

Micro and Macro Fundamental Factors, Systematic Risk and Stock Performance after Global Crisis

Iis Ismawati & Tulus Haryono

Universitas Sultan Agung Tirtayasa

Universitas Sebelas Maret

Abstract

The objectives of this research are examine the fundamental factors of macro (Rupiah exchange rates (NTR) and the interest rate of Bank Indonesia Certificate (SBI)) and micro (current ratio (CR), debt to equity ratio (DER), total asset turnover (TATO) and return on assets (ROA), the systematic risk to the increasing of stock performance manufacturing company in Indonesia after global crisis. This research used sample from manufacturing industry companies in Indonesia Stock Exchange. It used panel cross section data and time series data pre-crisis in (2004-2007) and after crisis in (2009-2013). Using purposive sampling, and the analytical technique used multiple regression analysis. The results showed that variable micro fundamentals (current ratio (CR), debt to equity ratio (DER), total asset turnover (TATO), return on assets (ROA), after global crisis has given significant effect on Systematic Risk (RS), variable micro fundamentals (current ratio (CR), debt to equity ratio (DER), total asset turnover (TATO), return on assets (ROA), after global crisis also given significant effect to the performance of stocks (KS) the systematic risk (RS) as an intervening variable effect of variable macro fundamentals (rupiah exchange rates (NTR) and micro fundamental (debt to equity rati/DER)

Keywords: *micro-macro fundamental factors, systematic risk, stock return, and global crisis*

1. INTRODUCTION

The attractiveness of Indonesia Stock Exchange as an investment vehicle for investors is supported by the increasing of a number of investment managers, owned by securities firms as an exchange members. Investment managers are always ready to analyze capital market performance that can be used in making investment decisions both on the orders of investors, dealers, stock brokers or bonds.

In the capital market there are two ways of investment analysis, they are technical analysis that concern on stock price movements in making decisions to sell or buy shares, the second is fundamental analysis that concern on the fundamental condition of the company. Before global crisis, investment managers in making investment decisions only believed in technical analysis and ignored fundamental analysis, this technical analysis was used about 90% of stockbrokers (Taylor and Allan, 1992). After global crisis they realized that fundamental analysis was necessary to look at the actual company condition to reduce the risk of incorrect investment addresses to the company which fundamentally unfavorable.

Fundamental analysis consists of micro and macro fundamental analysis. Micro-fundamentals analysis includes analysis of company's financial ratios. Robert Ang (1997) classifies these financial ratios into 5 types: liquidity ratios, activity ratios, profitability ratios, solvency ratios and market ratios. The increasing of company's financial performance as reflected by its ratio, it will higher company's stock price. Current ratio (CR) is the most important liquidity ratio among the existing liquidity ratios. Solvency ratio usually use Debt to Equity Ratio (DER). Return on asset (ROA) is the most important profitability ratio among profitability ratios. While the ratio of activity that is often used is Total Asset Turn Over (TATO).

In theory, there are many indicators that can measure macro variables, including political economic indicators. Indicators are quite commonly used to predict fluctuations in the stock is a variable that is directly controlled through monetary policy transmission mechanism through financial markets (Bank Indonesia, 2004) which includes the interest rate and foreign exchange rates. The value of a company needs to be linked to exchange rate movements. Shapiro (1975) conducted research to predict the addition of value from the company in home country with the depreciation of the home country exchange rate. Adler and Dumas (1984) conducted a study and found that companies whose entire operations in domestic level are also affected by the exchange rate, if the input and output prices the companies are affected by currency movements. Several other relevant researches conducted by Mao and Kao (1990), and Bortov and Bodnar (1992) found that the company's stock value exporters are more sensitive to the changes of foreign currency exchange rates.

There are twoinherent aspects in investment, the expected rate of return (return) and the risk of not achieving the expected return. The high risk of stocks is related to macroeconomic conditions, such as economic recession, political turmoil, etc. Industry and company characteristics. Beta of a security is important to analyze the securities or portfolio. Beta of a security indicates the sensitivity of a securities' gain level in market changes. Jensen and Johnson (1995) suggest that changes in interest rates will elicit varied reactions to anykinds of industry sectors. The increasing of interest rates was followed by the performance of the US capital markets which reacted negatively, and vice versa (Waud, 1970 and Fama, 1990 in Lantara, 2004).

Anastasia (2001) fundamental factors and cystmatic risk simultaneously affected on stock prices, Abdurahman (2003), current ratio, asset size earning variability affected on stock prices. Tendeilin (1997)

financial and accounting variables are more influential on the beta than macroeconomic variables such as inflation, GDP, and interest rates, firm size, government policy in economic field. Selection of manufacturing companies listed on the Stock Exchange as objects of this research, because the type of manufacturing companies classified as leading sector for other sectors to increase economic growth and the majority of foreign investors whose shares are embedded in the manufacturing industry (Chandra, 2010).

