ANALYSIS OF THE EFFECT OF FIRM SIZE, FINANCIAL LEVERAGE, PROFITABILITY, DIVERSIFICATION ON MARKET RISK AND STOCK RETURN

(Case Study of Manufacturing Companies in the Consumer Goods Industry Sector Listed on the Indonesia Stock Exchange in 2007-2016)

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Abstract

The purpose of this study is to analyze the effect of firm size, financial leverage, profitability, diversification of market risk and stock returns. This research uses quantitative research methods. The population in this study is the consumption sector of manufacturing companies that are listed on the Indonesia Stock Exchange (IDX) during the observation period from 2007-2016. The sample technique using non probability sampling technique with purposive sampling method. The analysis method used Partial Least Square (PLS) analysis, with smartPLS as an analysis tools. The results showed that the size of the firm had a negative and insignificant effect, while financial leverage, profitability, and diversification had a positive but insignificant effect too on stock returns. And firm size had a negative and significant effect on market risk while financial leverage and profitability had a positive and had significant effect too on market risk, but for diversification, has a positive and insignificant effect on market risk. Last, market risk has a positive and significant effect on stock returns.

Keywords: fundamental, diversification, risk, stock returns

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1. INTRODUCTION

Market risk (systematic risk or general risk) is risk associated with changes that occur in the market as a whole. These market change will affect the variability of an investment. If market risk (systematic risk) occurs, all type of shares will be affected. Because beta or high risk will be accompanied by high return (high risk high return) so before investing, investor should think and understand the risk and return of investment first by assessing the capabilities and performance of the company. Assessing the capability and performance of a company can be seen from the financial statements of the company itself, because financial statements are a fundamental information that has a relationship with the condition of a company (Absari, 2012). In addition to describing the capabilities and performance of a company, financial statements also show the size of a company (firm size). Large-scale companies will find it easier to obtain loans compared to small companies, so the rate of return of large-sized company shares is greater than stock returns in small-scale companies (Absari, 2012).

In addition to large-scale company securities can provide a greater return on company shares because it is easier to obtain loans, securities of large companies are also considered as valuable assets that can be converted quickly into cash, resulting in less risky large companies and large companies are more able to reduce the effect of economic, social and politic changes on their management, thereby keeping their business less risky (Sullivan, 2006). Debt or leverage as explained earlier is an assessment of company performance that can be done by investors before investing, where leverage also shows the ability of a company. According to (Keown, Martin, Pretty, William, & Scott, 2011) leverage or debt is funding part of the assets of companies with securities that bear a fixed (limited) rate of return in the hope of increasing returns for shareholders. Decision making on the use of debt requires companies to balance higher levels of expected return with increase risk (Bringham & Houston, 2009). In addition, based on the signaling theory, the use of debt (debt) is a signal delivered by manager to the
market. Signal that indicate if manager has confidence that the company is in good condition and with the prospects of the company in the future, because this belief is what makes the company dare to use greater debt in the hope that investor will catch the signal (Tiningrum, 2011).

In addition to the high debt as indicated by the higher level of leverage resulting in high expected rates of return, this also causes interest costs to increase which will reduce company profits. Reduced Corporate profits will reduces investor interest in holding the company’s shares, besides that risk of unpaid company debt increases (Absari, 2012), and high debt incurs fixed cost such as interest expenses that can increase risk (Kartikasari, 2007).

Furthermore, an assessment of company performance that can be done by investors before investing, which is also an attraction for the owner of the company or shareholders is profitability. Profitability also measure the effectiveness of company’s overall management. This is shown from the profits obtained from sales and investment. The higher the profitability the smaller risk of the company (Kartikasari, 2007) because companies with good profitability can reduce the possibility of bankruptcy of the company (Shin, 2009). The owner is interested in the distribution of profit to which he is entitled, how much is reinvested and how much is paid as dividend to them. (Absari, 2012) states that the higher the profitability value, the better the company is and the impact on the company’s stock price increase. As the stock price rises, stock return will also increase, and (Rachmatika, 2006) also states the same thing. The greater the value of profitability shows the company’s performance is getting better because the rate of return is greater, so it can be said if this measurement has increased which has an impact on increasing profits that can be enjoy by shareholders that is return (Rachmatika, 2006).

