THE EFFECT OF ERM, FIRM SIZE, LEVERAGE, PROFITABILITY AND DIVIDEND POLICY ON FIRM VALUE (EVIDENCE FROM FOOD & BEVERAGE SUB SECTOR COMPANIES LISTED IN IDX 2015-2019)

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Abstract: Enterprise risk management (ERM), firm size, leverage, profitability, and dividend policy is believed have an impact on firm value. However empirical evidence on thus impact is still considered scarce. The objectives of this study is to determine the effect of ERM, firm size, leverage, profitability, and dividend policy on firm value either simultaneously and partially. This study used purposive sampling technique. The samples used in this study is 14 companies listed and traded on the Indonesia Stock Exchange. The data analysis method used is multiple linier regression. The ERM variable in this study is measured with a dummy, Ln of total asset is used to measure the firm size. Debt to equity ratio used as a proxy of leverage, return on assets used as a proxy of profitability, dividend payout ratio as a proxy of dividend policy, then Tobin’s Q as a proxy of firm value. The results of this study indicate a simultaneous significant effect between the independent variables and firm value. Partial test shows that leverage and profitability have a significant positive effect on firm value. ERM & firm size have a negative coefficient and have no significant effect, while dividend policy has a positive coefficient but does not have a significant effect on firm value.

Keyword: ERM, Firm Size, Leverage, Profitability, Dividend Policy, Firm Value


Kata Kunci: ERM, Firm Size, Leverage, Profitability, Dividend Policy, Firm Value

AKUN BISNIS | 65
INTRODUCTION

The financial scandal that befell PT Jiwasraya and PT Garuda Indonesia in 2019 has been in the public spotlight. The Two State-Owned Companies (BUMN) are indicated committing fraud. Reporting from CNN Indonesia, PT Jiwasraya experiencing liquidity pressure so that the company’s equity was negative at Rp23.92 trillion in September 2019. Even the smuggling of Harley Davidson Motorbikes and Brompton bikes by the airline Garuda Indonesia resulted dismissal of the President Director and a number of Directors of PT Garuda Indonesia. Based on the case that dragged the two state-owned companies, managing risk become a necessity for every company to keep its business running healthily. Companies recognize the need for risk management and have at least moderate top management support for the initiative (Scannell et al., 2013: 24). Managing risk is about making tactical and strategic decision to control the risks that must be controlled and take advantage of opportunities that can be exploited (Coleman, 2006).

A holistic approach to risk management emerges as a way of managing risk that deals with systematic risk and unsystematic risk. The holistic approach is called enterprise risk management (ERM) that define as a process, effected by an entity’s board of directors, management, and other personal, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite to achieve entity objectives (COSO, 2004: 2). Several studies were conducted by academics to prove whether implementing ERM creates value for companies. Research conducted by Hoyt (2011) on U.S insurance companies shows that insurers with ERM programs are valued approximately 4 percent higher than other insurers. The financial characteristics of ERM users are different from non users, the average ERM user is larger, less leveraged, less opaque, has less financial slack, and lower return volatility than the average nonuser (Hoyt, 2011:810). Other research on manufacturing companies listed on the Indonesia Stock Exchange by Pamungkas (2017) shows that ERM has a positive effect on firm value. The result also shows that 78% of manufacturing companies have implemented ERM efficiently (Pamungkas, 2017:20). In addition to the positive influence on firm value from the application of ERM, an increase in firm value is also influenced by firm size, leverage, profitability, and also dividend policy (Bertino, et al, 2013: Suffah & Riduwan, 2016: Iswajuni, et al, 2018: Rudangga, 2016: Mayogi, 2016).

The bigger the company size, the easier it is for the company to obtain funding sources. Research by Iswajuni, et al (2018) shows a significant positive relationship between firm size and firm value. This means that the bigger the company size, the higher it is investors assess the company. Leverage is described as the use of debt than equity to acquire assets. Leverage in a trade-off perspective theory, has the implication that companies with a high level of profitability will try to reduce its taxes by increasing the debt ratio. Leverage has a positive effect on firm value (Suffah, 2016; Rudangga, 2016) because high leverage is used to reduce agency cost by control free cash flow. Profitability is the company’s ability generate profit in a certain period. Profitability shows success companies in increasing profits and company performance. Profitability has a positive relationship with firm value which means that the higher the profitability value, the higher the firm value (Suffah, 2016; Mayogi, 2016).

