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MANAGEMENT TRACK

THE INFLUENCE OF CORPORATE GOVERNANCE AND RISK FACTORS ON EQUITY RISK PREMIUM OF INDONESIAN PUBLIC LISTED COMPANIES

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ABSTRACT

The purpose of this study is to examine the impact of risk factor (company's size, book to market equity, leverage, and beta) and corporate governance factor on company's equity risk premium (independent Board, Board size, and Managerial Ownership). Based on purposive sampling method, the 41indonesian public listed companies were selected as a sample of this study.

This study found that risk and corporate governance factors influence equity risk premium as well. In context of risk factors, book to market equity and leverage positively and significantly influence equity risk premium, while firm size negatively and significantly influence equity risk premium. These findings indicate that equity risk premium increase as book to market equity increase, because the highest book to market equity ratio show that companies is not growth, so company's risk will be high. The findings also indicates that the investor more confident to invest their money in larger companies because information asymmetry reducing and stock liquidity. In the context of corporate governance factors, this study found that managerial ownership positively and significantly influence equity risk premium. This finding indicates that investor perceive that companies with managers as dominant ownership are higher risk. It is consistent with entrenchment theory which mentioned that the performance of companies will lower since management entrencement increase.

Keywords: Capital Asset Pricing Model, Corporate Governance, Book to Market equity, Leverage, Beta, and Equity Risk Premium.

1. INTRODUCTION

Uncertainty of the results to be obtained becomes an important element in calculating the risk of investing in the stock market. Tandelilin (2001) suggested that the risk is the possibility of real return (actual return) is different from the expected return. Investment risk may be influenced by economic, political, market, customer, internal company and other factors. These factors will impact on the risk changing (increased or decreased risk) that would alter investor confidence and response.

Tandelilin (2001) states that there are two types of investment risk namely the systematic risk and unsystematic risk. Systematic risk is a risk that can not be diversified because of this risk depends on various factors such as economic and political changes that affect all companies, while non-systematic risk is the risk that can be eliminated by establishing a well diversified portfolio (Hartono, 2009).

Investors realize that the willingness to bear risk will result in consequences of the return. The higher the risk taken by investors who are willing to *return* to the higher obtained. Investors also realize that investing in the stock market especially in the more risky stocks, but investors will earn returns that exceed the returns derived from risk-free investments like government bonds and bank interest. In other words, the willingness of investors to risk investing in stocks should be paid to the additional *return that* investors would be obtained from investing in the stock. Additional *return* is called the equity risk premium (ERP). High and low ERP influenced by several factors.

According to Gebhardt, Lee, and Swaminathan (2001) there are several factors affecting the ERP such as firm size, growth, risk, and leverage. Collins and Huang (2011) classify the factors that affect the equity risk premium to the risk and corporate governance factors. Furthermore, Collins and Huang (2011) explains that there are several variables that can be grouped into risk factors such as firm size, beta, leverage, and the ratio of book value to market value. While the corporate governance factors consists of managerial ownership, the number of commissioners, the proportion of independent commissioners, and institutional ownership.

Gebhardt et al (2001) the influence of company size on the risk associated with the availability of information and share turnover (liquidity of shares.) Availability of more complete information and higher liquidity of the shares of the company's impact on decreasing the level of risk which in turn will lower the ERP. But some of their results show that the size of the company as having a positive effect on the ERP. Fama and French (1992) confirmed that the company's size, price earnings ratio, the ratio of debt to equity, and book-to-market equity ratios have significant explanatory power to the average level of return. Shares of the issuer with the size of a small firm and book-to-market equity ratio high is a company that has a bad performance and tend to experience financial difficulties (financial distress), the cost of equity capital to be higher resulting in increased ERP participate, and investors will ask for compensation risk premium this reason.

Bhandari (1988) found that the leverage ratio has a positive relationship to the level of expected stock returns. Because the increase in debt is usually followed by increases in working capital in the company, it will lead to increased capital costs and ultimately increase the ERP. Fama and French (1992) concluded that the effect of beta with an average rate of return disappeared for several years (1963-1990) on the stock on the *New York Stock Exchange* (NYSE). Their results found that the beta has a weak influence on the average rate of return. But Boone, et al. (2008) says that in the context of the capital asset pricing model (CAPM) beta is the systematic risk that influence positively to ERP.