Based on above description, it is necessary to conduct research related to the stock performance, macro and micro fundamental factors with systematic risk as intervening variables before and after global crisis. Micro fundamental factors used in this research are: CR, DER, TATO, and ROA while the macro fundamentals are Rupiah Exchange Rate (NTR), and SBI Interest Rates.

2. THEORETICAL FOUNDATION

Agency theory by Jensen and Meckling (1976), states that between owners and management have different interests. The main principle of this theory states the existence of a working relationship between the party who give authority (principal), the owner with the party who receives the authority (agent), namely manager. The existence of these various interests, each party seeking to enlarge its own advantage. Principal (owner) wants maximum and prompt return on the investment that has been made. While the agent (manager) wants his interests accommodated as big as possible for the performance.

The economic Nobel Prize in 2001 received by Akerlof, Spence and Stiglitz which initiated Signalling Theory and asymmetric informations. Signaling theory is developed in economics and finance to take into account the fact that insiders generally have better and faster information related to current conditions and prospects of company than outsider investors. Signalling theory is an explanation of information asymmetry. The occurrence of information asymmetry is due to the management having more information about the prospect of the company. To avoid information asymmetry, companies must provide information as a signal to the investor. Information asymmetry needs to be minimized, so that the go public company can inform the company's situation in a transparent manner to investors.

Dornbusch and Fisher (1980) argue that exchange rate movements affect to international competitiveness and trade balance positions, and the consequences will also impact on the real output of the country which in turn will affect current and future cash flows and stock prices of company. Equity as a part of the company's wealth, can affect to the behavior of exchange rates through the mechanism of money demand based on monetary expert exchange rate model (Gavin, 1989).

Previous studies that have conducted research on the relationship between capital market and exchange market conducted by Aggarwal (1981), Soenen and Hennigar (1988), Ma and Kao (1990), Roll (1992) and Chow (1997). They found different outcomes related to the relationship of the two markets. Aggarwal (1981) found that revaluation of US \$ is positively associated with stock market returns. While Soenen and Hennigar (1988) found a negative relationship. Roll (1982) using daily data during the period 1988-1991 found a positive relationship between the two markets. Chow (1997) using monthly data for the period 1977-1989 found no relationship between stock performance and exchange rate returns.

In 1990, William Sharpe earned an economic nobel over the theory of financial asset price formation, which was then called Capital Asset Pricing Model (CAPM). The CAPM model was introduced by Treynor, Sharpe and Litner. The CAPM model is a portfolio theory developed by Markowitz by introducing a new term of systematic risk and specific risk / unsystematic risk.

According to Capital Asset Pricing Model (CAPM) theory, the expected income level of a securities can be calculated by:

$$E(R_i) = R_f + \beta_i [E(R_M) - R_f]$$

Where:

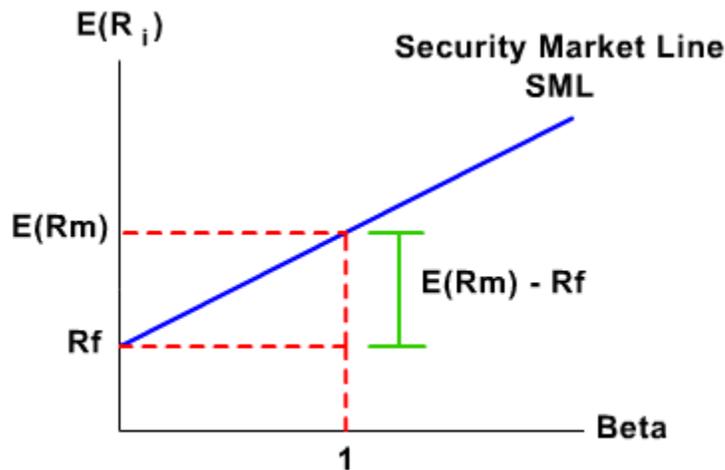
$E(R_i)$ = expected income level of securities i ,

R_f = Risk-free rate,

$E(R_M)$ = expected level of income from the market portfolio, and

β_i = Unbalanced risk standard of securities i .

CML describes the relationship of risk and returns on a balanced market, for efficient portfolios.



Picture 1 *Security Market Line*

Helfert (1996) reveals there are many financial ratios that can be used to perform a company performance assessment. Benefit ratio analysis is basically not only useful for internal corporate interests but also for outsiders. In this case a potential investor or creditor invested funds in companies that go public. For financial managers, calculating certain ratios will gain information into the strengths and weaknesses faced by companies in financial sector, so that they can make important decisions (White et al., 2002). In this research used 4 financial ratios, they are Current Ratio (CR) is liquidity ratio, Debt Equity Ratio (DER) is leverage ratio, Total Asset Turn Over (TATO), Return on Assets (ROA) is profitability ratio, .

