are considered constant.

e. The regression coefficient of the firm's growth variable is -0.01 means that if the growth variable of the firm experiences 1 unit then the firm's performance will decrease by -0.01 assuming other variables are considered constant.
Coefficient Determination ($R^2$)

The coefficient of determination ($R^2$) in this study is used to see the effect of jointly exogenous variables in the model were analyzed. Here the coefficient of determination in the table ($R^2$) in this study.

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.407 $^a$</td>
<td>0.165</td>
<td>0.82</td>
<td>12.70789</td>
</tr>
</tbody>
</table>

Based on Table 2 known coefficient of determination ($R^2$) equal to 0.407. This means that in this research model capital structure variables, institutional ownership, firm growth, and business risk affect the variable performance of the firm by 40.7% and the remaining 59.3% is influenced by other variables not explained in this research model.

**Hypothesis Testing (t Test)**

Testing hypothesis used for verify truth or error hypothesis. T test is known with test Partial that is for test hypothesis each variable independent to variable dependent. Testing hypothesis in a manner Partial on penelitian this has $\alpha = 0.05$ with degree of freedom (df) = $n - k = 45 - 2 = 43$ then obtained $t$ table 1.680. Following is a testing hypothesis:

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t_{hitung}$</th>
<th>$t_{table}$</th>
<th>Sig</th>
<th>Keputusan</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Ownership</td>
<td>-1.002</td>
<td>1.680</td>
<td>0.322</td>
<td>Refuse $H_0$ and accept $H_a$</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>-1.320</td>
<td>1.680</td>
<td>0.194</td>
<td>Refuse $H_0$ and accept $H_a$</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Risk Business</td>
<td>2.122</td>
<td>1.680</td>
<td>0.040</td>
<td>Refuse $H_0$ and accept $H_a$</td>
<td>Significant</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>-0.795</td>
<td>1.680</td>
<td>0.432</td>
<td>Refuse $H_0$ and accept $H_a$</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Firm Performance</td>
<td>-1.181</td>
<td>1.680</td>
<td>0.244</td>
<td>Refuse $H_0$ and accept $H_a$</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Based on Table 3 could known $t$ value calculated from variables tested for knowing variable significant or no. From the table it can be seen that the variables of institutional ownership, capital structure, firm growth, and firm performance have a path coefficient value with a calculated $t$ value $<from t$ table where $H_0$ is accepted and that means the variable is not significant. The path coefficient of business risk variables for the firm performance variables with a value of $t$ count of 2.122 $>t$ table of 1.680 d ith a significance value 0.040 $<0.05$ then $H_0$ is rejected and $H_a$ accepted, meaning that the path coefficient business risk variable to variable performance of the firm can be expressed significant. So it can be concluded that only business risk variables that influence the variable performance of the firm and have a positive relationship.

4. CONCLUSION

The firm's performance must be measured, one of which can be measured from the firm's financial management. From the firm's finances can be seen the performance of the firm. Firm performance can be said as a formal business carried out by the firm to evaluate the efficiency and effectiveness of firm activities that have been carried out for a certain period. The firm's performance is very important to be measured as a firm evaluation material. Measurement of firm performance can be seen from that only business risk variables that influence the variable performance of the firm and have a positive relationship and variables of institutional ownership, capital structure, firm growth, and firm performance have a path coefficient value with a calculated $t$ value $<from t$ table where $H_0$ is accepted and that means the variable is not significant.
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