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THE COMPANY FUNDAMENTAL FACTORS AND SYSTEMATIC RISK IN INCREASING STOCK PRICE

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ABSTRACT

Some factors in increasing stock price can be interesting when they are scrutinized. What affects the stock price so far has been the pursuit of any business recently. The research is aimed at identifying the effect of company fundamental factors (Earning per Share, Price Earning Ratio, Debt to Equity Ratio, Current Ratio, Net Profit Margin, Dividend Payout Ratio, Return on Asset) to stock price and the extent of Beta (β) effect as measurement of systematic risk in explaining the variance of prices in Indonesian Stock Exchange. Using regression analysis and McKinnon, White, and Davidson test (MWD test), the result found that the functional relational model is linier-log. According to the result of estimation to stock prices, it is discovered that EPS, PER, and HSM variables have positive and significant effects to stock prices, while DER and NPM variables have negative and significant effects. EPS is the dominant variable with strong relation to stock prices.

Key words: *stock price, company fundamental factors, systematic risk, beta, MWD test.*

FAKTOR FUNDAMENTAL PERUSAHAAN DAN RISIKO SISTEMATIS DALAM MENINGKATKAN HARGA SAHAM

ABSTRAK

Beberapa faktor dalam meningkatkan harga saham sangat penting ketika diteliti. Hal-hal yang mempengaruhi harga saham sejauh ini merupakan tujuan usaha tersebut. Penelitian ini bertujuan untuk mengidentifikasi pengaruh faktor fundamental perusahaan (Earning per Share, Price Earning Ratio, Debt to Equity Ratio, Current Ratio, Net Profit Margin, Dividend Payout Ratio, Return on Asset) dengan harga saham dan pengaruh tingkat Beta (β) sebagai pengukuran risiko sistematis dalam menjelaskan varians dari harga di Bursa Efek Indonesia. Dengan menggunakan analisis regresi dan uji McKinnon, White, dan Davidson (uji MWD), hasilnya menunjukkan bahwa model relasional fungsional adalah log-linier. Berdasarkan hasil estimasi terhadap harga saham, diketahui bahwa EPS, PER, dan variabel HSM memiliki efek positif dan signifikan terhadap harga saham, sedangkan DER dan variabel NPM memiliki efek negatif dan signifikan. EPS merupakan variabel yang dominan dengan hubungan yang kuat dengan harga saham.

Kata Kunci: *harga saham, faktor fundamental perusahaan, risiko sistematis, beta, uji MWD.*

INTRODUCTION

It has been noted that capital market is efficient when all of the prices of its securities have represented all relevant information (Jones, 1998; Husnan, 2001). The information can be classified into three types such as 1) the change of price in the past (weak form), 2) the amount of publicly available information (semi strong form), and 3) availability of information whether it is public or not (strong form), this known as efficient market hypothesis (EMH). According to EMH in semi strong form, new information is represented in the security price, if they are rapidly accommodated. It is then the capital market can be classified as efficient.

Stock price has been fluctuating from time to time. This fluctuation is influenced by several factors such as company external and internal factors. External factors are economic state, government policies, inflation rate, etc., while internal factors consist of company fundamental state, policies made by board of directors, etc. (Usman, 1990; Jones, 1998). Stock values often represent its company value, so that stakeholders often comparing the price in the stock market with the true stock price before deciding to buy or sell stocks. This true value (intrinsic value – fundamental value), can be calculated using two kinds of security analysis, that is fundamental security analysis and technical security analysis (Hartono, 2000). Financial report used in fundamental analysis, while technical analysis using the data from stock market.

The previous research in finance suggest that Earning per Share (EPS), Return on Asset (ROA), dan Net Profit Margin (NPM), Basic Earning Power, Price Earnings Ratio (PER), Dividend Payout Ratio (DPR), Earning, and Beta (β) has a significant effect to stock price (Ebrahimi and Chadegani, 2011; Seetharaman and Raj, 2011; Al-Dini *et al.*, 2011). Ebrahimi and Chadegani (2011) has investigated whether the current period of earning divided by stock price at the beginning of the stock market period, current period dividend divided by stock price at the beginning of the stock market period, previous dividend divided by stock price at the beginning of the stock market period and the reverse of stock price at the beginning of the stock market period are relevant to explain stock market returns in Iran.