Sartono (2001), Current ratio (CR) is a measure for liquidity ability (short-term solvency) that is the ability to pay debts that must immediately be found with current assets. Debt to Equity Ratio (DER) reflects the ability of a company to fulfill its obligations as indicated by some part of its own capital or equity used to repay debt. Debt to Equity Ratio (DER) is the ratio between total debt owned by the company with total equity.

Riyanto (1995) Total asset turn over ratio or total asset turnover is used to measure the extent to which the capability of funds embedded in the entire assets of the company rotates within a certain period or capital capabilities invested to generate revenue. Further asset rotation ratios according to Brigham and Houston (2004), are calculated by dividing sales by total assets.

Belkaoui (1998), ROA is used to measure the financial performance of multinational companies especially when viewed from the standpoint of profitability and investment opportunities. Return on

Assets (ROA) is a ratio that measures a company's ability to generate net income based on certain asset levels. Bringham and Hounston (2004) stated that ROA is the ratio between net income to total assets.

Risk is the possible difference between the actual return received and the expected return. The greater the likelihood of the difference, the greater the investment risk. There are several sources of risk that can affect to the amount of risk in investment. These sources include, interest rate risk, market risk, inflation risk, business risk, financial risk, liquidity risk, currency exchange risk and state risk (Tandelilin, 2001).

Jones (2004), "Systematic risk as is shown in part two on portfolio management an investor can construct a diversified portfolio and eliminate part of the total risk. The diversifiable or non market part. The diversity of portfolios or the market risk variability in a securities total return are directly associated with overall movements in the general market or economy ".

Risk is the possible difference between the actual return received and the expected return. The greater the likelihood of the difference, the greater the investment risk. There are several sources of risk that can affect to the amount of risk an investment. These sources include, interest rate risk, market risk, inflation risk, business risk, financial risk, liquidity risk, currency exchange risk and state risk (Tandelilin, 2001).

The total return is overall return of an investment for a certain period consisting of capital gain (loss) and yield. Capital gain (loss) is the difference in profit (loss) from the current investment price, relative to the price in past period (Jogiyanto, 1998). This study uses the concept of capital gain that is the difference between the current stock price (Closing price in period t) with the previous period share price (Closing price in period t-1) divided by the price of the previous period (Closing price in period t-1). Closing price is the closing price or the last trading price for a period. Because of its availability, closing price is the most frequently used price for analysis (Salim, 2003).

Based on the theoretical basis and the results of previous research, the framework of thought in this study can be described as follows:

H1: CR, DER, TATO, ROA, NTR and SBI have an effect on systematic risk

H2: CR, DER, TATO, ROA, NTR, SBI and RS influence on stock performance

H3: Systematic risk as intervening variable influence of CR, DER, TATO, ROA, NTR and SBI on stock performance.

3. RESEARCH METHODS

The population of this study are all manufacturing companies listed in Indonesia Stock Exchange from 2008-2013. The selection of this manufacturing industry as a population because the manufacturing sector is the group with the largest number of companies compared to other sectors that is 35% (www.bapepam.com), so it is considered quite representative in representing the actual BEI conditions. The type of data used in this study is secondary data.

Table 1. Variable Operationalization

Variable	Variable Definition	Measurement formula	Scale
Stock Performance	Capital gain: Difference between Closing Price in period t With Closing price Previous period (t-1)	$Return = \frac{(CP_t - CP_{t-1})}{CP_{t-1}}$	Ratio
Systematic risk	Beta is a measure of volatility (volatility) return of a Securities or portfolio returns against market returns	$rit = \alpha_i + \beta_i RMt + \epsilon_{it}$	Ratio
<i>Current ratio</i> (CR)	The ability of the company to meet all short-term obligations	$\frac{Current\ asset}{Current\ liabilities}$	Ratio
<i>Debt to Equity Ratio</i> (DER)	The ability of the company's capital to be used as collateral for all debts	$\frac{Total\ debt}{Total\ equity}$	Ratio
<i>Total Asset Turn Over</i> (TATO)	The number of company's assets has experienced a turnaround in each period	$\frac{Net\ sales}{Total\ Assets}$	Ratio
<i>Return to Assets</i> (ROA)	Company's ability to generate net profit after tax based on the level of assets owned by the company	$\frac{EAT}{Total\ Assets}$	Ratio
Rupiah exchange rate	Rupiah currency exchange rate in foreign currency (USD)	The sensitivity of Rupiah against the stock price $SHS = \alpha_i + \beta_i (NTRt) + \epsilon_{it}$	Ratio
SBI	SBI rate	SBI sensitivity to stock price $SHS = \alpha_i + \beta_i (SBI_t) + \epsilon_{it}$	Ratio

This study aims to examine whether micro-fundamentals (CR, DER, TATO, and ROA), macro fundamentals (NTR and SBI) and systematic risks affect to the stock performance, test whether micro-fundamentals factor (CR, DER, TATO, and ROA) And macro fundamental (NTR and SBI) have an effect on systematic risk, whether systematic risk is an intervening variable of micro fundamentals factor (CR, DER, TATO, and ROA), macro fundamental (NTR and SBI) to stock performance. It will use multiple linear regression analysis techniques. Before this analysis is carried out, it is first necessary to test Classical Assumptions to produce a valid parameter estimator model value. The value will be fulfilled if the results of the classical assumption test meet the assumption of normality, and does not occur heteroscedasticity, autocorrelation, and multicollinearity.