A company that is getting bigger in size and has good performance and ability shows that the company has grown into an adult. Diversification is a company-level strategy used to diversify company operations from a single business competing in a single market into several market products and mostly into a number of businesses (Hit & Ireland, 2007). (Lubatkin & Rogers, 2009)
specifically disclosed that diversified companies show a significant lower systematic risk and higher shareholder return.

Research conducted by (Absari, 2012) and (Theriou, Aggelidis, & Maditinos, 2010) shows that systems risk has an influence on stock return, however research conducted by (Rahmatullah, 2013) shows a different opinion that beta (systematic risk or market risk) does not have a positive and significant effect on stock returns. These results indicate that investors consider information about systematic risk to be not to be affect beta stocks (systematic risk) on stock returns can also be caused by psychological factors investors who want to always get a maximum return. In addition, this result also shows that the theory of high risk high return is not always suitable for all investors, because there are investors who do not like risk. Research conducted by (Sudarsono & Sudiyanto, 2014) who fund a significant positive effect between stock size and return, but different opinion are shown by research conducted by (Maringka, 2015) directly firm size has no significant effect on stock returns, which means the size of a company with a high total asset does not affect the increase in stock return company. Large or small a company size cannot disrobe the condition of the company that should give a signal of how strong the company’s finance or as an opportunity to gain profits (return).

(Ben-Zion & Shalit, 2019) adopted the size of company in determining the influence of financial variables with risk, showing the extent to which economies of scale allow companies to maintain lower unit costs so large companies are more likely to benefit an reduce the possibility of bankruptcy, thereby reducing risk, however different opinions are shown by research conducted by (Iqbal, Iqbal, & Khan, 2015) if firm has a negative relationship with systematic risk, market risk (beta) in (Iqbal et al., 2015) research measure firm size using the natural log of the company’s net sales. Research conduct by (Ahmad, Fida, & Zakaria, 2013) shows a strong influence between leverage and stock return, and research conduct by (Sugiarti, Surachman, & Aisjah, 2015) conveys a different matter if the leverage represented by debt to equity has a negative and significant effect on stock returns of manufacturing companies. Research conducted by (Lee & Jang, 2007) states
that leverage has a positive relationship with beta but research conducted by 
(Borde, 2000) shows if leverage has no influence with systematic risk (market risk 
or beta), where leverage is defined as the ratio equity to total assets.

Research conduct by (Borde, 2000) shows that companies with good 
performance measured by high profitability may face the possibility of low losses 
that indicate low risk. (Halim, 2010) shows that profitability has positive and 
significant effect on stock, but different opinion is show by (Setianingrum, 2009) 
saying if profitability has no influence significant to stock return. Research 
conduct by (Dwi, Wiagustini, & Sedana, 2017) show that diversification has a 
positive and significant effect on stock returns. And research conduct by 
(Montgomery & Singh, 2016) reveals if diversification has a significant effect on 
systematic risk or market risk, but (Barton, 2018) shows a different matter, where 
companies that diversify have much higher systematic risk and low market power, 
low capital intensity, and high debt.

Based on the description of the background of the research, the researcher 
want to examine regarding whether there is an influence between company size 
(firm size), financial leverage, profitability, and diversification on market risk and 
stock return., so it can be seen the formulation of the problem to be examined in 
this study include: Does firm size have a significant effect on stock return? Does 
firm size have a significant effect on market risk? Does financial leverage have a 
significant effect on stock return? Does financial leverage have a significant effect 
on market risk? Does profitability have as significant effect on stock return? Does 
profitability have a significant effect on market risk? Does diversification have a 
significant effect on stock return? Does diversification have a significant effect on 
market risk? Does market risk have a significant effect on stock return?

2. Hypotheses Development

2.1. The Effect of Company Size (Firm Size) on Stock Return.

(Absari, 2012) revealed that the size of the company describes the size of a 
company as indicated by total assets, number of sales, average level of sales and 
average total assets. Large-scale companies will find it easier to obtain loans
compared to small companies, so the rate of return of large-sized company shares is greater than the stock return on small-scale companies. The larger the size of the company or the scale of the company, the easier it will be for companies to obtain funding sources both internally and externally (Yuliana, 2015).