In fact, in some years, shareholders pay special attention to dividends and also the variable prior dividend divided by stock price at the beginning of the stock market period affects stock return. Moreover, there is a significant relationship between current period earning divided by stock price at the beginning of the stock market period and stock return. Thus, results theoretically support the existence of relationship between earning, dividend and stock return. Seetharaman and Raj (2011) has investigated whether there is any correlation between Public Bank Berhad's EPS and its stock price for a relatively long time period of 19 years.

It suggests that there is a very strong positive correlation between Public Bank Berhad's EPS on its stock prices and there is a significant impact of earning announcement on Public Bank Berhad's stock prices. Al-Dini *et al.* (2011) was studied the relationship between financial variables (EPS, DPS, E/P) and the stock prices using fuzzy linear regression method. The empirical results of this research indicate that there is a positive and significant relationship between Earning per Share (EPS) and stock price of the company. However, there is a negative and significant relationship between Dividends per Share (DPS) and Price to Earnings ratio (P/E) of the said company.

This research attempts to identify the effects of EPS, PER, Debt to Equity Ratio (DER), Current Ratio (CR), NPM, DPR, and ROA on stock prices in Indonesian Stock Exchange. It also discovers the extent of Beta (β) effect as measurement of systematic risk on explaining the variance of security prices. Two important things to be considered by stakeholders before they decide to invest their capital are the expected profit rate and the subsequent risk. There are two

kinds of risk, systematic risk which is a market risk faced by all companies and cannot be removed, and unsystematic risk faced by certain company which can be removed or minimized (Husnan, 2001; Fabozzi, 2002).

Systematic risk is measured by beta coefficient (β). This indicator is also a measurement to show the imminence of individual profit rate of a certain stock to the change of market index profit rate. Market beta is a beta that measures the responds of each security to the market progress. This beta is calculated based on the relationship between market data and is not calculated based on fundamental data such as dividend payment (Hartono, 2000). There are several theories that can be used to estimate market beta, such as single index model and CAPM model, both of them can be done through regression technique.

THEORETICAL FRAMEWORK AND HYPOTHESIS

Indonesian capital market has shown an important role in mobilizing capitals to support national development for over a decade. This development is good for has increasing economic growth because capital market has both economic function and financial function (Jones, 1998; Husnan 2001). Investment can be simply understood as an activity of putting a capital into one or more asset(s) under certain period in order to gain income or improvement in investment value. Koetin (1994), divide investment into two as follows: (1) Distinct investment, such as gold, houses, machines, and other static property; and (2) Indistinct investment, such as company's stock, obligation, etc. Buying stocks can also be considered as investment since stocks give income in form of dividends, moreover its value can be expected to increase in the future.

The role of a stock exchange is as an entity to provide system and medium to draw together both buying and selling demands in order to exchange stocks between them, which means stock exchange has an important role in developing Indonesian capital market. Sartono (1996) defines stock exchange as an organized system with official mechanism to assemble stock seller and its buyers, directly or indirectly through their own representatives. The functions of stock exchange entails such as 1) Creating a persistent market for publicly offered stocks; 2) Creating a standard price for the respective stocks through mechanism of the market; 3) Helping to fulfill companies' monetary needs through gathering of public capitals; and 4) Expanding public participation in companies' stocks ownership. Main purpose of capital market is to create market price and continuous profit rate. Basically stock price is determined by interaction between demand and supply, competitive capital market are formed because there are both power of demands and supply continuously so that stock market's price can adjust itself rapidly with every information change.