Descriptive statistics aim to provide an overview of data or samples, presenting sample selection, minimum value (min), mean (mean), and standard deviation.

This classical assumption test aims to know and test the feasibility of the regression model used in this study. This test is also intended to ensure that in the regression model used there is no multicollinearity and heteroscedasticity and to ensure that the resulting data is normally distributed (Ghozali, 2006). Include: normality test, multicollinearity test, heteroscedasticity test, autocorrelation test.

To test the influence between variables, then first performed data analysis by using statistical analysis. Statistical analysis used in this research is multiple linear regression analysis and coefficient of determination. This regression equation aims to predict the size of the dependent variable by using the data of known variable. The model of the regression equation to be tested is as follows:

The model of the regression equation to be tested is as follows:

$$Y1 (RS) = a + b1CR + b2DER + b3TATO + b4ROA + b5NTR + b6SBI + e$$

$$Y2 (KS) = a + b7CR + b8DER + b9TATO + b10ROA + b11NTR + b12SBI + b13RSe$$

$$Y3 (KS) = a + b7CR + b8DER + b9TATO + b10ROA + b11NTR + b12SBI * b15BS + e$$

Where :

Y1 (RS) = dependent Systematic Risk

Y2 (KS) = Stock Performance Percentage

A = Constants

CR = Current ratio

DER = Debt to Equity ratio

TATO = Total Asset turn Over

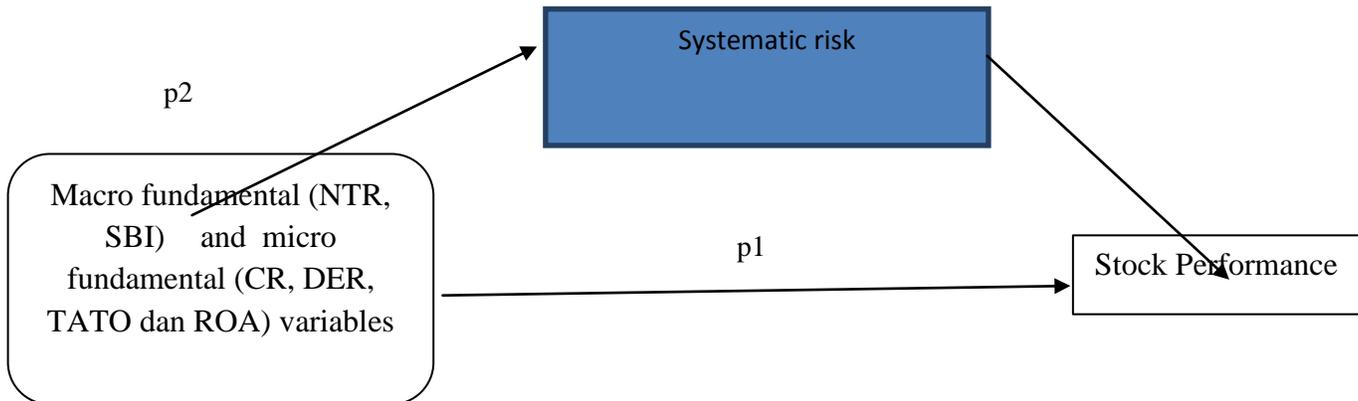
ROA = Return on Asset

NTR = rupiah exchange rate

SBI = SBI interest rate

And e = error

Path analysis (path analysis) for mediation testing can be described in a model as follows:



Picture 2. Model Path Analysis

The direct effect of fundamental variables to stock performance = $p1$

The indirect effect of fundamental variables to stock performance = $p2 \times p3$

Total influence (correlation of fundamental variables to stock performance) = $p1 + (p2 \times p3)$