When viewed based on total sales, the greater the total sales of a company allows the profit generated by a company is greater as long as operating costs are not much increased and total sales also measure product competition. If viewed based on the total assets of a company can increase the company's ability to fund profitable investments, in addition the total assets measure the total resources of a company, the market capacity that involves the company's growth opportunities and equity market conditions (Dang, (Frank) Li, & Yang, 2018)

**H1: Firm Size has significant effect on Stock Return.**

### 2.2. The Effect of Company Size (Firm Size) on Market Risk.

In addition to large-scale corporate securities that can provide a greater return on corporate shares, it is easier to obtain loans, large-scale company securities are also considered valuable assets that can be quickly accessed into cash, difficult to avoid with large companies (Fisher, 1959), these companies are better able to cope with economic, social and political changes in their management, and therefore can make their business less risky (Sullivan, 2006).

Firm size in determining the effect of financial variables on risk shows the extent to which economies of scale allow companies to maintain lower unit costs, then large companies are more likely to benefit and reduce the possibility of bankruptcy thereby reducing risk (Ben-Zion & Shalit, 2019). Increasingly large company profits increase profits gained by investors, making investors more interested in buying company shares and less uncertainty resulting in smaller beta (risk). Securities of large companies are also regarded as valuable assets that can be converted quickly into cash, resulting in less risk of large companies (Kartikasari, 2007).

**H2: Firm Size has significant effect on Market Risk.**
2.3. The Effect of Financial Leverage on Stock Return

Based on the signaling theory, the use of debt (debt) is a signal delivered by the manager to the market. Signals that indicate if the manager has confidence that the company is in good condition and with the company's prospects in the future, because this belief is what makes the company dare to use greater debt in the hope that investors will catch the signal. Signal where the company has good prospects so that debt is a positive sign or signal (Tiningrum, 2011). In addition, (Hadi, 2015) revealed the same thing, leverage related to corporate funding funded by debt or external funds, with high debt the company gained creditor trust because the company was considered able to repay the debt when it was due. This trust was gained because the increase in debt was considered as 'good news' and the event of debt reduction as 'bad news'.

Companies that have large leverage will make investors demand a greater stock return on their shares because of the high risk of bankruptcy, which indicates that leverage has a strong influence on stock returns (Ahmad et al., 2013). Companies that have relatively high debt ratios will have higher return expectations when the economy is in normal condition, but have a risk of loss when the economy goes into a recession. Decision-making on the use of debt requires companies to balance higher rates of return expectations with increased risk (Bringham & Houston, 2009).

H3: Leverage has significant effect on Stock Return.

2.4. The Effect of Financial Leverage On Market Risk

The high debt is indicated by the higher level of leverage but the expected rate of return is also high when the company gets a large profit, so the interest costs will increase which will reduce the company's profits. Decreasing corporate profits will reduce investor interest in holding the company's shares, besides that the risk of unpaid corporate debt increases (Absari, 2012), besides high debt raises fixed costs such as interest expenses that can increase risk (Kartikasari, 2007). (Lee & Jang, 2007) states that if leverage is measured using
a debt ratio, it has a positive relationship with beta (market risk / systematic risk), where high leverage makes the company vulnerable to systematic risk, this result shows that management needs pay special attention to the debt ratio to reduce the systematic risk of the company.

In addition, (Shin, 2009) shows that leverage is found to have the most significant effect on risk besides (Borde, 2000) also shows the influence of leverage on market risk is measured using market based. (Puspitaningtyas, 2006) also shows that leverage has a positive and significant effect on systematic risk (market risk). The higher leverage means that the greater the company's assets financed by debt, this reflects the greater risk for the company. Due to the increasing amount of corporate debt, the company continues to experience a steady increase in the long term, resulting in higher earning variability and systemic risk (market risk).

**H4: Leverage has significant effect on Market Risk**

### 2.5. The Effect of Profitability On Stock Return

Probability is an attraction for a company owner or shareholder and is also an assessment of company performance that an investor can make before investing. Profitability analysis is one way to assess precisely the extent of the rate of return that will be obtained from investment activities (Sugiarti et al., 2015). The assessment of company performance seen from greater profitability illustrates the company's performance that is getting better and the shareholders will benefit from the dividends received increasing, because increased profitability eats stock returns will also increase. (Absari, 2012) said that the higher the value of profitability, the better the company and the increase in the company's stock price. Increasing stock prices, stock returns will also increase.