Apart from ERM, company size, leverage, and profitability, dividend policy also considered as a factor that can affect firm value. Research result by Suffah & Riduwan (2016), Mayogi & Fidiana (2016), and Priya &
Mohanasundari (2016) shows the positive influence between dividend payout and firm value. Myron Gordon and John Lintner argued that investors perceive the dividends yield to be more certain than receiving capital gains that are supposed to result from retaining earnings (Brigham, 2008). This study uses the bird in hand theory that shareholders are more like the distribution of profit in the form of dividends rather than capital gains. Company with a high dividend ratio level, it is considered capable of making prosperity to shareholder.

The purpose of this study is to find empirical evidence on the effect of ERM, firm size, leverage, profitability, and dividend policy on firm value in the food and beverage sub sector listed on the Indonesia Stock Exchange 2015-2019. Badan Pusat Statistik (BPS) recorded that 2019 household consumption was 5.04%, this realization was smaller than 2018 at 5.05%. In addition, the level of consumption in the food and beverage industry in 2019 was 5.16%. The realization has slowed down compared to the 2018 position which was 5.22% (BPS, 2019). Therefore the objectives of this study is to determine the effect of ERM, firm size, leverage, profitability, and dividend policy on firm value in the food and beverage sub sector listed on the Indonesia Stock Exchange 2015-2019 either simultaneously and partially.

The Determinants of Firm Value
ERM and Firm Value

The results of an empirical study by Hoyt & Liebenberg (2011) state that if a company applies ERM, the firm’s value is 4% higher than a company that does not implement ERM. Other researches conducted by Bertinetti, et al (2013) and Iswajuni, et al (2018) show that ERM positively affect firm value. In this study, to find out whether the company is doing ERM or not, using the same proxy has been done by Hoyt (2011) and Pagach (2010). Hoyt uses the keywords “enterprise risk management,” “chief risk officer,” “risk committee,” “strategic risk management,” “consolidated risk management,” “holistic risk management,” and “integrated risk management” as a proxy for ERM implementation. These keywords are searched for in the management disclosure of each company. Therefore, ERM is one of the factors that can increase firm value, so hypothesis 1:

H1 : ERM has a positive effect on firm value

Firm Size and Firm Value

Several academic studies have tested the hypothesis that there is a positive relationship between firm size and firm value (Aditya and Naomi, 2017; Bertinetti, et al, 2013; Tahir and Razali, 2011; Iswajuni, et al, 2018; Hirdinis, 2019; Suffah and Riduwan, 2016). The studies use log natural or book value of total assets as the measurement of firm size (Aditya and Naomi, 2017; Bertinetti, et al, 2013; Tahir and Razali, 2011; Iswajuni, et al, 2018; Hirdinis, 2019; Suffah and Riduwan, 2016). The results of empirical study prove that firm size has significant effect on firm value and it assumed that the larger the size of the company is considered to be more capable to prosper the shareholders compared to smaller companies (Iswajuni, et al, 2018; Hirdinis, 2019). Therefore:

H2 : Firm size has a positive effect on firm value

Leverage and Firm Value

The trade off theory implies that leverage has a positive effect on firm value because high leverage is used to reduce agency cost by control free cash flow. Debt can alleviate the agency problem of free cash flow through committing to the interest payment. Besides, in order to avoid of overinvesting due to the excessive free cash flow, the firm can design the attractive executive compensation to motivate the manager to use the free cash flow efficiently (Cheng,2011:49). The results of empirical study proved
as the proportion of debt increases, the value of firm also increases (Suffah and Riduwan, 2016; Rudangga, 2016; Hirdinis, 2019; Tahir and Razali, 2011). Therefore :

H₃ : Leverage has a positive effect on firm value

**Profitability and Firm Value**

Profitability in this study is measured by Return on Assets (ROA). Research by Bertinetti, et al (2013) and Iswajuni, et al (2018), Mayogi & Fidiana (2016) found that ROA has a positive and significant effect on firm value. This means that the more profitable a company is, the higher the value of the company (Bertinetti, et al, 2013' 10). Therefore, the fourth hypothesis is:

H₄ : Profitability has a positive effect on firm value.