The systematic risk variable is said to be an intervening variable if: The coefficient value of Standardized beta ($p2 \times p3$) > $p1$, with the note of standardized coefficients beta $p2$ and $p3$ significant. The following is the equation of multiple linear regression analysis with the path analysis to test the fourth hypothesis (H4) the influence of Macro (NTR, SBI) and Micro fundamental on stock performance with Risk sistematic as an intervening variable after crisis is shown as follows:

$$Y.1 (KS) = a + b1.1NTR + b13.1SBI + b11.1RS + e$$

$$Y.2 (KS) = a + b12.2NTR + b13.2SBI + b11.2RS + e$$

4. DISCUSSION

The influence of macro and micro variables on the systematic risk of the Company

The global crisis makes management of company must work hard to eliminate the adverse effects caused by the crisis, based on the data obtained in field, apparently all the policies taken by the company management both in terms of regulation of liquidity, corporate activity settings, corporate leverage and corporate business in obtaining profit and economics macro conditions related to exchange rate fluctuation and interest rate of SBI also give impact to company risk, it is proved that from the result of hypothesis analysis stated that simultaneously / model stated that macro and micro variable company that is CR, DER, TATO, ROA, NTR and SBI are significantly influence to the systematic risk of the company with a significance level of 0%. Partially CR, DER, TATO, ROA and NTR have negative relationship and SBI has positive relation with systematic risk, although partially significant effect only DER and SBI against systematic risk have significant effect 5% while NTR 10% significance.

Based on the empirical data from the results of research states that the Current Ratio has negative relationship to systematic risk, this is because at that time where the occurrence of global crisis occurs, companies that have high funds in the response by market indicates that the company is safe because it can pay all the current liabilities Which must be paid immediately so that the risk decreases. Large debt utilization policies during crisis can also have a positive impact that can reduce corporate risk. The

decrease of corporate risk caused by the lending which increase during crisis as some of the shareholder risk can be diverted to creditor risk. The high turnover of assets leads to the risk of the company declining, because of good turnover rate means the company's opportunity to get profit from the company's assets are increase. Similarly ROAs, companies that can create high returns on their assets during crisis lead to a decrease in systematic risk. This is because the results of corporate profits can be used to increase the company's operational and pay debts so that the systematic risk of the company will decrease. The exchange rate of US \$ against rupiah rises creates an increasing systematic risk because the company's debt and debt value becomes increase with the increasing of the SBI interest rate which resulted the investment climate became difficult because of the high capital cost, while the income decreases as the amount of demand decreases due to the crisis Which resulted declining in consumer purchasing power.

This Conditions support the results of research Nining et.al. (2010), (Robert Ang, 1997). Companies with high DERs will have high risks because shareholder powers will be taken by creditors, Syahib Natarsyah (2000), Rachelis (2000), Dedi Haryanto (2007). Companies that have a good Current Ratio will smoothly operationalize their companies because there are no obstacles caused by the lack of liquidity tools that will reduce the risk of the company. And contrary to the results of Beaver et al. (1970), Farelly et al. (1982), Capstaff (1992) in Abdurahim (2003), indicating negative influence of current ratio on Systematic Risk.

Table 1 Regression Result Effect of CR, DER, TATO, ROA, NTR and SBI on Systematic Risk

Independent Variable	Beta coefficient	t-count	Sig-t
CR	-,062	-,843	,401
DER	-,249	-3,444	,001
TATO	-,018	-,255	,799
ROA	-,026	-,363	,717
NTR	-,127	-1,691	,093
SBI	,281	3,762	,000

*, **, *** determine the significance at 10%, 5% and 1% respectively

R- Square =0,139

Adj. R- Square =0.111

F-count =4,942

Significance =0,000

*= Significance < 1%

** = Significance <5%

***= Significance > 10%

Source: output spss this research data

The Effect of Micro and Macro Fundamental Variables on Stock Performance

Profits that can be gained by shareholders or investors in the capital market are one of the rising stock prices. The price of a company's stock will increase if the demand for the company's stock rises, supported by increasing in investment interest of investors to invest in the company as a result of positive sentiments related to the management, condition and prospects of the company in the future. The market will assume that if the company's microcompany is in good management so that the company's policies of

both liquidity, leverage and activity will have good impacts on corporate profits as well as a good macro environment will support the company in the creation of maximum returns. But the opposite will happened if the company's management does not work maximally in managing the company and the macro environment which does not support, the expected profit will not be achieved.

The global crisis that occurred in 2008 had a negative impact on manufacturing industries in Indonesia so that they lost the opportunity to gain profit because they could not market their products due to the loss of demand caused by the declining purchasing power due to the crisis, the difficulty of raw materials, and because the prices rose Due to the rise of US \$ to Rupiah exchange rate. Increased US dollar exchange rate against Rupiah or declining Rupiah exchange rate against US \$ due to increased demand for US \$ and decline stock of foreign currency reserves US \$ due to maturity of repayment period of manufacturing industry debts and withdrawal of investment of foreign investors due to financial crisis or due to Other negative sentiment that makes them attract their investment in Indonesian capital market

Management policy in terms of determining Current ratio, total assets Turn over and Return On Asset and declining exchange rate of rupiah against US \$ and increasing of SBI interest rate during global crisis turns out to have an effect on positive relationship between micro and macro fundamental variable to stock performance Only debt to equity ratio is negatively related to stock performance which means that if DER goes up then stock performance will decrease. Based on F test from the research result stated that micro and macro fundamental variables simultaneously influence to stock performance at the 0.0% level <1%. While partially according to t Test all micro and macro fundamental variables have a positive beta meaning positive influence on stock performance means if CR, TATO, ROA, SBI and NTR rise then the company's stock performance will rise but only DER variables are negatively related to the performance Stock of micro and macro fundamental fundamentals toward stock performance based on the research result shows that the significance level is less than 5% only the influence of Bank Indonesia Certificates (SBI) only has a positive relationship is not significant equal to more than 10%.