(Rachmatika, 2006) revealed that the greater the value of ROA shows a better company performance due to the greater return, so it can be said if both of these measurements have increased, it means that the company's profitability has increased, so that it has an impact on increasing profitability.
that can be enjoyed by shareholders, namely returns. Profitability also measures the effectiveness of a company’s overall management as shown by the profits derived from sales and investments. (Halim, 2010) also shows the positive effect of profitability on stock returns, with high ROA values can increase stock returns. High ROA in a company shows that a company is able to manage the capital invested in overall assets to produce high profits for investors, besides that high ROA is able to entice investors to buy shares of a company or invest their funds in a company because it can generate returns which is also high.

H5: Profitability has an influence on stock returns

2.6. The Effect of Profitability On Market Risk

Probability other than as a performance appraisal and measure the overall management effectiveness of a company. Profitability is very important for a company, because to continue its life a company must be in a favorable condition. Without profits, it will be very difficult for companies to attract investors (Puspitaningtyas, 2006). This is shown from the profits obtained from sales and investment. The higher the probability the smaller the risk of the company (Kartikasari, 2007) because companies with good profitability can reduce the possibility of bankruptcy of the company (Shin, 2009). (Borde, 2000) shows that companies with good performance measured with high ROA values may face the possibility of low losses that indicate low risk.

H6: Profitability has significant effect on Market Risk

2.7. The Effect of Diversification On Stock Return

According to Richard Rumelt, the company began to plan for diversification of high growth and opportunities for growth in business that had increased. This often happens as the industry compiles into adults and most of the companies that are still alive have reached the growth limit using vertical and horizontal growth strategies, besides increasing can increase their business to less mature international markets, so there are no other options available
diversification to different industries if they want to continue to grow (Wheelen & Hunger, 2012). (Lubatkin & Rogers, 2009) said that specifically diversified companies show a higher shareholder return, while diversification if it is related to the good can generate high returns.

**H7: Diversification has significant effect on stock returns**

### 2.8. The Effect of Diversification On Market Risk

According to (Hit & Ireland, 2007) diversification is a company-level strategy used to diversify company operations from a single business that competes in a single market to a number of market products and mostly in general into several businesses. The corporate level strategy determines the actions of a company to enhance competitive advantage by selecting and managing different competitive business groups on different market products. (Lubatkin & Rogers, 2009) said specifically diversified companies show a significantly lower systematic risk. Low systematic risk is very valuable for shareholders only without being accompanied by a low return, besides diversification if planned well together can produce low risk and high returns besides (Titman & Wessels, 2007) revealed that large companies have a tendency to do diversifying their business more efficiently and making companies less vulnerable to bankruptcy which can allow risk to be lower.

Trade off theory reveals that large companies are more diversified, have lower bankruptcy costs, and have easier access to the capital market (capital market), indicating that companies get more debt (Ahmad et al., 2013). (Dwi et al., 2017) shows that diversification has a positive and significant effect on stock returns, this shows that diversification can increase company value by opening new investment opportunities. Companies can use a diversification strategy to strengthen the market which will have an impact on improving the performance of the company due to pengembalin from the business segment can reduce the risks that will be faced by the company. (Montgomery & Singh, 2016) revealed that diversification has a significant effect on systematic risk or market risk, by finding that systematic risk has an influence on all
perspectives of diversification strategies in the form of a single business, dominant, related constrained and related linked diversification.

H8: Diversification has significant effect on Market Risk

2.9. The Effect of Market Risk On Stock Return

Risk is the possibility between the actual return received and the expected return, the greater the possibility of the difference, meaning the greater the risk of the investment (Tandelilin, 2010). (Shin, 2009) revealed the relationship between investment risk and return in general can be explained by using the capital asset pricing model (CAPM). Based on the CAPM theory there are two types of risk, namely systematic risk and systematic risk. Systematic risk is the volatility of returns related to market portfolio returns (securities) and is indicated as beta, then unsystematic risk is the volatility of returns caused by specific events of the company, while the total risk is the sum of two risks. CAPM theory says high systematic risk can be compensated with high returns but systematic risk may not be compensated to investors because investors can reduce it with their strategies.

(Kim, Ryan, & Ceschini, 2007) state that systematic risk has a relationship with stock market movements. Systematic risk (non-diversifiable) cannot be eliminated by using diversification, because the risks associated with the market will affect all shares, from an investment perspective, high systematic risk has compensation with high returns because investors cannot implement diversification strategies to reduce risk. Systematic risk can also be referred to as market risk or general risk, due to events outside the company's activities, such as inflation, recession (Hartono, 2016), riots or political change (Tandelilin, 2010).