The purpose of stock analysis is to estimate intrinsic value of a stock, and then compare it to its current market price. Intrinsic Value (IV) of a stock shows expected present value of the cash flow of the stock. The following guidelines are used:

If IV > current market price, then these stocks are considered undervalued, and is a good choice to be bought or be held if they are already in the possession.

If IV < current market price, then these stocks are considered overvalued and should be sold.

If IV = current market price, then these stocks are in their equilibrium position (standard price).

The decision of stock prices can be done through technical analysis and fundamental analysis. In technical analysis, stock price is determined by the record of its previous prices. On the other hand, in fundamental analysis, stock price is determined by fundamental factors that have significant effects such as profit and dividend rate. This paper deals with fundamental analysis only.

Fundamental analysis is assuming that every stakeholder is a rational being, and is

trying to study the relationship between stock prices and company's condition. Fundamental analysis is trying to estimate stock price in the future by two means: 1). Estimating the value of fundamental factors, which affecting stock price in the future, and 2). Applying the relation of these variables so that stock price can be estimated. Fundamental analysis has two models of stock evaluation that is by present value approach and by Price Earning Ratio approach (Hartono, 2000).

According to present value approach, the present value of a stock is equal to the expected cash flow present value (Husnan, 2001). This method is used to identify the value of company in the future by discounting the values of cash flow in the future into present value using the following formula:

$$Stock\,\Pr ices = \sum \frac{Cashflow}{(1+r)^2} \qquad (1)$$

In which it describes that r is the interest rate or the appropriate profit rate for the particular investment. A stakeholder has to input risk factor to estimate the appropriate profit rate.

The previous research in finance has found that Earning per Share (EPS), Return on Asset (ROA), dan Net Profit Margin (NPM), Basic Earning Power, Price Earnings Ratio (PER), Dividend Payout Ratio (DPR), Earning, and Beta (β) has a positive and significant effect to stock price (Savuth, 1997; Syahyunan, 1997; Wardhani, 1998, Iswahyudi, 2001). On the contrary, another research investigates the lingkage between these variables and stock returns or equity returns. Tripathi (2009) examines the relationship between four company fundamental variables (viz. market capitalization, book equity to market equity ratio, price earnings ratio and debt equity ratio) and equity returns in Indian stock market. Besides, the researcher also investigate whether the inclusion of any one or more of these fundamental variables can better explain cross sectional variations in equity returns in India than the single factor CAPM and whether there are any seasonality patterns in equity returns.

Using monthly price data with a sample of 455 companies over the period June 1997 to June 2007, the result shows that market capitalization and price earnings ratio have statistically significant negative relationship with equity returns, while book equity to market equity ratio and debt equity ratio have statistically significant positive relationship with equity returns in India. The investment strategies based on these variables produced extra risk adjusted returns over the study period. The researcher also find that Fama French three factor model (viz. market risk premium, size premium and value premium) explains cross sectional variations in equity returns in India in a much better way than the single factor CAPM, and did not find any seasonality patterns (April or January Effect) in equity returns in India.

Fama French three factor models is a model designed by Eugene Fama and Kenneth French to describe stock returns. The traditional asset pricing model, known formally as the Capital Asset Pricing Model, CAPM, uses only one variable, beta, to describe the returns of a portfolio or stock with the returns of the market as a whole. In contrast, the Fama French model uses three variables. Fama and French started with the observation that two classes of stocks have tended to do better than the market as a whole: (i) small caps and (ii) stocks with a high book-to-market ratio (BtM, customarily called value stocks, contrasted with growth stocks).

They then added two factors to CAPM to reflect a portfolio's exposure to these two classes. The Fama-French three factor model explains over 90% of the diversified portfolios returns, compared with the average 70% given by the CAPM (within sample). The signs of the coefficients suggested that small cap and value portfolios have higher expected returns and arguably higher expected risk than those of large cap and growth portfolios (Fama and French, 1992).