Table 3 Regression Result Effect of CR, DER, TATO, ROA, NTR and SBI on Stock Performance

Independent variable	Beta coefficient	t-count	Sig-t
CR	,155	2,375	,019
DER	-,308	-4,689	,000
TATO	,146	2,323	,021
ROA	,179	2,881	,004
NTR	,265	3,981	,000
SBI	,063	,925	,356
RS	,267	4,116	,000

*, **, *** determine the significance at 10%, 5% and 1% respectively

R- Square =0,336

Adj. R- Square =0.311

F-count =13,225

Significance =0,000

*= Significance < 1%

** = Significance <5%

***= Significance > 10%

Source: output spss this research data

The influence of micro and macro fundamental variables on stock performance with systematic risk as intervening variable.

Based on the results of the path analysis, because of the 3 existing models that illustrate the relationship between CR, DER, TATO, ROA, NTR and SBI on stock performance with Systematic Risk as intervening variable can be fulfilled, because from model 1,2 and 3 Which is significant only DER and NTR, while the requirement of acceptance of variables as intervening variable is if the relationship between independent variables with intervening / mediation variables are significant. In addition, the requirement to be an intervening variable is the indirect effect must be greater with the direct influence between the influence of debt to equity ratio (DER) and rupiah exchange rate (NTR), so the systematic risk is only the intervening variable for the influence of micro fundamental variables (DER) and macro (Rupiah exchange rate / NTR) on stock performance only, while for other macro and micro variables such as SBI, CR, ROA and TATO, systematic risk can not be intervening variable.

Table 4. Sistemmatic risk as intervening variabel effect macro and micro variables to stock performance

N o	Variabel X	P2 (Y1) <i>x-Risiko Sistematik</i>	P3 (Y2) Rs--Kinerja saham	P2xP3 x—Kinerja saham	P1	P2xP3 vs P1
1	CR	-,062	0,267 ***	-0,016554	,155**	<
2	DER	-,249***	0,267 ***	-0,066483	- ,308***	>
3	TATO	-,018	0,267 ***	-0,004806	,146**	<
4	ROA	-,026	0,267 ***	-0,006942	,179***	<
5	NTR	,281***	0,267 ***	0,075027	,063***	>
6	SBI	-,127*	0,267 ***	-0,033909	,265	<

*, **, *** determine the significance at 10%, 5% and 1% respectively
 *= Signifikansi < 1%
 ** = Signifikansi <5%
 ***= Signifikansi > 10%

Source: output spss this research data

5. CONCLUSION

1. Micro and macro fundamental variable, CR, DER, TATO, ROA, NTR and SBI simultaneously impact to systemic risks, although in partial only Debt to equity (DER),Rupiah exchange rate (NTR) and Indonesia Bank certified which has significant relation. DER and NTR are negative significant which means if DER and NTR increase, so that systemic risk will decrease, while SBI has positive relation but significant. Current ratio (CR) total assest turn over (TATO), ROA has negative relation and not significant.
2. Micro and macro fundamental variable, CR, DER, TATO, ROA, NTR and SBI are significantly influence to the stocks performance, although there is SBI variable has positive but not significant, while current ratio (CR), total assets turn over (TATO), return on assets (ROA) and value of rupiah exchange (NTR) positive significance and debt to equity ratio influence negative significance.

3. Systematic Risk (RS) became intervening micro variable (debt to equity ratio (DER) and macro (the value of Rupiah exchange (NTR) through the stock performance.

The restrictions of this research

This research has restrictions which influence to the result, so that the next researcher must get a better result to consider the restrictions are in this research.

The restrictions in this research are :

- The writer only used manufacturing companies in 2008 – 2011 as samples by using purposive sampling method so the result couldn't be generalize widely to public companies in Indonesia
- The are subjective side in determine the reveal index. It caused since there is no standard formula that can be standarization or reference, so that in determining the index for indicators in the same categories can be different for each researcher.
- The writer only used CR, DER, TATO, ROA, NTR, and SBI as independent variable which influence the stock performance of companies. Other variables from micro and macro also can influence the company's stock performance.

