

Influence of Fundamental Ratio, Market Ratio and Business Performance to The Systematic Risk and Their Impacts to The Return on Shares at The Agricultural Sector Companies at The Indonesia Stock Exchange for The Period of 2010 -2013

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ABSTRACT

Stock market is a market for various kinds of long term financial instruments able to be put into a sale-purchase transaction. Stock market has a big role for economy of a country, since it functions to improve efficiency in economy by means of connecting the funds from non-productive parties to the productive ones. In line with investment made by investors related to the return, it also faces the systematic risk that has to be taken. This research is intended to know how big the influences of fundamental ratio, market ratio and business performance to the systematic risks and their impacts to the return on shares at the agricultural companies available at the Indonesia Stock Exchange. Location of this research is chosen under a purposive sampling technique. Data in this research are collected by using the method of documentation study, namely studying the reports and documents of companies in agricultural sectors with the sources deriving from Financial Statements of companies listed at the Indonesia Stock Exchange for the period 2010-2013. Data is analyzed by using SEM – Structural Equation Modeling processed through the Smart PLS software of 2.0 Version. Output of this study indicates that the fundamental ratio and the market ratio do not have significant influence to the systematic risks, but on the contrary the business performance has significant influence. Further, fundamental ratio, market ratio and business performance do not have significant influence as well to the return on shares, and only the systematic risk has significant influence to the return on shares. The aforesaid condition is also strongly influenced by external factors in the form of price of CPO (Crude Palm Oil), inflation, SBI (Certificate of Bank Indonesia), exchange rate of Rupiah to USD as well as the macroeconomic condition undergoing the crisis. Thus, investors wishing to make investment should pay more attention to the level of systematic risks at the sector of agricultural business listed at this Indonesia Stock Exchange, since it will be able to predict the amount of return to be received in the future by calculating the existing external factors.

Keywords: Fundamental ratio, market ratio, business performance, systematic risk, returns on shares

INTRODUCTION

One of the biggest stock markets in Indonesia is Indonesia Stock Exchange having a seat in Jakarta. The Stock Exchange (Security Exchange) is an institution holding and providing system facilities to arrange the meeting on the offers for the sale-purchase of stocks among various companies or individuals involved with the purpose to trade the listed company stocks (Darmadji, 2001:17). In line with the national economic betterment at present, it also brings a good impact to the plantation companies available in Indonesia. One of the

dominating plantations is *the palm oil estate* having the production cycle up to the period 25 years and also supported by its *derivative product* in the form of CPO (Crude Palm oil).

Stock market has a very important role in economy of a country. It is due to the fact that the stock market runs the economic function and at the same time it also runs the financial function. From the economic point of view, stock market serves as one of the long term fund mobility system efficient for the government. Through stock market, the government is able to allocate the community fund to the productive investment sector. From the financial point of view, the stock market serves as one of the efficient media to allocate the funds from the parties having the fund surplus, namely *investors*, and the parties in need for the funds, namely *companies*. The rapid development of stock market in Indonesia becomes an indicator that the stock market constitutes the alternative fund sources beside banks. In addition, the bigger growth of stock market also indicates that the trust of stock owners for investment at the Indonesian Stock Market is sufficiently good. This is in parallel with the plantation sector undergoing a sufficiently rapid development during the last few years, supported by big enlargement of the productive land as well as the prospective CP market, so that it also has the impact to the share portfolio at the agricultural sector, particularly the *palm oil estate*.

Investment is a delay in current consumption with the purpose to obtain the level of *return* to be received in the future. Investment in stock is deemed to have bigger risks compared to the other alternative investment, such as bond, deposit, and saving. Investors and also candidate investors can estimate level of *the expected return* and how far *the actual* return will deviate from the expected return. If the investment opportunity has higher level of risk, the investors will signalize the higher level of profit as well. In other words, the higher the risk is in an investment opportunity, the higher as well the level of profit (return) is signalized by the investors (Hartono, 2003:130).

Investment risk at the stock market basically consists of two categories, namely the *systematic risk* and the *unsystematic risk*. Husnan (1994) states that the systematic risk tends to have two characteristics. *First*, it relatively has the same influence to all company shares available at the market, so that this systematic risk is also called as the '*market risk*'. *Second*, it cannot be abolished through investment diversification in investment portfolio. The risk relevant to be considered by investors in making investment decision is the systematic risk or the market risk (Husnan, 1994), since the investors can eliminate the unsystematic risk through establishment of investment portfolio. In financial literature, *the systematic risk* or the *market risk* is frequently named as *beta* (β). Thus, for the sake of investment, the investors shall estimate the amount of beta of share as the size of investment risk at the stock market.

The trend of *return* on shares materialized by the group of companies in agri-business sector tends to increase gradually after the first quarter in the year 2010 till the fourth quarter in the year 2013. This condition if connected to the systematic risk indicates the reversed comparison, in which the systematic risk available within the same period tends to decrease. This indicates that the smaller the beta of the share is, the bigger return will be returned. The analysts evaluate that this is the suitable time to carry out the *selective buying* to the shares having defensive nature. At the market condition with a tendency to be dominated by negative sentiment, the shares of consumptive goods and pharmaceutical industry, foods and beverages and retailing services relatively have low risk. It is also stated that at present, the main attention of the market performers concern with the availability of liquidity at the global financial market. The plan of the *US Central Bank* or *The Federal Reserve (The Fed)* is responded by the market performers because they are afraid that the liquidity will decrease.

(www.indonesiainancetoday.com, Thursday, February 13, 2014 at 08:22 (GMT+7). Hence, it can be stated that the defensive shares will be safe as long as the intension of the investor is to make investment and to chase for dividend. The trading for defensive shares requires extra patience, since its movement is really slow.

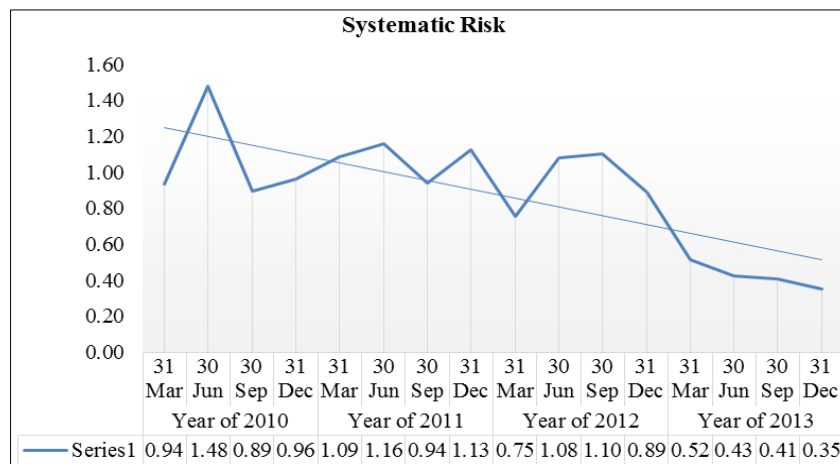


Figure 1. Systematic Risk of Company Shares at the Agricultural Sector during the Year 2010-2013

Then, the movement of return on shares in agricultural sector during the observation period from the year 2010 to 20113 indicates a movement with tendency to increase.