The present research also investigated

the linkages between stock prices and some economic factors, namely, inflation rates, industrial production output, interest rates, and foreign exchange rates (Al-Khazali and Pyun, 2004; Maysami *et al.*, 2004; Sari and Soytas, 2006; Kolluri and Wahab, 2008; Wan Mahmood, 2009; Agu and Agu, 2010). Agu and Agu (2009) has investigated the relationship between stock pricing and behaviour of the stock market on one hand and micro and macro economic fundamentals in the Nigerian economy on the other.

Using a censored logistic model for the primary data, and error correction approach for secondary data, the result shows that the key drivers of share prices, particularly for the boom period were neither broad macroeconomic indicators (though such factors as inflation rate and macro instability are noted to affect it) nor key indicators of the health of the firm. Prices were clearly shown to be much above levels that could have been determined by firm fundamentals. In contrast, stakeholders see price setting behaviour as dominant in the market aided by weak regulatory capacity of key institutions in charge of the market. From the secondary data, researcher found that while fundamental values of the ASPI (all-share price index) are driven by monetary and relative price variables, actual values are driven by external sector variables and prices.

RESEARCH METHOD

Sample and Data

Populations are the actively traded stocks based on their trading frequency with observation period from January of 2002 to November of 2006. The samples are selected by purposive sampling method, with following criterions:

Objects of the research are the companies whose stocks are actively traded during observation period.

Those companies must have been paying dividend in cash during observation period.

IHSG is used as proxy of market index.

Research data are being processed based on weekly-interval observation.

The secondary data were obtained from monthly statistic and capital market directory of 2002-2006 published by Indonesian Stock Exchange. There are 17 companies selected as samples which have fulfil preceding requirements. Required data for this research are (but not limited to) stock prices on its weekly closing price during observation period, and company's annual financial reports.

Model

Previous studies (Ebrahimi and Chadegani, 2011; Seetharaman and Raj, 2011; Al-Dini *et al.*, 2011) have investigated the relationship between stock price and fundamental factors such as dividend, earning per share, price to earning ratio, etc. Ebrahimi and Chadegani (2011) has investigated whether the current period earning divided by stock price at the beginning of the stock market period, current period dividend divided by stock price at the beginning of the stock market period, prior dividend divided by stock price at the beginning of the stock market period and the reverse of stock price at the beginning of the stock market period are relevant to explain stock market returns in Iran. They used cross-section, pooled data and panel data regression models for testing the effects of the above variables on stock returns.

It shows that in some years, shareholders pay special attention to dividends and also the variable prior dividend divided by stock price at the beginning of the stock market period affects stock return. Moreover, there is a significant relationship between current period earning divided by stock price at the beginning of the stock market period and stock return. Thus, results theoretically support the existence of relationship between earning, dividend and stock return.

Seetharaman and Raj (2011) has investigated whether there is any correlation between Public Bank Berhad's EPS and its stock price for a relatively long time period of 19 years. The research finding can be concluded that there is a very strong positive

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In this research we hypothesize that there is a significant simultaneous effect of several company fundamental factors such as *Earning per Share* (EPS), *Price Earning Ratio* (PER), *Debt to Equity ratio* (DER), *Current Ratio* (CR), *Net Profit Margin* (NPM), *Dividend Payout Ratio* (DPR), *Return on Asset* (ROA), and BETA (β), as measurement of systematic risk in relation to company stock prices in Indonesian Stock Exchange. Furthermore *Return on Asset* (ROA) is believed to has the most dominant and significant influence in relation to the change of company stock price in Indonesian Stock Exchange. Assuming that stakeholders are rational being, it is assumed that fundamental factors and β as systematic risk measurements have a big contribution in explaining variances of company stock prices in Indonesian Stock Exchange.

In order to solve that particular problem, a regression analysis model is built as follows:

$$Y = \mu + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon_i \quad (2)$$

where Y = stock price; - [X_1 = *Earning per Share* (EPS), X_2 = *Price Earning Ratio* (PER), X_3 = *Debt to Equity Ratio* (DER), X_4 = *Current Ratio* (CR), X_5 = *Net Profit Margin* (NPM), X_6 = *Dividend Payout Ratio* (DPR), X_7 = *Return on Asset* (ROA), X_8 = *Beta* (systematic risk)] and ε_i = distorting variable.