H9: Market risk has significant effect on Stock Return
3. **METHOD, DATA, and ANALYSIS**

This study uses quantitative research methods and is a type of explanatory research. The population in this study are manufacturing companies of consumer goods industry sectors that are listed on the Indonesia Stock Exchange (IDX) during the observation period from 2007 to 2016 means 10 years. And the sample in this study uses non-probability sampling techniques with purposive sampling methods. Where purposive sampling in this study have four criteria, among other: first, the company reports its financial position in annual financial statements in a row during the observation period starting from 2007 to 2016. Secondly, the company was still listed on the Indonesian Stock Exchange during the observation period start from 2007 to 2016. Third, the company does not have a negative balance in the annual report. Fourth, the company diversified into business segments during the observation period starting from 2007 to 2016. Of the four criteria, the samples in this study were eight (8) companies.

Sources of data in this study were obtained from multiple references to books, scientific papers, previous studies, the internet, and websites related to research objects such as financial statements of manufacturing companies in the consumer goods industry sector published on the Indonesia Stock Exchange (IDX) and closing price taken from yahoofinance.com. The independent variables in this study are:

1. **Company Size or Firm Size** (measured using the natural logarithm of the company’s total assets and total sales because the value of the company’s assets and sales are very large so as to homogenize the value with other variables. Total assets and total sales are used as a measurement of company size because they are considered capable of describing the characteristics of company size. Total assets measure a company’s total resources, market capacity which involves the company’s growth opportunities and equity market conditions, while total sales measure product competition (Dang et al., 2018)).

2. **Financial Leverage** (measure use leverage ratio because this ratio describe the measurement of the extent to which a company’s assets are financed by debt.
Companies that have a big high leverage ratio have an impact on the emergence of large risk of loss but there is an opportunity to get a large profit as well (Sunyoto, 2013).  

3 Profitability (Measurement carried out based on profitability ratio, that conducted by previous studies)  

4 Diversification (measure use Hischman-Herfindhal Index (HII) where HII is the calculation of the square of market share of all companies in the market. HII describe a number of business people in the market and its market share (Saptono, 2017)).  

And for dependent variable in this study there are two dependent variabel, the market risk and stock return. The data analysis in this study used Partial Least Square (PLS) analysis, with smartPLS as an analysis tools. The researchers use this method because all the past research use this method too and want to know even with this same method will have different or same result.

**Table 1 Research Variable, Indicator, Formula and Source**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Variable</th>
<th>Indicator</th>
<th>Formula</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>Firm Size</td>
<td>Total Asset</td>
<td><em>Firm size = Ln (Total Asset)</em></td>
<td>(Yuliani, 2013)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Sales</td>
<td><em>Firm size = Ln (Total Sales)</em></td>
<td></td>
</tr>
<tr>
<td>X2</td>
<td>Leverage</td>
<td>Debt to assets</td>
<td>*debt to asset = ( \frac{\text{total Debt}}{\text{total asset}} \times 100% )</td>
<td>(Kasmir, 2016)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debt to equity</td>
<td>*debt to equity ratio = ( \frac{\text{total Debt}}{\text{equity}} \times 100% )</td>
<td></td>
</tr>
<tr>
<td>X3</td>
<td>Profitability</td>
<td>Profit margin</td>
<td>*profit margin = ( \frac{\text{Total Profit after tax}}{\text{Total Sales}} \times 100% )</td>
<td>(Sunyoto, 2013)</td>
</tr>
</tbody>
</table>
Return on assets

\[ rasio\text{ pengembalian total aktiva} = \frac{total\text{ profit after tax}}{total\text{ asset}} \times 100\% \]

Return on equity

\[ return \text{ on equity} = \frac{latotal\text{ profit after tax}}{equity} \times 100\% \]

<table>
<thead>
<tr>
<th>X4</th>
<th>Diversification</th>
<th>Herfindahl Indeks</th>
<th>[ H = \frac{\sum_{i=1}^{n} S_i^2}{(\sum_{i=1}^{n} S_i)^2} ] (Berger &amp; Ofek, 1995)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>Market Risk or Systematic risk</td>
<td>Regression</td>
<td>[ y = \beta_0 + \beta_1 X ] (Iqbal &amp; Shah, 2009)</td>
</tr>
<tr>
<td>Y2</td>
<td>Stock Return</td>
<td></td>
<td>[ stock\text{ return } R_t = \frac{(P_t - P_{t-1})}{P_{t-1}} ] (Harton &amp; P. J., 2016)</td>
</tr>
</tbody>
</table>