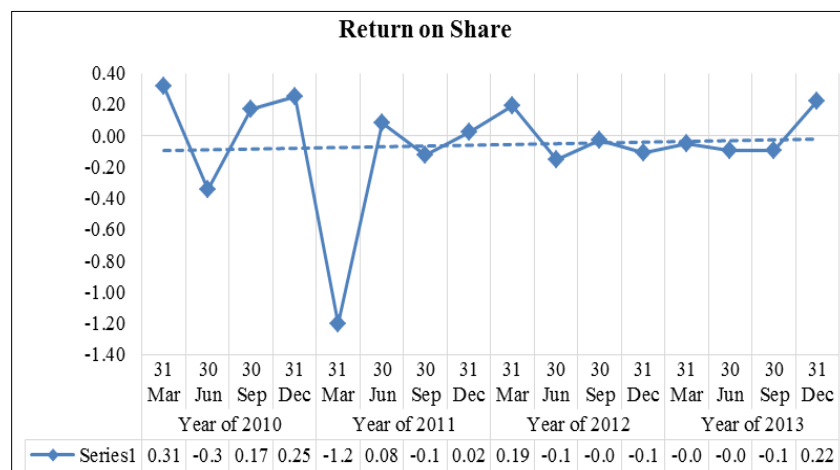


Figure 2. Return on Shares of Companies at Agricultral Sector the Year 2010-2013

In Figure-1 and Figure-2 above, it is obviously shown that the systematic risk tends to be getting more and more decreasing or leading toward the defensive shares, in contradiction with the return on shares being obtained, which tends to be getting more and more increasing within the same period of time. This also indicates that although the movement of agricultural shares tends to slow down, the market trust to this sector remains good and more convincing, besides, this sector produces the CPO product as one of the primary products for human being.

There are several factors directly and indirectly influence the aforesaid systematic risk and return on shares. *The fundamental ratio factors* consist of: CR (*Current Ratio*), TATO (*Total Asset Turnover*), DER (*Debt Equity Ratio*), and TDA (*Total Debt to Asset*). The other factor is *the stock market ratio* consisting of EPS (*Earning Per Share*), PER (*Price Earning Ratio*) and PBV (*Price to Book Value*) and also *the business performance factors* in the forms of ROE (*Return on Equity*), ROA (*Return on Asset*) and ROI (*Return on Investment*). This research is designed by using the *multivariate analytical technique* with the model of SEM –

Structural Equation Modeling in order to be able to see the latent variables involved in data analysis supported by variable indicators or manifest so that it will be able to describe them more completely compared to the previous researches and this subject becomes the gap in this research.

The above phenomena is interesting to be observed further from the viewpoints of comprehending and measuring the investment risks, particularly within the share groups in agricultural sectors. In this regard, it consists of 8 (eight) companies listed at the Indonesia Stock Exchange since 2010 till 2013. The systematic risk during the said period seemingly tends to decrease and indicates that the market systematic risk is more aggressive, therefore the level of return on shares obtained by the investors is decreasing. Such condition indicates that the shares in agricultural sector during the period of 2010-2013 tend to be *in defensive nature (conservative)*, indicating that the said shares are less sensitive to the market change and have the risks below the market average. This reality is also in line with the opinion of Purwanto in Tandelilin (2003:7), stating that such a condition may happen when the market excess return is negative, and there will be a negative relation between beta and return.

LITERATURE REVIEW

Financial ratio can help investors make decision and predict the company performance in the future. This can also give an early warning upon the company's financial condition as a whole (Ohlson, 1980). Such financial condition can also predict the share portfolio condition, in this case particularly the systematic risk and the return on shares.

Influence of Fundamental Ratio to Systematic Risk

Output of study by Gundoro and Nurhayati (2001) has already proven that there is no significant relationship nor influence from fundamental variables of CR, DER, TATO, NPM and TDA to the beta of shares. Meanwhile, Tandelilin (1997) and Natarsyah (2000) conclude in their study that the fundamental variables of CR, DER, TATO, NPM and TDA jointly have the influence to beta. Output of research by Rachmawaty (2011) concludes that DER has no significant influence to the beta of shares, in which in this case it indicates that the presence of loan in Company's capital structure has the impact to the risk borne by the investors. However, output of this study is in line with the result of empirical study by Gundoro and Nurhayati (2001) proving that there is no significant relationship nor influence from the fundamental variables of CR DER, TATO, NPM and TDA toward the beta of shares at the Indonesia Stock Exchange.

Influence of Market Ratio to Systematic Risks

According to Penman (2005) the Book-to-Price has significant influence to the beta of shares in NYSE and AMEX. Machfiro and Sukoharsono (2013) declare that PBV has positive and significant influence to the *stock return* at the Food and Beverage Company available at Indonesia Stock Exchange during the period 2008-2011. Output of empirical study by Taani and Banykhaled (2011) state that PBV has significant influence to the return of share. According to the result of empirical study performed by Thim et al., (2012) and Chambers et al, (2013) the EPS significantly influences the return on shares. The research output of Fidiana (2010) declares that EPS and PER do not have significant influence to the beta of shares, while the PBV has significant influence to the beta of shares.

Such condition indicates that Stock Exchange constitutes a developing capital market and each company tries to strengthen its position, so that the established price is not determined merely based on the earnings. This empirical finding indicates that the investors consider the profit of a company already been in 'go-public' status is always stable.

Influence of Business Performance to Systematic Risks

From the result of empirical study by Suhardi (2009), it is found out that the profitability factor of a company in the form of ROA significantly influences the beta of shares. According to Meng (2011) based on the output of his empirical study, it is indicated that ROE has a significant influence to the beta of shares. And so is the research result of Rachmawaty (2011) showing that ROA significantly influences the beta of shares, and ROA as the ratio of the adjusted total operational profit will be related with the level of dividend paid, perception of shareholders, and investors. If ROA increases, dividend and the level of return are expected to increase, and so is the contrary. Thus, such circumstance will cause the level of systematic risk (Beta) increases. Further, according to the research conducted by Sunardi (2010) it is found out that the ROI factor does not significantly influence the beta of the shares. This is due to the fact that the economic condition during the research period is in crisis.

Influence of Fundamental Ratio to the Return on Shares

Output of research conducted by Indriana and Anik (2008) shows that the fundamental factors consisting of CR and DER do not have any influence to the return of company shares. Research performed by Estuari (2010) concludes that CR and DER do not significantly influence the return on shares of companies listed at Indonesia Stock Exchange. The *leverage impact* in the form of TDA has no significant influence to the return on shares (Karaaslan et al., 2013). Hovakimian et al., (2004) states that DER and TDA do not significantly influence the return on shares. In line with Yulianty (2008), in the result of her study declares that NPM and DER have no significant influence to the return on shares. Supported as well by the research output of Absari et al (2013) indicating that liquidity ratio and solvability of the company do not significantly influence the return on shares. Muhayatsyah (2012) concludes in his empirical study that TATO does not have any significant influence to the return on shares.