Suggests

Based on the result of the reseach, analysis and discussion, the conclusion and the writer's restrictions, the suggests for the next research are :

- The next research ought to use all companies which listed in BEI. Both manufacturing industries and other industries, and add sample of years for observing because it may increase the result.
- The government should make the exact regulations to determine NTR and SBI in crisis period to minimize company's loss.
- The next research suggest to use other variables beside CR, DER, TATO, ROA, NTR, and SBI as independent variable which influence stock performance with systematic risk as intervening variable by sufficient reseach model.

6. LIMITATIONS OF RESEARCH

This study has limitations that influence the research results. Better results for future researchers are expected to further consider the limitations that exist in this study. Limitations in this study are

- This research uses only manufacturing companies with the study period 2008-2011 as a sample by using purposive sampling method so that the results of this study can not be generalized widely for every public company in Indonesia.
- There is an element of subjectivity in determining the disclosure index. This is because the absence of standard provisions that can be used as a standard or reference, so the determination of the index for indicators in the same category may be different for each researcher.
- This study only uses CR, DER, TATO, ROA, NTR and SBI as independent variables that affect the company's stock performance. Other variables of micro and macro fundamentals can also affect the company's stock performance.

7. SUGGESTION

Based on the results of research, analysis and discussion, conclusions taken and limitations of research, the suggestions that can be submitted by researchers for future research include:

1. Subsequent research to use all companies listed on the Stock Exchange, both manufacturing and other industries as well as adding a semper year of observation because with longer observations may improve the results better.
2. The government should establish the appropriate regulation in terms of determination of NTR and SBI in times of crisis so that the company's losses in the crisis can be minimized.
3. Further research is suggested to use other variables besides CR, DER, TATO, ROA, NTR and SBI as independent variables that influence stock performance with systematic risk as intervening variable with adequate research model.

ROA dan TATO, risiko sistematis tidak bisa menjadi variabel intervening.

N o	X Variabel	P2 (Y1) <i>Systematic Risk</i>	P3 (Y2) Rs—Stock performance	P2xP3 x—Stock performance	P1	P2xP3 vs P1
1	CR	-,062	0,267 ***	-0,016554	,155* *	<
2	DER	-,249***	0,267 ***	-0,066483	- ,308* **	>
3	TATO	-,018	0,267 ***	-0,004806	,146* *	<
4	ROA	-,026	0,267 ***	-0,006942	,179* **	<
5	NTR	,281***	0,267 ***	0,075027	,063* **	>
6	SBI	-,127*	0,267 ***	-0,033909	,265	<
*, **, *** determine the significance at 10%, 5% and 1% respectively * = Significance < 1% ** = Significance < 5% *** = Significance > 10%						

Source : The result of SPSS, the data which has been proceed

References

- [1]. Altman, E. I. 1968. Financial Ratios, Discriminant Analysis, and the Prediction of Corporate Bankruptcy. *Journal of Finance*, September: 589 - 609.
- [2]. Anastasia,Njo, Yanni W.G dan Imelda W. 2003. Analisis Faktor fundamental dan Risiko sistematis terhadap harga saham Properti di BEJ, *Jurnal Akuntansi & Keuangan* Vol. 5, No. 2, Nopember: 123 – 132.
- [3]. Ang, Robert. 1997.*Buku Pintar: Pasar Modal Indonesia*, Mediasoft Indonesia, Jakarta.
- [4]. Akerlof, G., Michael Spence, and Joseph Stiglitz. 2001. Markets With Asymmetric Information. *The Scandinavian Journal Of Economics*, 104(2): 195-211.
- [5]. Barret, M.E., dan L.L. Spero. 1975. Accounting Determinants of Foreign Exchange Gains and Loses, *Financial Analyst Journals*, March-April: 26-31.
- [6]. Beaver, W., P. Kettler dan M. Scholes. 1970. The Association between market determined and accounting determined risk measures, *The Accounting Review*, October: 654-682.
- [7]. Bodnar, G. M dan Gentry, W. M.1993. Exchange rate exposure and industry characteristics: Evidence from Canada, Japan and USA.*Journal of International Money and Finance*, 12: 29-45.
- [8]. Choi J.J, dan Prasad A. M.1995.Exchange rate sensitivity and determinant A Firm and Industri Analysis of US multinational. *Financial Management*. Vol 24, No: 77-88.
- [9]. Claude B. Erb, Campbell R. Harvey and Tadas E. Viskanta. 1996. Political Risk, Economic Risk, and Financial Risk,*Financial Analysts Journal*, Vol. 52, No. 6, November-December: 29-46
- [10]. Cooper, D. R., dan C. W., Emory. 1996. *Business Research Method*, 5th Edition, Richard D.Irwin, Inc., USA
- [11]. Dornbusch, R dan S. Fisher. 1980. Exchange rate and current account , *American economic Review*, 70: 960-971.
- [12]. Eduardus, Tandelilin. 1997. Determinants of Systematic Risk: The Experience of Some Indonesian Common Stock, *Kelola 6 , Gadjah Mada University Business Review*, No. 16: 101-115.
- [13]. Fama, Eugene F., 1990, Stock returns, Expected Return and Real Activity, *The Journal Of Finance*, Vol. xlv, No. 4, September: 1089-1108.
- [14]. Foster, George. 1986. “*Financial Statement Analysis*”, Prentice-Hall Inc. Englewood Cliffs NJ, 2nd edition
- [15]. Gavin, M. 1989. The Stock Market and exchange Rate Dynamics, *Journal of international Money and inance*, [Volume 8, Issue 2](#), June: 181–200.
- [16]. Gitman, Lawrence J. 2003. *Principles of Managerial Finance*, Tenth Edition, International Edition Financial Series, Boston: Addison-Wesley.
- [17]. Glaum, M., Brunner, M., dan Himmel, H., 2000. The DAX and the Dolar: The economic Exchange rate exposure of German Corporation. *Journal of International Business Studies*, Vol.31, .4: 715-724.
- [18]. Helfert, E. A. 1991. *Analisis Laporan Keuangan*(terj. Herman Wibowo), Edisi Ketujuh, Jakarta: Penerbit Erlangga
- [19]. Horrigan, O.J. 1965. Some Empirical Bases of Financial Ratio Analysis, *The Accounting Review*, July: 555-568.
- [20]. Jensen, M.C. and Meckling, W.H. 1976. Theory of The Firm; Managerial Behaviour, Agency Cost and Ownership Structure. *Journal of Financial Economics*, No.3: 305 – 306.
- [21]. Jorion, P. 1990. The Exchange rate exposure of US multinational. *Journal of usiness*, Vol.63 No:3: 331-345.
- [22]. Larson dan Morse. 1987. Intervalling Effects In Hong Kong Stocks, *The Journal ofFinancial Research*, Vol. X, No. 4: 353-362,
- [23]. Lawrence, Ramon. 1997.*using neutral network to forecast stock market price*, Departement of computer science, University of Manitoba, 12 December.