Source: research concept development, 2018

4. Results and Discussion

Data processing techniques using the Partial Least Square (PLS) require two stage to assess Fit Model from a research model. First, assessing the outer model or measurement model and secondly, structural model testing or inner model.
There are three criteria using data analysis technique with SmartPLS to assess the outer model, namely convergent validity, discriminant validity and composite reliability, but because this is financial research using formative direction analysis so the composite reliability is zero (Wiyono, 2011).

**Table 2 Convergent Validity (Outer Loadings)**

|   | Original Sample (O) | Standard Deviation (STDEV) | T Value (|O/STERR|) | results |
|---|---------------------|----------------------------|-----------------|---------|

Source: Data processing with PLS, 2018
The table in this output (convergent validity) illustrates of each indicator to construct, and seeing convergent validity with 2 option, first with the provisions that the loading factor value > 0.7 can be said to be valid, but the rule of thumb interpreting the loading factor value > 0.5 can be said to be valid or secondly, has a statistical T value > 1.96 (Widarjono, 2015).

**Table 3 Discriminant Validity (Cross Loading)**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>Y1</th>
<th>Y2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN Total assets (X1.1)</td>
<td>0.985</td>
<td>0.194</td>
<td>0.098</td>
<td>0.027</td>
<td>0.221</td>
<td>0.223</td>
</tr>
</tbody>
</table>

Source: Data Processing with PLS, 2018

The table in this output (convergent validity) illustrates of each indicator to construct, and seeing convergent validity with 2 option, first with the provisions that the loading factor value > 0.7 can be said to be valid, but the rule of thumb interpreting the loading factor value > 0.5 can be said to be valid or secondly, has a statistical T value > 1.96 (Widarjono, 2015).
LN Total sale (X1.2) | 1.000 | 0.244 | 0.056 | 0.005 | - | -
DR (X2.1) | 0.345 | 0.734 | - | 0.147 | 0.201 | 0.267 | 0.271
DER (X2.2) | 0.283 | 0.991 | - | 0.109 | 0.099 | 0.359 | 0.366
PM (X3.1) | 0.105 | 0.113 | 0.264 | 0.015 | 0.123 | 0.101
ROA (X3.2) | 0.101 | 0.127 | 0.150 | 0.044 | 0.076 | 0.052
ROE (X3.3) | 0.098 | 0.125 | 0.036 | 0.007 | 0.031 | 0.000
HI (X4) | 0.011 | 0.069 | 0.179 | 1.000 | 0.045 | 0.074
BP (Y1) | -0.227 | 0.362 | 0.415 | 0.045 | 1.000 | 0.963
Closing Price (Y2) | -0.224 | 0.370 | 0.434 | 0.074 | 0.963 | 1.000

Source: Data Processing with PLS, 2018

Discriminant validity of the measurement model is assessed based on the measurement of cross loading with the construct. The model has good discriminant validity if each loading value of each indicator of a latent variable has the greatest loading or largest cross loading value for the variables they form and not on the other variable (Widarjono, 2015). In this study, ROE (return on equity) indicator that represent profitability variable have different results. The indicator is not discriminant, because the largest outer loading value for the variable it form in other variable, namely leverage.

**Table 4 R-Square Value**

<table>
<thead>
<tr>
<th>Construct</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Risk</strong></td>
<td>0.9321</td>
</tr>
<tr>
<td><strong>Stock Return</strong></td>
<td>0.4771</td>
</tr>
</tbody>
</table>

Source: Data Processing with PLS, 2018

Testing the inner model or structural model is done by using R-square for the dependent construct of the t-test as well as the significance of the coefficient of...
structural path parameters and by looking at the R square value which is a goodness-fit test of the model. In the table 4, shows the R square value of two variables that are influenced by other variables. Namely market risk (Y1) which is 93.21% influenced by firm size, leverage, profitability, and diversification variable and stock return (Y2) which is 47.71% influenced by firm size, leverage, profitability, and diversification variable. In the PLS model for overall goodness of-fit assessment it is known from the value of Q2 (predictive relevance), where the higher the Q2, the model can be said to be more fit with the data. So Q2 for this study:

Value of Q2 = 1 - (1-R2) X (1-R2)
Value of Q2 = 1 - (1-0.9321) X (1-0.4771)
= 0.9645

The calculation result above can be seen the Q2 value was 0.9645 meaning that the magnitude of diversity of research data that can be explained by the structural model is 96.45%, while remaining 3.55% is explained by other factor outside the model. Based of these results, the structural model in the study can be said to have goodness of fit. In the PLS analysis that test every statistic that is hypothesized is done using a simulation, in the case the bootstrap method is performed on the sample. Bootstrap testing also help to overcome the problem of research data abnormalities. Bootstrapping test results from PLS analysis are:

Figure 2 Inner Model
### Tabel 4.1 Path Coefficient (Mean, STDEV, T-Values)

<table>
<thead>
<tr>
<th></th>
<th>Original Sample (O)</th>
<th>Standard Deviasi (STDEV)</th>
<th>T-Statistic (O/STERR)</th>
<th>P-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 -&gt; Y2</td>
<td>-0.038</td>
<td>0.061</td>
<td>0.628</td>
<td>0.5318</td>
<td>Rejected</td>
</tr>
<tr>
<td>X1 -&gt; Y1</td>
<td>-0.378</td>
<td>0.120</td>
<td>3.143</td>
<td>0.0024</td>
<td>Accepted</td>
</tr>
<tr>
<td>X2 -&gt; Y2</td>
<td>0.058</td>
<td>0.057</td>
<td>1.011</td>
<td>0.3154</td>
<td>Rejected</td>
</tr>
<tr>
<td>X2 -&gt; Y1</td>
<td>0.497</td>
<td>0.138</td>
<td>3.615</td>
<td>0.0005</td>
<td>Accepted</td>
</tr>
<tr>
<td>X3 -&gt; Y2</td>
<td>0.075</td>
<td>0.069</td>
<td>1.088</td>
<td>0.2803</td>
<td>Rejected</td>
</tr>
<tr>
<td>X3 -&gt; Y1</td>
<td>0.498</td>
<td>0.175</td>
<td>2.852</td>
<td>0.0056</td>
<td>Accepted</td>
</tr>
<tr>
<td>X4 -&gt; Y2</td>
<td>0.043</td>
<td>0.051</td>
<td>0.839</td>
<td>0.4042</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Source: Processed Data with PLS, 2019
Based on the tests that have been carried out using PLS analysis, with smartPLS as an analysis tools. It can be tested the hypothesis described as follows:

1) The result means that Firm Size has a negative and not significant effect on Stock Return, which means it is not in accordance with the first hypothesis where Firm Size has a significant effect on Stock Return. Negative and insignificant influence means that the larger the size of the company (firm size) results in the company's stock returns getting smaller and the size of the company cannot be used to predict the company's stock returns in the future.

2) The result means that Firm Size has a negative and significant effect on Market Risk which means it is in accordance with the second hypothesis where Firm Size has a significant effect on Market Risk. A negative and significant relationship means that the greater the size of a company (firm size), the systematic risk (market risk) is lower and the size and size of the company can be used to predict the systematic risk (market risk) of the company in the future.

3) The result means that Financial Leverage has a positive and not significant effect on Stock Returns which means it is not in accordance with the third hypothesis where Financial Leverage has a significant effect on Stock Return. This result show leverage has a positive effect on stock returns, meaning the greater the leverage value of a eating company the greater the stock return but have insignificant to so it show the high or low value of financial leverage will not affect the value of stock return or cannot be used to predict future stock even the greater the leverage value of a eating company the greater the stock return. Financial leverage or debt is used as a corporate investment interest to support the company’s growth in the long run so that it will generate high

| X4 -> Y1 | 0.104 | 0.119 | 0.873 | 0.3856 | Rejected |
| Y1 -> Y2 | 0.900 | 0.275 | 3.269 | 0.0016 | Accepted |

Source: Processed Data with SmartPLS, 2019
profits but the high and low debt is not used as benchmark by investors, but
the activities carried out by other investors in conducting stock trading
activities. This because the increase that affects the rising stock price depends
on how many are buying shares at the time (long term), and vice versa so that
debt is irrelevant in determining the value of stock return in the short term. In
addition to getting the maximum return, investors must have more mature
knowledge of technical analysis used to maximize profits so that so that
insignificance occurs due to the consideration of some investors in viewing
leverage as not important.