Influence of Market Ratio to the Return on Shares

Output of research conducted by Yulianty (2008) and Indriana & Anik (2008) indicate that the market ratio consisting of PER, PBV and EPS do not have significant influence to the return on shares. Output of research by Adystya (2013) indicates that the variables of PER and EPS do not have any significant influence to the return on shares of the companies at the Indonesia Stock Exchange. Result of research by Kristiana et al (2012) concludes that EPS does not significantly influence the return on shares of manufacturing companies at the Indonesia Stock Exchange. This research is also in line with the output of research by Tandelilin (1997) in which the non-significance of EPS and PER factors has the relevance with the Indonesia Stock Exchange. Further, the research output of Absari et al (2013) finds out as well that the PER and EPS variables have no significant influence to the return on shares. Also, Muhayatsyah (2012) finds out that PBV does not have significant influence to the return on shares.

Kusumawardani (2009) concludes that EPS and PER significantly influence the price of company shares at LQ45. Alxakis et al, (2010) states that the return on his empirical finding, that PER and PBV have positive and significant influence to the *stock return* at the developing stock market in Greece. Aras and Yilmaz (2008) in their empirical finding declare that the financial ratio consisting of PER and PBV are considered to be able to predict the return on shares in the future and useful in making the decision for investment.

Influence of Business Performance to the Return on Shares

The empirical study conducted by Rachmawati (2011) reveals that there is a significant influence of ROA to the systematic risk (beta). Then, according to the result of empirical study by Suhardi (2009) it is found out that profitability factors of companies in the forms of ROE, ROA, and ROI have significant influence to the beta of shares. According to Meng (2011) based on the output of his empirical study indicates that ROE significantly influences the beta of shares. The role of ROA directly influences the beta of shares and indirectly influences the growth or movement of shares. Muhayatsyah (2012) concludes in his empirical study that ROA does not have any significant influence to the return on shares. Abasari, et al (2013) in the result of her research concludes that ROE has no influence to the return on shares. Then, the output of research by Sunardi (2010) concludes that ROI does not significantly influence the return on shares. Further, on the research conducted by Sunardi (2010) finds out that ROI does not have any significant influence to the return on shares.

Influence of Systematic Risk to the Return on Shares

Fama and MacBeth (1973) conclude in their study that the risk and the return have significant influence in *New York Stock Exchange* and this reflects the magnitude of risk owned by every investor on the expected return. According to Lau, et al (2002) at the output of his empirical study concludes that there is a negative and significant relationship between beta and the stock return during the recession period or negative market excess return at the Singaporean and Malaysian shares. Allen and Cleary (1998) on their research also find out that in distribution of monthly return at the *Malaysian Stock Market* that on its early selection is relatively almost the same with the coefficient of market model which is on reversed state compared to its systematic risk.

Meanwhile, Shue et al., (1998) in his study finds out that beta is negatively related to the return on shares if the market is in recession condition. However, when the market condition grows and develops, the beta will have positive relationship with the return on shares at *Taiwan Stock Exchange*. WBBA and Pratomo (2013) in their research find out that beta has negative and significant influence to the price of shares at the banking sector at the LQ45 Index. Al-Rjoub and Azzam (2012) state that the systematic risk has significant influence to the stock return and this also illustrates that the economic crisis has occurred, in which the sensitivity of both factors is high. Absari et al (2013) through her research states that the systematic risk has significant influence and positive relationship with the return on shares.

The research conducted by Lilti and Montagner (1998) find out that the beta of shares has significant influence in determining the return in *France Stock Exchange*. Tandelilin and Poerwanto (2003) in their study investigating the relationship between beta and return, find out that for positive market excess return, there is a positive relationship between beta and return, while for the negative market excess return there is a negative relationship between beta and return. By separating the measurement of beta at the *bullish and bearish market*, Tandelilin (2001) finds out that the beta of share portfolio is able to explain about the return on portfolio.

Thus, in general the presence of systematic risk will cause the change in share price at the stock market indirectly and will cause the change at the expected return of share portfolio.

METHODOLOGY

The various kinds of research outputs concerning with relationship among fundamental ratio, market ratio, business performance and the systematic risk and return on shares motivate

further researches. This paper will discuss the relationship by using the data obtained from the Indonesia Stock Exchange and the Hypotheses to be examined will be as follows:

H1: Fundamental ratio significantly influences the systematic risk.

H2: Market ratio significantly influences the systematic risk.

H3: Business Performance significantly influences the systematic risk.

H4: Fundamental ratio has significant influence to the return on shares..

H5: Market ratio has significant influence to the return on shares.

H6: Business Performance has significant influence to the return on shares

H7: Systematic risk significantly influences the return on shares.

The study in this proposed paper applies the structural equation modeling in order to study the influence of several factors to the systematic risk and the return on shares and its implementation is carried out by using the Smart PLS software of 2.0 Version.

Model

The structural equation modeling in this study can be illustrated as follows:

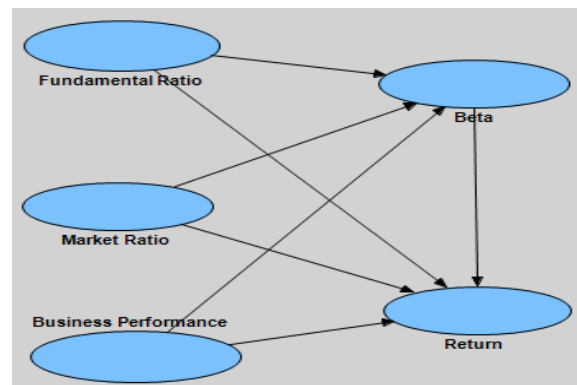


Figure 3. The Purpose Study

The exogenous variables are represented by CR, DER, NPM, TATO and TDA, while the endogenous variables are represented by *Beta* and *Return of Share*, and can be described in Table 1.as follows:

Table 1. Description of the Variables

Dimension of Variable Construct					
Exogenous			Endogenous		
Description		Symbol	Description		Symbol
Construct	Indicator		Construct	Indikator	
1. Fundamental Ratio	1. <i>Current Ratio</i>	CR	1. Sistematic Risk	Beta	β
	2. <i>Total Asset Turnover</i>	TATO			
	3. <i>Net Profit Margin</i>	NPM			
	4. <i>Debt to Equity Ratio</i>	DER			
	5. <i>Total Debt to Asset</i>	TDA			
2. Market Rasio	1. <i>Price to Book Value</i>	PBV	2. Return of Share	Return	RSHM
	2. <i>Price to Earning Ratio</i>	PER			
	3. <i>Earning Per Share</i>	EPS			
3. Business Performance	1. <i>Return on Equity</i>	ROA			
	2. <i>Return on Asset</i>	ROE			
	3. <i>Return on Investment</i>	ROI			

Sample of Research

This research applies the primary data deriving from the *financial statement*, including *report on financial position* and *the comprehensive income statement*. Index Data on Combined Share Price, closing price of share of each company at the agricultural sector, and Certificate of Bank Indonesia (SBI). In addition, the sources including the textbooks, newspapers, relevant website, and journals are used to review the theoretical framework of previous researchers. Samples applied in this research are companies at the agricultural sectors listed at the Indonesia Stock Exchange selected by using the *purposive sampling* method.