Variable Measurement

Earnings per Share

EPS represents the capability of a company in making profit for each stock owned by stakeholder. The formula to calculate EPS is as follows:

$$EPS = \frac{EAT}{TotalStocks} \quad (3)$$

The reason why this variable is chosen as an independent variable is because the bigger the value of EPS, the more attractive the stock to be bought, and so increasing its price.

Price Earnings Ratio

PER is a function that represents the expected income in the future. When PER value is relatively high then the expected income growth will also be high, and by itself making the price of a stock become higher.

Debt Equity Ratio

Debt Equity Ratio (DER) represents comparison between the company's liability and company's capital. A relatively high DER value shows that there is a relatively large proportion of debt in company's capital, which will induce more risk in investment. In the end, stakeholder tends to avoid investing their asset in a company that has a high DER.

Current Ratio

Current ratio is the most generic measurement of company's short-term solvability. This ratio shows the comparison between solvable capital and solvable liability, and represents a company's capability in fulfilling their short-term liability with the solvable capital currently available.

Net Profit Margin

Net Profit Margin (NPM) is one kind of profitability ratio, which can be calculated by the following formula:

$$NPM = \frac{EAT}{TotalNettSales} \quad (4)$$

This ratio shows how cost-effective the

operational activities of a company is, the higher the ratio the better it is (Helfert, 1997).

Dividend Payout Ratio

Dividend payout ratio represents the amount of profit a stakeholder obtains from the company. The correlation between stock price and the value of DPR can be formulated as follows:

$$P_o = \frac{D_1}{k - g} \quad (5)$$

It can be shown that there is a positive relation between stock price and the amount of dividend being paid out. That is, the higher the dividend, the higher the price of the respective stock.

Returns on Asset

Another profitability ratio other than of the previously mentioned NPM, RoA can be calculated as follows:

$$RoA = \frac{EAT}{TotalCapital} \quad (6)$$

The value of RoA depends on how effective a company allocates and use their capital, an inefficient company will produce low RoA, vice versa.

Stocks-β

According to Hartono (2000), stocks beta is a measurement of systematic risk of a security or a portfolio relative to market profit. Beta of a security or portfolio is shown by beta-coefficient, which is measured by slope obtained from stocks-return regression with market-return.

Beta of a security can be calculated by estimation technique using historical data, which subsequently can be used to estimate future beta. Historical data used to estimate beta consist of market data, accounting data, and fundamental data.

Market-β

Market beta is calculated using market data and can be estimated by collecting historical values of security return and market return under a specified period (Hartono, 2000). If regression technique is used, then its dependent variables are security returns and the independent variables are market returns. Regression equation used to estimate beta is based of single-index model or CAPM model.

Accounting-β

Accounting beta is beta that can be estimated using accounting data such as accounting profit (Hartono, 2000). Accounting beta can be estimated using regression equation with accounting transformation as its dependent variable and change in market-profit index for accounting profit of market portfolio as the independent variable.

Fundamental-β

Fundamental beta is calculated based on company fundamental variables. The amount of variables used to create fundamental beta also vary, Beaver, Kettler, and Scholes use 7 variables, Thompson (1978) uses 43 variables, while Rosenberg and Marathe (1975) used 101 variables.

Tests

In order to test the relationship between fundamental factors and systematic risk to stock prices, this research uses several fundamental factors, which consist of EPS, PER, DER, CR, NPM, DPR, ROA, last-year stock prices (HSM), and β as independent factors, while stock prices act as dependent factors. The value of beta which is used in this research is calculated using single-index model which is considered to be better model than Markowitz mean-variance model. The equation used for single-index model is as follows:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + e_t, \quad (7)$$

where $R_{i,t}$ is the return value of stock- i at moment-t; α_i is constant; β_i *slope of regression;* $R_{m,t}$ is the return value of market-portfolio at moment-t; and e_i is *error term*. In the equation above β acts as the value of regression coefficient, this regression is used on R_i (stock *return*) as dependent variable,

and R_m, (market *return*) as independent variable.