**Dividend Policy and Firm Value**

A study by Hoyt and Libenber (2011), Suffah and Riduwan (2016), Siboni and Pourali (2015), Mayogi & Fidiana (2016) found that dividend have a positive and significant effect on firm value. This is consistent with the idea that dividend payment is a powerful method of reducing agency cost by controlling free cash flow. Therefore, the fifth hypothesis is:

H₅ : Dividend policy has a positive effect on firm value

**ERM, Firm Size, Leverage, Profitability, Dividend Policy and Firm Value**

Based on the explanation of the five independent variables above, it is assumed that ERM, firm size, leverage, profitability, and dividend policy have a positive effect on firm value. Therefore:

H₆ : ERM, firm size, leverage, profitability, and dividend policy have a positive effect on firm value

**RESEARH METHODOLOGY**

The population in this study is the food and beverage sub sector companies listed on the IDX in 2015-2019. The population in this study amounted to 19 companies. The sampling technique in this study used purposive sampling. After sorting the population based on the sample criteria, the sample in this study amounted to 14 companies.

**Operational Definition Dependent Variable**

The dependent variable in this study is firm value. Firm value is the investor's perception of the company's success rate (Suffah, 2016). Maximizing company value is the main goal of the company. Firm value in this study is measured by Tobin's Q.

**Independent Variables**

The independent variables in this study are as follows:

**ERM** is a risk management strategy that attempts to holistically evaluate and manage all of the risks faced by the firm using its risk appetite to determine which risks should be accepted and which should be mitigated or avoided (Pagach, 2010). Specifically, since the reporting of the adoption of ERM is not mandatory, this study has been done by collecting all annual reports from a sample during the study period and conducting a detailed search for evidence of ERM (explicit or implicit, such as Risk Committee, corporate risk management, integrated risk management) in corporate disclosures. The assessment of ERM in this study is treated as a dummy variable, setting a value equal to one to companies that explicitly declare in their financial reports the adoption of an integrated approach to risks and also to those that have a risk committee.

**Profitability** is the ability of a company to generate profits for a certain period (Suffah, 2016). Profitability in this study is measured by Return On Assets (ROA). It measures how efficiently a company is managing its assets to generate profits during a period.
The test of the hypothesis that will be done is by multiple linear regression, referring to the study of Iswajuni et al. (2018); Aditya and Naomi (2017); Hirdinis (2019); Suffah & Riduwan; (2016); Rudangga (2016); Mayogi (2016). Multiple regression analysis is used to determine the effect of the five independent variables on the dependent variable. The multiple regression equations is as follows: The research model can be formulated as follows:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \epsilon \]

Where:
- \( Y \) = Tobin’s Q
- \( a \) = constant
- \( X_1 \) = Enterprise Risk Management (ERM)
- \( X_2 \) = Firm Size
- \( X_3 \) = Leverage
- \( X_4 \) = Profitability
- \( X_5 \) = Dividend Policy
- \( b_i, b_5 \) = Regression coefficient of each variable
- \( \epsilon \) = Error

**RESULTS AND DISCUSSION**

The Result of Classical Assumption Test

1. There is no heteroscedasticity in the regression model, so the regression model is suitable for predicting firm value.
2. Multicollinearity test done using the value of tolerance and Variance Inflation Factor (VIF). There is no symptoms of the regression model between the multicollinearity independent variable.
3. The Result of Autocorrelation Test. Tool measurement used to detect the presence of autocorrelation in this research using test Durbin Watson (DW). According to DW assumption there is no autocorrelation if \( dh <DW<4-dh \). The value of DW above is greater than \( dh \) and within \( 4-dh \). It can be concluded that there is no autocorrelation in this regression model.
4. Multiple regression analysis requires that the residual population is normally distributed (Gudono, 2016). This study using histogram and normal probability plots to determine a normal distribution. this regression model is suitable to the assumption of normality.
The Result of t-Test

The results of the t-test (partial hypothesis testing) and the value of significance using software SPSS 23 can be seen in Table 3 below:

Table 1. t-Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Standardized Coefficient</th>
<th>S</th>
<th>Std. Error</th>
<th>Data</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-231</td>
<td>-229</td>
<td>-1.003</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>lag_x1</td>
<td>-4.54</td>
<td>3.86</td>
<td>-1.17</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>lag_x2</td>
<td>-3.39</td>
<td>3.04</td>
<td>-1.17</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>lag_x3</td>
<td>7.86</td>
<td>2.63</td>
<td>0.12</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>lag_x4</td>
<td>21.67</td>
<td>1.74</td>
<td>0.12</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>lag_x5</td>
<td>3.93</td>
<td>4.90</td>
<td>0.12</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: Data Secondary Processed (2020)

Based on Table 1 above, it can be concluded, as follows:

a. Hypothesis 1: Lag_X1 (ERM)

Table 1 shows that the variable Lag_X1 (ERM) is not statistically significant at α = 0.05, while the value of t count equal to -1.717 and t table 1,998 (t < t table) so that based on these results the first hypothesis namely ERM has a positive effect on firm value, is rejected.