In selecting the samples, the criteria have already been determined as follows:

- The company belongs to sub-sector of palm oil plantation.
- The company shares have already been active in trade during the period 2010 till 2013.
- The company has already published its quarterly complete financial statement during the period 2010 till 2013.
- The company tax year ends on 31st of December.
- The company has no negative capital.

The purposive sampling with the criteria as determined above produces 8 (eight) companies as samples. The applied data to be analyzed are related to the agricultural companies or plantation sub-sector for 3 (three) year period (2010-2013) and classified again into 16 (sixteen) quarterly periods.

Having classified the exogenous and endogenous variables as well as their respective indicators, it is then followed by the next step, namely processing the data using the suitable and proper model. Significance of some descriptive variables has been tested by counting the t-value. In order to determine the proportion of the variables described at the endogenous variables, the determinant coefficient (R^2) has been returned.

OUTPUTS

Measuring Model (Outer Model) Examination

This research applies 5 (five) latent variables with 13 (thirteen) indicators. All variables are in reflective nature. Examination on latent variable measuring model is intended to identify the important indicators.

Fundamental Ratio Variables

Indicators of fundamental ratio variable consist of CR, TATO, NPM, DER, and TDA. Outer loading values of those indicators are shown on Table 2 below:

Table 2. Outer Loading Indikator Variabel Rasio Fundamental

<i>Indicators</i>	<i>Outer Loading</i>	<i>T-Statistics</i> (<i>T-Critical: 1.96</i>)
CR	0.637760	1.091894
TATO	-0.021408	0.096720
NPM	0.628846	1.043247
DER	-0.592314	1.031042
TDA	-0.1874547	1.099083

Based on Table-2 above, it is shown that among those five indicators, the TDA outer loading is bigger than the others, so that it can be stated that TDA is the stronger and more dominant indicator in reflecting the fundamental ratio variables.

Market Ratio Variables

Indicators of market ratio variable consist of PBV, PER, and EPS. The outer loading values of those indicators are shown on Table 3 below:

Table 3. Outer Loading Indikator Variabel Rasio Pasar

<i>Indicators</i>	<i>Outer Loading</i>	<i>T-Statistics (T-Critical: 1.96)</i>
PBV	0.170546	0.346544
PER	-0.559502	0.880230
EPS	0.842035	1.525405

Based on Table 3 above, it is shown that among those three indicators, the EPS outer loading is bigger than the others, so that it can be stated that *EPS is the stronger and more dominant indicator* in reflecting the market ratio variables.

Business Performance Variables

Indicators of business performance variable consist of ROA, ROE, and ROI. The outer loading value of those indicators is shown on Table 4 below:

Table 4. Outer Loading Indicatorsof Market Ratio Variables

<i>Indicators</i>	<i>Outer Loading</i>	<i>T-Statistics (T-Critical: 1.96)</i>
ROA	0.939826	24.016800
ROE	0.961615	125.528100
ROI	0.987653	243.536000

Based on Table 4 above, it is shown that among those three indicators, the ROI outer loading is bigger than the others, so that it can be stated that *ROI is the stronger and more dominant indicator* in reflecting the business performance variables.

Systematic Risk (Beta/B) Variables

Indicators of systematic risk variables in this case are in the form of beta of shares. Outer loading values of those indicators are shown on Table 5 below:

Table 5. Outer Loading Indicators of Business PerformanceVariable

<i>Indicator</i>	<i>Outer Loading</i>	<i>T-Statistics (T-Critical: 1.96)</i>
Beta	1.000000	-

Return on Share Variables

Indicators of return on share variables in this case are in the form of return on shares. Outer loading values of those indicators are shown on Table 6 below:

Table 6. Outer Loading Indicator of Business Performance Variable

<i>Indicator</i>	<i>Outer Loading</i>	<i>T-Statistics (Critical-t: 1.96)</i>
Share Income	1.000000	-

Evaluation on Goodness of Fit for Structural Model (Inner Model)

Evaluation on Goodness of Fit for Structural Model is measured by using the predictive-relevance value (Q^2). The predictive-relevance value is calculated by using a formula as follows:

$$Q^2 = 1 - (1 - R^2_1) (1 - R^2_2) \dots (1 - R^2_3)$$

The R^2 value for each independent variable is shown on Table 7 as follows:

Table 7. R-Square Value of Endogen Variable

<i>Variable</i>	<i>R-square</i>
Share Income	0.076600
Systematic Risk	0.119455

Based on the said table, it is found out that the predictive-relevance value is at the amount of 0.1869 or 18.69 %, meaning that the model is able to explain the phenomena of return on share at the amount of 18.69% whereas the remaining 81.31% is explained by other variables not yet been included into the model and also *error*. Further testing is to see the influence significance of the fundamental ratio, market ratio, business performance to the systematic risk and return on shares by seeing the parameter coefficient and significance value of t-statistic, and presented in Table 8 as follows:

Table 8. Path Coefisients (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
Beta -> Return	-0.257546	-0.277582	0.103027	0.103027	2.499782
Business Performance -> Beta	0.141453	0.141072	0.071895	0.071895	1.967497
Business Performance -> Return	0.087916	0.095697	0.060471	0.060471	1.453864
Fundamental Ratio -> Beta	0.295667	0.045244	0.324124	0.324124	0.912201
Fundamental Ratio -> Return	0.073147	0.042724	0.127788	0.127788	0.572411
Market Ratio -> Beta	-0.057991	-0.028393	0.177943	0.177943	0.325897
Market Ratio -> Return	0.093660	0.010937	0.161811	0.161811	0.578826

From the aforesaid table, it is obvious that beta gives negative influence to the return with the coefficient at the amount of -0.258. The business performance has positive relationship with beta with the coefficient of 0.141. The business performance has positive performance to the return with the coefficient at the amount of 0.088. Fundamental ratio has positive influence to the beta with the coefficient of 0.296. Fundamental ratio has positive influence to the return with the coefficient at the amount of 0.073. Market risk has negative influence to the beta with the coefficient of 0.058. Market risk has positive influence to the return with the coefficient of 0.094. Only beta and return on share have significant influence to the return on shares because the value of T-statistics progression > T-table 1.96.