Stock-return can be calculated based on weekly change in price of individual stock price, while individually market return can be formulated as follows.

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}, \quad (8)$$

where $R_{i,t}$ is *return* of stock *i* on t^{th} week; $P_{i,t}$ is the price of stock-i on t^{th} week; $P_{i,t-1}$ is the price of stock *i* on $t\text{-}1^{th}$ week. To calculate market-return, IHSG is used as market-index. Market return is calculated weekly by following formula:

$$R_{m,t} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}, \quad (9)$$

where is $R_{m,t}$ market-*return* on t^{th} week; $IHSG_t$ is the price index of stock-i on t^{th} week; and $IHSG_{t-1}$ is the price index of stock-i on $t\text{-}1^{th}$ week.

In order to know the form of function to be chosen for this research, a functional relationship test is used. The test chosen to be used is MacKinnon, White and Davidson test. Furthermore, to test the reliability of the model, several model-reliability tests were used, that are R^2 criterion, Akaike Information Criterion and Schwarz Information Criterion. Ensuring that the estimation result are unbiased, parametrically linear, and in its best, several classical assumption tests are used, among them are linearity test (by Lagrange Multiplier), heteroscedasticity test (using White test), autocorrelation test (by Breusch-Godfrey test), multicollinearity test (using Gujarati test), and normality test (using Jarque-Bera test).

DATA ANALYSIS AND DISCUSSION

Data Normality

Both graphically and numerically show that EPS data are in outlying condition compared to the data of other variables. The differences in calculation metrics result in average value of EPS variable is much higher than other variables, and if it's estimated right away these data would be economically-meaningless, but statistically significant. Under Jarque-Bera test, it is found that EPS variable is not normally distributed. In order to overcome this condition, EPS data are transformed into logarithmic forms.

Functional Relationship

An error in determining functional relationship of a model will result in specification-error problems, biased coefficient estimations, and inconsistent estimation parameter. Avoiding these errors, MacKinnon, White, and Davidson test is used and showing unobjectionable proof, that linier-log functional form should be used in this research.

Furthermore, the reliability of this model is confirmed by the result of Akaike Information Criterion and Schwarz Information Criterion, under these test, result show that AIC and SIC value are smaller compared to AIC and SIC value of normal linear model.

Regression Estimation Results

Estimation results of stock price model are shown in the Table 1 and 2.

Analysis of the Effects of EPS, PER, DER, CR, NPM, DPR, ROA, HSM, and β to Stock Prices

Using estimation result of stock price model, the researcher found that EPS variable has positive effect to stock price with integrity interval of 1%. Positive sign of regression coefficient shows that increase in EPS will result in rise of stock-price. Significantly-positive result is implicating that EPS is a very much needed information by stakeholder, because EPS is one of company profitability measurement which is usually used as stakeholders main reason of capital investment.

Estimation result also shows that PER variable has a positive effect on stock price with integrity interval of 1%. In the preceding table, it was shown that the value of PER coefficient is 0,252, which means every 1-point increase of PER will result in 0,252-point increase in stock price. Next variable is DER which has a significant-negative effect (5% interval) to stock price. This means that

Table 1
Test Result

Variables	Coefficient	p-value
Constants	2.036	**0.031
LogEPS	1.361	***0.000
PER	0.252	***0.000
DER	-0.284	**0.044
CR	-0.113	0.582
NPM	-0.726	**0.378
DPR	0.117	0.780
ROA	0.024	0.842
HSM	0.768	***0.009
Beta	-0.263	0.624