- [24]. Mankiw, N.G. 2006. The macroeconomist scientist and engineer, National bureau of Economic Research: *Working Paper* 12349.
- [25]. Miller, K.D., dan Reuer, J.J. 1998. Firm strategy and Economic exposure of foreign exchange movements. *Journal of International Business Studies*. Vol: 29, No.3: 493-513.
- [26]. Modigliani, F. dan M. Miller. 1958. The Cost of Capital, Corporation Finance, and the Theory of Investment, *American Economic Review* 48 (3): 261-297.
- [27]. Newell, G. dan Higgins, D. 1996. Impact of Leading Economic Indicators on Commercial Property Performance. *The Valuer and Land Economist*, May: 138-143.
- [28]. Pakkala, A.L. 1975. Foreign exchange Accounting of Multinational Corporation. *Financial Analysts Journal* (March-April): 32-41.
- [29]. Racelis, Aliza D. 2007. *Capital Structure and Systematic Risk in the Philippine Setting*. College of Business Administration University of the Philippines, Dillman, Quezon City. (online), (<http://www.upd.edu.ph/~cba>).
- [30]. Ramon Lawrence. 1997. "Using Neural Networks to Forecast Stock Market Prices", Course Project, University of Manitoba Dec.: 12, 1-21.
- [31]. Scott, William R, 2003. *Financial Accounting Theory*. Toronto: Prentice Hall International Inc.
- [32]. Shapiro, A. 1975. Exchange rate changes, inflation, and the value of multinational corporation, *Journal of Finance*, 30: 485-502.
- [33]. Sharpe, W. F. 1970. *Portfolio Theory and Capital Markets*, Mc Graw-Hill: New-York.
- [34]. Sinkey, J. F. Jr. 1975. A Multivariate Statistical Analysis of the Characteristics of Problem Banks. *The Journal of Finance*, March: 21 - 36.
- [35]. Tearney, M.G, dan Z. Baridwan. 1989. "The Effects of Translation Accounting Requirements and Exchange Rates on Foreign Operations. Financial Performance –the case of Indonesia", *The International Journal of Accounting Education and Research*: 251-265.
- [36]. Walsh, Ciaran. 2004. *Key Management Ratios: Rasio-rasio Manajemen Penting*. Penggerak dan Pengendali Bisnis, Jakarta: Erlangga.
- [37]. Waud, R. N. 1970. *Public Interpretation of Federal Reserve Discount Rate Changes: Evidence on the Announcement Effect*. *Econometrica* 38: 231-250.
- [38]. Weston, J.F. dan Copeland, T.E. 1995. *Manajemen Keuangan*, Jilid 1, Jakarta: Binarupa Aksara.
- [39]. Wills, Ronald Kent and Helen I, Daniel. 1990, *Case Studies in Real Estate*, Prentice Hall, Inc., Englewood Cliffs, New Jersey.
- [40]. WWW.BI.GO.ID
- [41]. WWW.IDX.CO.ID