Hypothetical Testing

The first step to know the amount of the level of path coefficient of each variable can be illustrated at Figure-4 as follows:

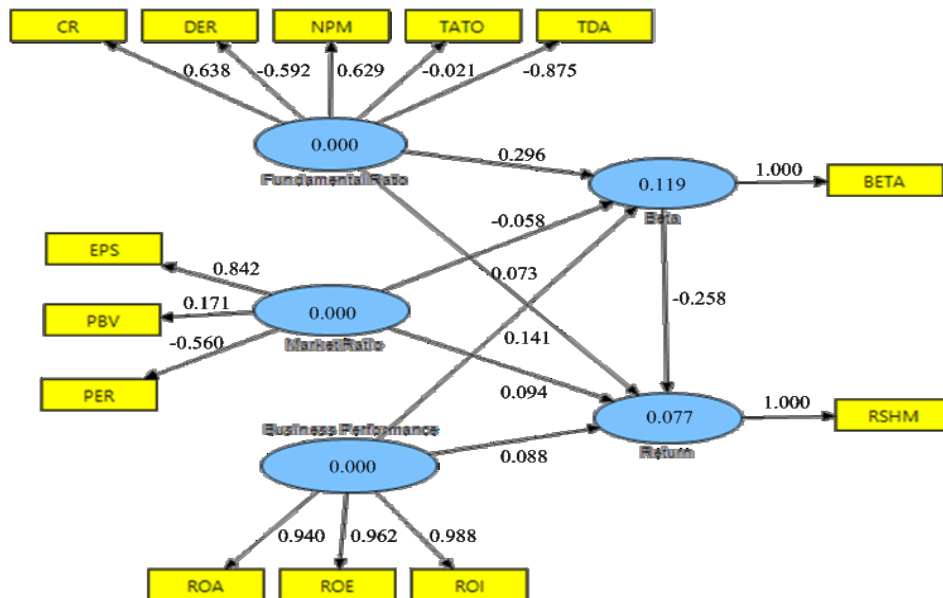


Figure 4. Output of Algorithm in the form of Path Diagram

In Figure-4 above, the amount of path coefficient level can be found out from the variables of fundamental ratio, market ratio and business performance to the beta. Then, we can find out the coefficient level of variables of fundamental ratio, market ratio and business performance to the return on shares.

Further, the next step for hypothetical testing directly among variables of fundamental ratio, market ratio, and business performance to the beta and also to the return on shares can be illustrated at Figure-5 as follows:

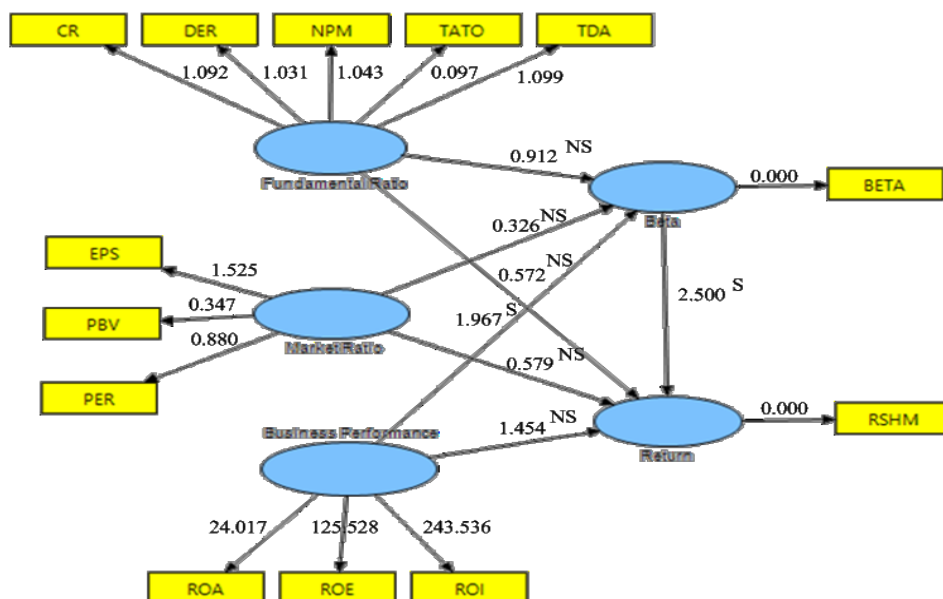


Figure 5. Output of Bootstrapping analysis in the form of Path Diagram

The descriptions on Figure-4 and Figure-5 above can be compiled into Table-9 as follows:

Table 9. Return of Direct Influence Hypothetical Testing

<i>Exogenous Variables</i>	<i>Endogenous Variable</i>	<i>Path Coefficient</i>	<i>T-Statistics (T-critical = 1.96)</i>	<i>Remark</i>
Fundamental Ratio	Beta	0.296	0.91	Not significant
Market Ratio	Beta	-0.058	0.326	Not significant
Business Performance	Beta	0.141	1.967	Significant
Fundamental Ratio	Return	0.073	0.572	Not significant
Market Ratio	Return	0.094	0.579	Not significant
Business Performance	Return	0.088	1.454	Not significant
Beta	Return	-0.258	2.500	Significant

Based on the analytical outputs shown on Table-9 above, it reveals that from the 7 (seven) direct influences among variables being tested, only two are found to be significant while the remaining five are not significant.

Fundamental ratio variables have positive and non-significant influence to the systematic risk. *Market ratio variables* have negative and non-significant influence to the systematic risk. *Business performance variables* positively and significantly influence the systematic risk. *Fundamental ratio variables* have positive and non-significant influence to the return on shares. Market ratio variables have negative and non-significant influence to the return on shares. Business performance variables positively and non-significantly influence the return on shares.

An investor has a high expectation from his investment. However, in order to get high return, the investor has to face high risk as well. *The higher return is expected, the higher as well the risk of investment is.* A research by Siegel (1992) comparing the return on shares to the bonds in USA within the period for almost a century (1902 – 1990) finds out that the return on shares is far much higher than the return on bonds. This is also followed by the fact that the risk of shares is much higher compared to the risk of bonds. Investment management distinguishes between the *expected return* and the *realized return* or the *actual return*. The expected return constitutes the level of return anticipated by the investors in the future, whereas the actual return is the return already been obtained in the past. The difference between the expected return and the actual return becomes the risk measuring tool that has to be considered by investors in the process of investment. The risk is frequently connected to the probability of actual return to be received which is much smaller than the expected return. The investment risk can be measured from the *variance or deviation* of the expected return standard. The attitude of investors upon the risk depends very much on their *preference to the risk*. The braver (*less risk averse*) investors tend to choose a high risk investment with the hope to obtain the high return as well. On the contrary, the investors who do not want to bear high investment risk (*more risk averse*) will have smaller probability to get a high return.

Influence of Fundamental Ratio of Systematic Risk

Fundamental ratio has no significant influence to the systematic risk. Output of this research is in compliance with the result of empirical study by Gundoro and Nurhayati (2001) proving that there is no relationship nor significant influence of the fundamental variables of CR, DER, TATO, NPM and TDA to the beta on shares at the Indonesia Stock Exchange. Output

of this research cannot confirm either the result of study conducted by Tandelilin (1997) or Natarsyah (2000) concluding in their studies that there is an influence of fundamental variables of CR, DER, TATO, NPM and TDA jointly to the beta. Further, this result can confirm output of research conducted by Rachmawaty (2011) in which DER does not significantly influence the beta of shares.

Result of this study is also in line with the output of empirical study performed by Gundoro and Nurhayati (2001) finding that the factors of CR, DER, TATO, NPM and TDA do not have significant influence to the beta of shares. This condition indicates that the Indonesia Stock Exchange is a developing stock market and each company tries to strengthen its position, so that the established price is not merely determined based on the earning obtained. The said subject also tends to indicate the '*incorrect opinion*' of investors that the profits of companies already been in the state of 'go-public' will always be stable, but in reality there are still external factors having sufficient significant influence to the systematic risk.