4) The result means that Financial Leverage has a positive and significant
influence on Market Risk which means it is in accordance with the fourth
hypothesis where Financial Leverage has a significant effect on Market Risk.
These results indicate that if the level of debt is high, the risk will also increase
in line with the increase in debt and can be used to predict the systematic risk
(market risk) of the company in the future.

5) The result means that Profitability has a positive and not significant effect on
Stock Returns which means it is not in accordance with the fifth hypothesis
where Profitability has a significant effect on Stock Return. A positive and
insignificant influence on return shares means that the relationship is the same
direction so the greater the profitability, the stock return that will be received
by investors also increases. The insignificant of the result of this study
occurred because there are indicators that cannot describe variables, namely
ROE. Profitability variables in this study are described by ROA, ROE and
profit margin but when testing ROE indicator show if it cannot describe
profitability.

6) The result means that Profitability has a positive and significant effect on
Market Risk which means it is in accordance with the sixth hypothesis where
Profitability has a significant effect on Market Risk. Positive and significant
influence on market risk means that both relations are in the same direction so
the greater the profitability, the market risk also increases and the increase in
profitability will also affect the increase in market risk. These result indicate
that the availability of earnings which is considered by investors as a future prospect rather than investors can be used to determine investment decisions in buying shares.

7) The result means that Diversification has a positive and not significant effect on Stock Returns which means it is not in accordance with the seventh hypothesis where Diversification has a significant effect on Stock Returns. Positive results that are not significant mean that the diversification strategy undertaken by the company is followed by an increase in stock returns but cannot be used to predict stock returns.

8) The result means that diversification has a positive and not significant effect on Market Risk which means it is in accordance with the eighth hypothesis where Diversification has a significant effect on Market Risk. This positive influence shows if the diversification strategy carried out by the company will increase market risk. These results contradict previous studies conducted by Barton (1988) and Montgomery and Singh (1984) which showed a significant influence between diversification of market risk, besides that the research conducted by Montgomery and Singh (1984) also found that systematic risk has an influence towards all perspectives of diversification strategies in the form of single, dominant, related constrained and related linked diversification.

9) The result means that market risk has a positive and significant effect on Stock Return, which means it is in accordance with the ninth hypothesis where market risk has a significant effect on stock return. Positive and significant results indicate that the stock beta is directly proportional to the company's stock return so that if the stock beta is a measure of market risk or systematic risk increases, the stock return will also increase. This results also prove that disclosed by Hartono (2016) and Tandelilin (2010) which stated that systematic (non-diversifiable) risk or market risk is a risk that cannot be eliminated by using diversification, because risks associated with the market will affect all shares. From an investment perspective, high systematic risk is compensated with high returns because investors cannot implement diversification strategies to reduce risk. In addition, these results are also in
line with the CAPM theory and in accordance with previous research conducted by Shin (2005), revealing the relationship between risk and return in general can be explained using the capital asset pricing model (CAPM). Based on the CAPM theory there are two type of risk, namely systematic risk. Systematic risk is the volatility of return associated with market portfolio return (securities) and is indicated as beta, then unsystematic risk is return volatility caused by company-specific events, while total risk is the sum of two risks. CAPM theory says high systematic risk can be compensated with high return but systematic risk may not be compensated to investors because investors can reduce it with their strategies.

5. CONCLUSION, LIMITATIONS, and SUGGESTIONS

Based on the results of the study showed firm size has a negative and not significant effect on stock return while on risk, firm size has a negative and significant effect. Furthermore, Financial leverage has a positive and not significant effect on stock return and financial leverage has a positive and insignificant effect on market risk, profitability has a positive and not significant effect on stock returns and profitability also has a positive and significant effect on market risk, while for diversification has a positive and not significant effect on market risk. Last, market risk has a positive and significant effect on stock return.

Based on the conclusions of the study, the suggestions can be given, for example, for further research, which wants to do similar research better in different sectors and with a more diverse sample size so as to strengthen the results of previous studies. Further research is also expected to be able to add several other variables, and for diversification variable the further researcher can divide diversification into two types, that are related and unrelated so that it is better to know which diversification strategies are best for reducing systematic risk, in addition the researchers also suggests to use
even more ratios for financial leverage and profitability, don’t only use a few ratios.

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Analysis of the Effect of Firm Size


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