Table 2
The Diagnostic Test and Classical Assumptions

Type	Stat. Value	Conclusions
1. Normality JB Test $\chi^2(2)$	3.692 (6.261)	Calc. χ^2 < table χ^2, empirical model has normally distributed residual.
2. Linearity Ramsey Reset Test (4.7)	2.921 (2.428)	Calc. F < table F, model specification is in linear function
3. Heteroscedasticity Arch Test $\chi^2(2)$	7.924 (9.251)	Calc. χ^2 < table χ^2, heteroscedasticity problem of the model is acceptable
4. Autocorrelation LM Test $\chi^2(4)$	5.982 (8.787)	Calc χ^2 < table χ^2, autocorrelation problem of the model is unacceptable.
5. Multicollinearity Gujarati test	-	There is no correlation between two variables which is greater than 0,8, multicollinearity problem in the model is unacceptable.

Source: Processed from the data of Indonesian Bank, Jakarta Stock Exchange, International Financial Statistic, 2006

every 1-point increase of DER will decrease stock price for 0,284-point.

Estimation result of the model also shows that NPM variable has negative effects to stock price with 10% integrity interval. Which means every 1-point increase in NPM will result in 0,726-point stock price decreasing. This result contradicts previous theory and research by Syahyunan (1997). Probably, this is caused by competition between companies compelling them to reduce selling-price in order to meet selling target, which result in low margin profit (Brigham, 1999). Because stakeholders are focusing mainly in selling-rate which has strong relation with company growth and determine a company performance, make a company with low NPM is favored by stakeholders.

Subsequent table also shows that the price of stock in the past (HSM), has a significant positive effect (1% interval) to stock price. This discovery shows that stakeholders tend to do short-term investment to obtain capital gain, instead holding their stocks long enough to acquire dividend. This is also confirmed by Jones (2000), which says that stock-price in the past will reflect stock-price in the future. This fact also makes stakeholders to use technical analysis which is constructed to detect change of

stock-price under a relatively short period to predict stock price in the future.

The regression-estimation of stock-price model provides the result that there is no significant effects of CR, DPR, ROA, and β variables to stock price. These variables cannot be used as the only consideration for stakeholders in buying stocks. Negative sign in CR coefficient shows that market tends to worry of under-utilized assets, which make in certain condition, growth of solvable assets compared to solvable obligation will produce market's negative reaction.

Positive and weak relationship in DPR variables are confirming *bird in hand* theorem which states that stakeholders tends to prefer dividend payment which will lessen insecurity factor in investment. On the other hand, ROA has a insignificant positive effects to stock-price shows that company that able to effectively manage their capital to produce profit are preferred by stakeholders.

The result of double regression technique shows that beta has negative insignificant effects to stock price. Every 1-point increase in Beta variable will result in 0,263-point decrease of stock-price. It shows that most stakeholders tend to avoid risk.

CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Under MacKinnon, White, and Davidson test, it is discovered that functional relationship model used in this research is log-linear. Estimation results of stock-price model show that EPS, PER and HSM variables have positive and significant effect. Improvement in these variables will increase stock price. On the other hand DER and NPM variables have negative and significant effects, improvement in these variables will decrease stock price.

Estimation results also shows that CR, DPR, RoA, and beta variables have insignificant effect to stock price. On the other hand EPS has a very strong relationship and dominant effects to stock price; this is shown by its regression coefficient and partial correlation which is higher than any other variables. It is indicating that stock-price has high sensitivity of EPS. As a consequence, for companies wanting to improve their stock-price to evaluate their EPS policy well, including some effort to improve their earning after tax and deciding how much stocks to be distributed to the market

On the stakeholders side, they are required that they consider the EPS value better in deciding whether to buy or sell their stocks, because company with high EPS tends to manage their capital better. Next research, should obtain more samples, adding more independent variables such as book value, SBI interest rate, and another economic variables also prolonging observation period in order to produce result that is more representative. We also hope to add other industrial variables as dummy variables in order to specify which variables are having effects to stock price based on the type of industry.

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