Influence of Market Ratio to Systematic Risk

Market ratio has no significant influence to the systematic risk at the agricultural shares. Output of this study cannot confirm the result of study carried out by Penman (2005) stating that *The Book-to-Price* significantly influences the beta of shares at New York Stock Exchange (NYSE) and AMEX. Also, this output cannot confirm the research by Machfiro and Sukoharsono (2013) in which PBV significantly influences the beta of shares at the Food and Beverage companies at the Indonesia Stock Exchange. Further, this output is not in compliance line with the result of study by Taani and Banykhaled (2011) in which PBV has significant influence to the beta of shares. Then, it is also in line with the output of study by Thim et al (2013) and Chambers et al (2013) in which EPS significantly influences the beta of shares.

However, this research is in compliance with the empirical study conducted by Fidiana (2010) in which EPS and PER do not have any significant influence to the beta of shares except PBV. This indicates that the book value reflects the adaptation value reflecting the net source value of the company in using the following alternatives. Besides, the book value takes the role as the *appraiser* for the *financial health* and reflects the optional value for the shareholder whose shares are more expensive compared to the price of other similar shares. Such kinds of shares invite the interest of investors, because they are expected to produce the high return.

Influence of Business Performance to Systematic Risk

Business performance significantly influences the systematic risk. Output of this study is in line with the result of study conducted by Suhardi (2009) and Rachmawaty (2011) in which ROA significantly influences the beta of shares. Further, the result of this study can also confirm the finding at a research by Meng (2011) in which ROE has significant influence to the beta of shares. This indicates that the role of beta mediation in a model shows how the investors in general decide to put a share into their portfolio.

Further, output of this study is not able to confirm the result of study performed by Sunardi (2010) in which ROI has no significant influence to the beta of shares. The business performance or level of investment return in which in this case is to measure the company's ability to produce a profit from the assets in use. The company value is determined by the *profit (return)* obtained and by the higher the profit margin. *Thus, the better the business performance elements are, the better company performance is indicated in general.* Under a normal situation, the relationship between the return on asset to the systematic risk is positive. The business performance or the level of investment return as one of the adjusted

ratios is related to the level of dividend paid, perception of shareholders and the investors. If the business performance increases, the dividend and level of the expected return will also increase, and so will the contrary. In this way, the level of systematic risk (beta) will increase as well.

Influence of Fundamental Ratio to the Return on Share

Fundamental ratio does not have significant influence to the return on shares. This output is in compliance with the result of research conducted by Indriana and Anik (2008) in which CR and DER do not significantly influence the return on company shares. Then, the result of this study can confirm the output of research by Estuari (2010) in which CR and DER do not have significant influence to the return of companies at the Indonesia Stock Exchange. Further, in line with the result of research carried out by Karaaslan et al., (2013) in which the leverage ratio in the form of TDA does not significantly influence the return on shares. It is also supported by Hovakimian et al., (2004) stating in his researches that DER and TDA do not have significant influence to the return on shares. In addition, the result of this study can also confirm the output of research conducted by Yulianty (2008) stating that the NPM and DER do not have significant influence to the return on shares and the output of study by Absari et al (2013) indicates that the liquidity ratio and the company solvability do not significantly influence the return on shares. Further, this research is also able to confirm that output of study by Muhayatsyah (2012) finding that TATO does not have significant influence to the return on consistent shares of the companies at the *Jakarta Islamic Index*.

In this way, it can be concluded that the market condition in general is not much influenced by the fundamental factors of the companies at the agricultural sectors and it shows that the investor's attention is not focused on the type of defensive shares, but on the companies having fast movement and able to produce more promising return on shares.

Influence of Market Ratio to the Return on Share

Market ratio does not significantly influence the return on shares. This output is in compliance with the result of research done by Yulianty (2008) and Indriana & Anik (2008) indicating that the market ratio consisting of PER, PBV and EPS do not have significant influence to the return on shares. Result of research by Adystya (2013) is also able to be confirmed indicating that the PER and EPS variables do not significantly influence the return on shares of companies at the Indonesia Stock Exchange. In line with the study conducted by Kristiana et al (2012) stating that EPS does not have significant influence to the return on shares of the manufacturing companies at the Indonesia Stock Exchange. This research is also in line with the output of research revealed by Tandelilin (1997) in which the non-significance of the said EPS and PER factors has the relevance with the Indonesia Stock Exchange. Further, it is also supported by the empirical study conducted by Absari et al (2013) finding that PER and EPS do not significantly influence the return on shares. Also in compliance with the research by Muhayatsyah (2012) declaring that PBV does not have significant influence to the return on shares.

This research is contradictory with the result of study by Kusumawardani (2009) concluding that EPS and PER significantly influence the share price at the LQ45. It is also in contradiction with the output of research by Aras and Yilmaz (2008) in which the financial ratio of PER and PBV has significant influence to the return on shares, in which it is considerable to predict the return on shares in the future.

Output of data analysis above indicates that in making the stock investment at the stock market, the investors do not care for the factors of PER, PBV and EPS above. In making

investment at the stock market, the investors tend to observe the *macro factors* first rather than the micro factors of a company.

Influence of Business Performance to the Return on Share

Business performance does not significantly influence the return on shares. Output of this research cannot confirm the result of research by Rachmawaty (2011) stating in her study that OA significantly influences the return on shares. Output of this study is also in contradiction with the result of empirical study conducted by Kusumawardani (2009) finding out that ROE and ROA influence the return on shares. Further, it is not in line with the result of study by Suhardi (2009) stating that ROE, ROA and ROI significantly influence the return on shares. This research is also in contradiction with output of research by Meng (2011) indicating that ROE has significant influence to the beta of shares.

This research can also confirm the result of empirical study by Muhayatsyah (2012) stating that ROA does not have significant influence to the return on shares. Further, this research is also in compliance with the result of research by Sunardi (2010) concluding that ROI does not significantly influence the return on shares. This research can confirm as well the result of research by Absari et al (2013) concluding that ROE does not influence the return on shares. This is possibly caused by several factors, such as the economic condition, namely the *global crisis* with the impact to the stock market and dropping down the company shares. Net incomes of companies and the share capitals owned by companies cause the fluctuation or up and down of the share price. This output is in contradiction with the theory that ROE, ROI and ROA constitute the (measuring) standard of profitability, in which the shareholders in general want to know the probability level of share capital and the profits that they have already re-invested again in the form of *the invested profits*. If the company capitals are traded at the stock exchange, the fluctuation (the high and the low level) of ROE, ROI and ROA will influence the demand level for such shares at the stock exchange and their selling price.

Influence of Systematic Risk to the Return on Share

The systematic risk significantly influences the return on shares. Output of this study is able to confirm the finding by Fama and MacBeth (1973) in which the risk and the return have significant influence at the New York Stock Exchange. It is also in line with the result of study by Lau et al (2002) declaring that there is a negative and significant relationship between *beta* and *the stock return* during the recession period or negative market excess return at the Singaporean and Malaysian shares. Further, output of this study can also confirm the finding by Allen and Celary (1998) in which in monthly return distribution at the Malaysia Stock Exchange, on its initial finding which is relatively almost the same with the market determination coefficient is in reversed condition compared to the systematic risk. Such finding also indicates that the beta shares obtain higher profit compared to the high beta shares. This shows that the systematic risk has negative and significant influence to the return on shares.