b. Hypothesis 2: Lag_X2 (Firm Size)

Table 1 shows that the variable Lag_X2 (Firm Size) is not statistically significant at α = 0.05, while the value of t count equal to -0.372 and t table 1,998 (t < t table) so that based on these results the second hypothesis namely firm size has a positive effect on firm value, is rejected.

c. Hypothesis 3: Lag_X3 (Leverage)

Table 1 shows that the variable Lag_X3 (Leverage) is statistically significant at α = 0.05, while the value of t count equal to 3.022 and t table 1,998 (t > t table) so that based on these results the third hypothesis namely leverage has a positive effect on firm value, is accepted. Thus, it is consistent with the hypothesis or a positive coefficient indicates that the leverage has a positive and significant effect on firm value which means that the higher the leverage will increase the firm value.

d. Hypothesis 4: Lag_X4 (Profitability)

Table 1 shows that the variable Lag_X4 (Profitability) is statistically significant at α = 0.05, while the value of t count equal to 12.281 and t table 1,998 (t > t table) so that based on these results the fourth hypothesis namely profitability has a positive effect on firm value, is accepted. Thus, it is consistent with the hypothesis or a positive coefficient indicates that the profitability has a positive and significant effect on firm value which means that the higher the profitability will increase the firm value.

e. Hypothesis 5: Lag_X5 (Dividend Policy)

Table 1 shows that the variable Lag_X5 (Dividend Policy) is not statistically significant at α = 0.05, while the value of t count equal to 0.980 and t table 1,998 (t < t table) so that based on these results the fifth hypothesis namely dividend policy has a positive effect on firm value, is rejected.

The Result of F Test

The simultaneous test results can be seen in Table 2 as follows:

| Source: Secondary Data Processed, 2020 |

Based on Table 2 above, the test results obtained simultaneously calculated F value of 43,116 while the F table is 2.37 that means (F count > F table). The significance value in the simultaneous test is less than 0.000. It can be concluded that the independent variables (ERM, firm size, leverage, profitability, and dividend policy) have a simultaneous...
significant effect on firm value. So that based on these results the sixth hypothesis namely ERM, firm size, leverage, profitability, and dividend policy have a positive effect on firm value, is accepted.

**Coefficient of Determination**

The coefficient of determination is shown in Table 3 as follows:

Table 3 Coefficient of Determination

<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>0.90*</td>
<td>0.774</td>
<td>0.766</td>
<td>0.0498</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), lag_2, lag_3, lag_4, lag_5, lag_6, lag_7
b. Dependent Variable: Q

Source: Secondary Data Processed, 2020

The coefficient of determination (adjusted R²) equal to 0.756. It means that 75.6% of the variation of the firm value can be explained by the variation of the five independent variables, namely ERM, Firm SIZE, LEVERAGE, PROFITABILITY, DIVIDEND POLICY. While the remaining 24.4% is explained by factors or variables other than the regression model. From the results of the feasibility of the model seen from the F test, t-test and the coefficient of determination show that research model developed in this study proved to be a model that has a good fit model.

**Model Interpretation**

Interpretation of the model is an attempt explanation theoretical research model into a practical research model as a problem solver research. Based on the coefficient determination, the multiple linear regression model in this study are as follows

\[ Q = 0.231 - 0.654 \text{ ERM} - 2.382 \text{ Firm Size} + 0.786 \text{ Leverage} + 21.670 \text{ Profitability} + 0.393 \text{ Dividend Policy} + \varepsilon \]

Interpretation model of regression are as follows:

a. Constant = 0.231

This means that if a variable is considered constant or if the effect of variable ERM, Firm Size, Leverage, Profitability, and Dividend Policy equal to zero, then the variable \( Q \) (Firm Value) is equal to 0.231.

b. ERM Coefficient = -0.654

The ERM of the regression coefficient is negative and no significant effect to the Q value. This result contradicts the previous studies (Hoyt & Liebenberg, 2011; Bertinetti et al, 2013; Iswajuni et al, 2018) that stressed on the importance and benefits of enterprise risk management for companies. While this result consistent with the results Aditya (2017); Tahir (2011); Pagach (2010) shows that ERM has no significant effect to firm value. Hoyt (2011) argued that ERM contribute to reduced earnings volatility, stock price volatility, and improving capital efficiency and return on equity (Hoyt, 2011:798). However it seems the implementation of ERM in Indonesia is still limited to following existing regulations and apparently it has not had a direct impact on firm value (Aditya, 2017:178). It also shows that the practice of ERM is still at an infancy stage in Indonesia.