Meanwhile the output of this study is also in compliance with the finding by Sheu et al, (1998) and Lau et al, (2002) stating in their studies that the beta is negatively related to the return on shares if the market is in recession condition. But, when the market condition grows and develops, beta will then be positively related to the return on shares at the Taiwan Stock Exchange. Meanwhile, this research can also confirm the output of study by WBBA and Pratomo (2013) finding that beta negatively and significantly influences the return on shares at the banking sector in LQ45 Index.

Meanwhile, output of this research is also in line with the result of research by Al-Rjoub and Azzam (2012) finding that the significant influence of systematic risk to the stock return indicates the presence of economic crisis and the developing stock market in Jordania and the market in general related to the transaction sentiment of the investors. This research can also confirm the result of empirical study by Absari et al (2013) finding that the systematic risk significantly influences and is positively related to the return on shares.

The result of this study is also in line with the output of research by Lilti and Montagner (1998) in which the beta of shares significantly influences the determination of return at France Stock Exchange. The result of this study can also confirm the output of research conducted by Tandelilin and Poerwanto (2003) examining the relationship between beta and return, and find out that for the *positive market excess return* there is a positive relationship between beta and return, while for the *negative market excess return* there is a negative relationship between beta and the return. By separating the beta measuring at the bullish and bearish markets, Tandelilin (2001) finds that the beta of share portfolio is able to explain the return on portfolio.

During the period when the market return is negative, there will be a reversed relationship between beta of the market and return on shares. As expected, there is a significant positive relationship between *beta* and *return* by the time when the market condition is strong, and there is a significant negative relationship between beta and return when the market is in weak condition. Further, the evidence of positive risk is found when the return on trade stops by the time beta is used to measure the risk. This return supports to continuously use the beta as the measuring tool for the market risk.

CONCLUSION

Based on the output ratio of structural equation modeling, it can be concluded that the fundamental risk represented by *the manifest variables* of CR, DER, NPM, TATO, and TDA do not significantly influence the systematic risk on shares. Further, *the market ratio* consisting of EPS, PBV and PER have no significant influence to the systematic risk on shares. *Business performance*, in this respect is represented by ROA, ROE and ROI, significantly influences the systematic risk on shares.

Output of this study finds out as well that the fundamental ratio, market ratio and business performance do not have significant influence to the return on shares, but the systematic risk significantly influences the return on shares. The aforesaid output of study has been obtained during the period 2010 – 2013 in which the economic condition *is classified as being sufficiently weak* and influencing the market condition into the bearish shares. Inflation by then tends to increase until the end of period. The exchange rate of Rupiah also tends to decrease and USD increases more and more, whereas the Certificate of Bank Indonesia (SBI) tends to increase its interest.

In addition, the sufficiently increasing external factors are the price of CPO (Crude Palm Oil) having a tendency to decrease, and in coincidence with the presence of big harvests of *soy beans* and *sun flowers* in Europe constituting the substitute product for CPO. Apart from that, the export tax determined by the government is sufficiently high. Such condition triggers the occurrence of direct impact in the form of *bearish shares* at the plantation / estate sector and makes this sector less attractive for the investors, so that it gives a direct impact to the systematic risk. Consequently it influences negatively and significantly to the return on shares. Such condition makes the shares in agricultural sector classified into the type of *defensive shares*.

Output of this study is almost the same with that by Sheu et al (1998) in which beta is negatively related to the return of shares. Further, Tandelilin (2003) and Lau et al (2002) find out that among the relationships between beta and return, there is a *negative market excess* or reversed relationship between both of them. This is caused by the impacts of macro economy, government intervention and the irrational behavior of investors individually.

By virtue of the result of finding as stated above, the investors will be able to make prediction much more easily on the risk and return as well as on the prospect of shares in this agricultural sectors and able to make a decision on their investment wisely.

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REFERENCES

- [1] Absari et al. (2013). Analisis Pengaruh Faktor Fundamental Perusahaan Dan Risiko Sistematis Terhadap Return Saham. *Jurnal El-Muhasaba*, 3(2), 1-29.
- [2] Amanda, WBBA dan Pratomo, Wahyu Ario. (2013). Analisis Fundamental Dan Risiko Sistematis Terhadap Harga Saham Perbankan Yang Terdaftar Pada Indeks LQ 45. *Jurnal Ekonomi dan Keuangan*, 1(3).
- [3] Allen, D. E., & Cleary, F. (1998). Determinants of the Cross-Section of Stock Returns in the Malaysian Stock Market. *International Review of Financial Analysis*, 7(3), 253-275.
- [4] Alexakis et al. (2010). Predictability of Stock Returns Using Financial Statement Information: Evidence On Semi-Strong Efficiency Of Emerging Greek Stock Market. *Applied Financial Economics* 20, 1321-1326.
- [5] Al-Rjoub et al. (2012). Financial crises, stock return and volatility in an emerging stock market: the case of Jordan. *Journal of Economic Studies*, 39(2), 2012, 178-211.
- [6] Aras, G., & Yilmaz, M. K. (2008). Price-Earning Ratio, Dividend Yield, And Market-To-Book Ratio To Predict Return On Stock Market: Evidence From The Emerging Markets. *Journal of Global Business and Technology*, 4(1), 18-30.
- [7] Beaver, W., P., Kettler, dan M., Scholes, (1970). The Association between Market Determined and Accounting Determined Risk Measure. *The Accounting Review* 45, (October), 654-682.
- [8] Chambers et al. (2013). An Analysis of the Effects of Capital Structure and the Beta Coefficient on Stock Returns: A Case Study of the Istanbul Stock Exchange (ISE) – Manufacturing Company. *International Journal of business and Social Science*, 4(7), 279-290.
- [9] Chin, L., & Hong Lee, W. (2008). Can Financial Ratios Predict The Malaysian Stock Exchange? *Journal Integration & Dissemination*, 2, 7-8.
- [10] Connor, O., & Canbas, (1997). Pengaruh Variabel Fundamental dan Teknikal Terhadap Harga Saham. *Journal Ekofoem Online*, pp 1-7.
- [11] Darmadji, Tjiptono dan Hendy M. Fakhruddin. (2001). *Pasar Modal Indonesia*. Jakarta: Salemba Empat.
- [12] Estuari, A. (2010). Pengaruh Currant Ratio (CR), Debt to Equity Ratio (DER), Return on Investment (ROI), Earning Per Share (EPS) Dan Dividend Payout Ratio (DPR) Terhadap Return Saham Perusahaan Di Bursa Efek Indonesia, *Thesis*, Universitas Diponegoro.
- [13] Fama, F., & MacBeth, J. D. (1973). Risk, Return, and Equilibrium: Empirical Tests. *The Journal of Political Economy*, 81(3) (may-Jun). Pp. 607-636.
- [14] Farkhan dan Ika. (2012). Pengaruh Rasio Keuangan Terhadap Return Saham Perusahaan Manufaktur Di Bursa Efek Indonesia (Studi kasus Pada Perusahaan Manufaktur Sektor food And Beverage). *Jurnal Value Added*, 9(1).
- [15] Fidiana. (2010). Pengaruh Tingkat Suku Bunga, Tingkat Inflasi, Dan Rasio Keuangan Terhadap Beta Saham. *Jurnal Investasi*, 6(1), 31-46.

- [16] Gudono dan Nurhayati, Nunik, (2001). The Association between Market-Determined and Accounting-Determined Risk Measures: Evidence from Indonesia. *Jurnal Riset Akuntansi, Manajemen, dan Ekonomi*, 1(2), 171-176
- [17] Hovakimian et al., (2004). Determinants of Target Capital Structure: The Case of Dual Debt and Equity Issues. *Journal of Financial Economics* 71: p.517-540.
- [18] Indriana, TL, Anik Widyani. (2010). Pengaruh ROA, EPS, Current Ratio, DER dan Inflasi terhadap Return Saham (Studi Kasus pada Perusahaan Manufaktur di BEI Periode Tahun 2006-2008). *Majalah Ilmiah Fakultas Ekonomi Universitas Semarang*, 9(1).
- [19] Karaaslan, Burak et al. (2013). An Analysis of the Effects of Capital Structure and the Beta Coefficient on Stock Returns: A Case Study of the Istanbul Stock Exchange (ISE) - Manufacturing Industry. *International Journal of Business and Social Science*, 4(7), 279-290.
- [20] Kristiana, Vera Anis dan Sriwidodo, Untung. (2012). Analisis Faktor-Faktor Yang Mempengaruhi Return saham Investor Pada Perusahaan Manufaktur Di Bursa Efek Indonesia. *Jurnal Ekonomi dan Kewirausahaan*, 12(1), 1-11.
- [21] Kusumawardani, A. (2009). *Analisis Pengaruh EPS, PER, ROE, FK, DER, CER Pada Harga Saham Dan dampaknya Terhadap Kinerja Perusahaan LQ 45 yang Terdaftar Di BEI Periode 2005-2009*. Universitas Gunadarma.
- [22] Lau et al., (2002). Stock Return and Beta, Firm Size, E/P, CF/P. Book-to-Market, and Sales Growth: Evidence from Singapore and Malaysia. *Journal of Multinational Financial Management*, 12, 207-222.
- [23] Lilit, J. J., & Montagner, H. R. (1998). Beta, size and returns: A study on the French Stock Exchange. *Applied Financial Economics*, 8, 13-20.
- [24] Machfiro, S., & dan Sukoharsono, E. G. (2013). The Effect Of Financial Variables On The Company's Value (Study of Food and Beverage Companies that are listed on Indonesia Stock Exchange Period 2008-2011). *Journal FEB Unbra*.
- [25] Muhayatsyah, A. (2012). Pengaruh Kinerja Keuangan Dan Makro Ekonomi Terhadap Return Dan Beta Saham Syariah Pada Perusahaan Yang Konsisten Di Jakarta Islamic Index. *Jurnal Hukum Islam dan Ekonomi*. 1(2), 1-24.
- [26] Natarsyah, S. (2000). Analisis Pengaruh Beberapa Faktor Fundamental Dari Resiko Sistematis terhadap Harga Saham: Kasus Industri Barang Konsumsi yang Go-Public di Pasar Modal Indonesia. *Jurnal Ekonomi dan Bisnis Indonesia*, 15(Juli), 294-312.
- [27] Ohlson, J. A. (1980). Financial ratios and the probabilistic prediction of bankruptcy. *Journal of Accounting Research*, 18(1), 109-131.
- [28] Paramitasari, R. (2011). *Pengaruh Risiko Sistematis Dan Risiko Tidak Sistematis terhadap Expected Return Portofolio Saham Perusahaan manufaktur Yang Terdaftar Di Bursa Efek Indonesia*. Tesis, Fakultas Ekonomi Universitas Sebelas Maret. Surakarta.
- [29] Penman, S. H. (2005). *The Book-of-Price Effect in Stock Returns: Accounting for Leverage*. The Rodney L. White Center for Financial Research. University of Pennsylvania. USA: p. 1-62.
- [30] Pettengill et al. (1995). The conditional relation between beta and returns. *Journal of Financial and Quantitative Analysis*, 30, 101-116.

- [31] Racmawati, S. (2011). *Analisis Pengaruh Faktor Fundamental Terhadap Risiko Sistematis (Beta) Pada Saham LQ 45 Yang Terdaftar Di Bursa Efek Indonesia (BEI) periode 2006-2008*. Tesis, Universitas Diponegoro, Semarang.
- [32] Shew et al. (1998). Cross-Setional Relationships between Stock Returns and market Beta, Trading Volume, and Sales-to-Price in Taiwan. *International Review of Financial Analysis*, 7(1), 1-18.
- [33] Siegel, J. J. (1992). Does It Pay Stock Investors to Forecast the Business Cycle? *Journal of Portfolio Management*, 18(1), 28-38.
- [34] Suhardi, D. A. (2009). Mediasi Beta Saham Dalam Model Pertumbuhan Harga Saham Denan Profitabilitas Dan Suku Bunga. *Media Riset Bisnis & Manajemen*, 9(1), 91-113.
- [35] Sunardi, S. (2010). Pengaruh Penilaian Kinerja dengan ROI dan EVA terhadap Return Saham pada Perusahaan yang Tergabung dalam Indeks LQ 45 di Bursa Efek Indonesia. *Jurnal Akuntansi*, 2(1), 70-92.
- [36] Suharli, M. (2005). Studi Empiris Terhadap Dua Faktor Yang Mempengaruhi Return Saham Pada Industri Food & Beverages Di Burs Efek Jakarta. *Jurnal Akuntansi & Keuangan*, 7(2), 99-116.
- [37] Tandelilin, E. (2003). Risiko Sistemik (Beta): Berbagai Isu Pengestimasian Dan Keterapannya Dalam Penelitian Dan Praktik. *Pidato Pengukuhan Jabatan Guru Besar pada Fakultas Ekonomi Unviersitas Gadjah Mada*, 1-46.
- [38] Taani, K., & Banykhaled, B. (2011). The Effect of Financial Ratios, firm Size and Cash Flows from Operating Activities on Earning per Share: An applied Study: On Jordanian Industrial Sector). *International Journal of Social Science and Humanity Studies*, 3(1), 1309-8063.
- [39] Tandelilin, E. (1997). Determinant of Systematic Risk, The Experience of Some Indonesia Common Stock. *Kelola*, 16(IV), 101-115.
- [40] Tandelilin, E. (2001). Beta Pada Pasar Bullish dan Bearish: Studi Empiris di Bursa Efek Jakarta. *Jurnal Ekonomi dan BisnisIndonesia*, 16(3), 261-272.
- [41] Thim et al. (2012). Stock Performance of the Property Sector in Malaysia. *Journal of Modern Accounting adn Auditing*, 8(2), 241-246.
- [42] Yulianty, E. (2008). Pengaruh PER, PBV, GPM dan DER Terhadap Return Saham Periode Pengamatan 2001-2005. *Jurnal Ekonomi dan Bisnis*, 13(2), 54-59.