c. Firm Size = -2.382

Firm size of the regression coefficient is negative and no significant effect to the firm value. This result contradicts the previous studies that assumed the larger the size of the company is considered to be more capable to prosper the shareholders compared to smaller companies (Iswajuni, et al, 2018; Hirdinis, 2019). However, this result consistent to other studies conducted by Bertinetti, et al (2013), Tahir and Razali (2011)
showed a negative impact between firm size and firm value, and study by Suffah and Riduwan (2016) did not show a significant influence between firm size and firm value. As argued by Reinert (1994) in Tahir (2011), there is no significant effect between firm size and firm value due to the theory of diminishing return. It happens when one factor of production remains constant while other productions are increased. It means that, if one factor is being held constant, the increment of other factors yields less benefit. So, there is no added value effect for big companies to increase their assets (Tahir, 2011).

d. Leverage = 0.786
Leverage coefficient is positive and has a significant effect to firm value means that the rise of leverage will increase the firm value, and vice versa when leverage is goes down then the firm value decline. This means that leverage has a positive effect on the firm value. The results consistent with the previous studies by Hoyt and Libenbarg (2011), Suffah and Riduwan (2016), Siboni and Pousali (2015), Mayogi & Fidiana (2016). Although this result do not support the hypothesis, it consistent to other studies conducted by Aditya (2017) and Meidiawati (2016) showed there is no significant effect between dividend policy firm value. It suggest a possibility from an investor’s perspective, it is not only the level of dividend payment that may be a necessity, but also the stability of dividend payments over a long period of time. As such, management must be aware of the fact that unexpected changes in dividend payments can alienate existing and potential investors. Unstable dividend policies can have a negative impact on investors’ perceptions of the company's performance on financial markets (Priya,2016).

e. Profitability = 21,670
Profitability coefficient is positive and has a significant effect to firm value means that the rise of profitability will increase the firm value, and vice versa when profitability is goes down then the firm value decline. This means that profitability has a positive effect on the firm value. The results consistent with the result by Bertinetti, et al (2013) and Iswajun, et al (2018), Mayogi & Fidiana (2016) that found ROA has a positive and significant effect on firm value. This means if a company is able to generate net income, the company creates value.

f. Dividend Policy= 0,393
Dividend policy coefficient is positive but no significant effect to firm value means that the rise of dividend payment has no added value effect for firm value. This result contradicts the previous studies by Hoyt and Libenbarg (2011), Suffah and Riduwan (2016), Siboni and Pousali (2015), Mayogi & Fidiana (2016). Although this result do not support the hypothesis, it consistent to other studies conducted by Aditya (2017) and Meidiawati (2016) showed there is no significant effect between dividend policy firm value. It suggest a possibility from an investor’s perspective, it is not only the level of dividend payment that may be a necessity, but also the stability of dividend payments over a long period of time. As such, management must be aware of the fact that unexpected changes in dividend payments can alienate existing and potential investors. Unstable dividend policies can have a negative impact on investors’ perceptions of the company's performance on financial markets (Priya,2016).

CONCLUSION
The results of this study indicate a simultaneous significant effect of ERM, firm size, leverage, profitability, and dividend policy on firm value. Partial
test shows that leverage and profitability have a significant positive effect on firm value. ERM & firm size have a negative coefficient and have no significant effect, while dividend policy has a positive coefficient but does not have a significant effect on firm value. Based on the result from F test and t test, implies that firm value can not be determined in a single variable. Determining the value of firm should be combined such variables. While this study show 75.6% of the variation of the firm value can be explained by the variation of the enterprise risk management, firm size, leverage, profitability, and dividend policy.

The practice of enterprise risk management is expected will be gain the ability to merge risk and provide confidence in the achievement of company objectives. The bigger the the size of the resources owned by the company gives more advantages to the company to utilizing its resources for the business growth. While optimal leverage can increase the efficient use of resources and reduce free cash flow that might have been invested by manager interested in suboptimal projects. The efficient use of resources and the optimally managed operation will rise the company profitability. High profitability indicates resources efficiency, optimally managed operation, and ability to generate profit will attracts the potential investor because this good firm performance. In addition to prospering stockholder, the proper dividend policy will also attach the potential investor. Along with the development of companies in Indonesia and the possibility of targeting a wider global market, the practice of ERM, the bigger the company, optimal leverage, high profitability and the proper dividend policy provide an advantage to the company to maintain access to capital markets and other resources necessary to implement a business strategy and achieve company objectives.

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