Collins and Huang (2011) states that corporate governance affects the risk and cost of capital. They further stated that the company has good governance will improve investor confidence and lower the cost of capital. Bowen *et al* (2008) express the characteristics of the board of commissioners will have an impact on the cost of capital and the equity risk premium. Furthermore, Bowen *et al* (2008) concluded that the higher the percentage of independent board, the smaller the cost of capital and the equity risk premium. The same was found by Lefort and Urzúa, (2008). Collins and Huang (2011) explore managerial ownership as a proxy for corporate governance. The results showed that managerial ownership has a positive effect on the equity risk premium.

The study aims to examine the influence of company size, the ratio of book value to market value of equity, leverage, beta, independent commissioners, managerial ownership, and the number of commissioners on Equity Risk Premium of Indonesian public listed companies.

2. LITERATURE REVIEWAND HYPOTHESIS DEVELOPMENT

2.1 *Equity Risk Premium*
Equity Risk Premium (ERP) is defined as the difference between the expected return on common stock and the return on government securities (Martin and Lillo, 2003). While Anin and Falaschetti (1998) defines ERP as a desired reward investors to generate income is not fixed with respect to his equity stake. ERP was measured as the expected shareholder return exceeds the average risk-free asset.

ERP is often described as the most important value in finance and investments, for example, in asset allocation decisions of portfolio managers, the decision how to divide the financial investments between stocks and fixed income securities is affected ERP and their different risk characteristics. In capital budgeting decisions at the enterprise level, ERP is an input in the cost of capital, the discount rate used to calculate the *net present value* investments. ERP is also an important input in calculating the cost of capital has a role to determine the maximum prices of goods and services from government utilities (Martin and Lillo, 2003).

ERP reflects the price of risk taken, is a major component of the expected return demanded on risky investments. Expected return is an important determinant of the cost of equity and capital costs, an important input in financial analysis and valuation firm (Demodaran, 2009). ERP as used in the discount rate and analysis of the cost of capital is a concept that looked into the future. Therefore, the ERP is used in the discount rate must reflect what investors think about risk premiums in the future.

There are two common ways to estimate the ERP, the first use of historical data and others use estimates or projections of the market. By using historical data, the assumption is that what happened in the past illustrates what might happen in the future. By using the projection market, the assumption is that for the ERP project can be done through a survey or some other projection models. Most ERP model using historical data and assumes that some past periods provides the best indication of what will happen in the future. Thus, the ERP model that uses future projections as the basis is not functioning properly (Anin and Falaschetti, 1998).

Anin and Falaschetti (1998) using the CAPM in calculating the ERP. They stated that the expected return consists of two main components, namely, risk-free rate of return and risk premiums that can be formulated as follows:

R_i = Risk-free asset return rate + risk premium

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

Description:

R_i = Rate of return expected

β_i = Stock beta

R_f = Risk-free rate of return of assets

$E(R_M)$ = Level of the expected market return

To obtain a new equation to be used, namely: :

$$R_i - R_f = \beta_i \, [Equity \; Risk \; Premium]$$

$$Equity \; Risk \; Premium = \frac{R_i - R_f}{\beta_i}$$

The main problem in the formula is that the formula assumes a perfect integrity in the capital market assumptions are not realistic in the emerging markets (Martin and Lillo, 2003). Research Erb, Harvey and Viskanta (1995) proved this, the research states that there is no influence between the average return and beta in emerging markets. These results are reinforced by Bekaert, Erb, Harvey and Viskanta (1997) which examined determinansi cross-sectional equity returns in emerging markets, their research found that the CAPM fails to explain returns in emerging markets.

In addition there CAPM Fama French Three Factor model is an extension of the CAPM. Regression equation to estimate the cost of capital using the Fama French Three Factor Model can be written as follows (Anin and Falaschetti, 1998):

$$R_i - R_f = \beta_i (R_m - R_f) + (s_i \times SMB) + (h_i \times HML)$$

Description:

$R_i - R_f$ = Risk premium company i

β_i, s_i, h_i = Regression coefficient of firm i

$R_M - R_f$ = Equity Risk Premium Expected

SMB = Risk factors for firm size. Expected return on a portfolio of small stocks minus the expected return on a portfolio of large stocks

HML = Factor of financial difficulties, measured by book value of equity divided by equity market prices. Expected return on a portfolio of high stock return minus the expected low on stock portfolios.

ERP is one of three components in the Fama French Three Factor Model. There are three factors in it, namely firm size factor, the factor of financial difficulties, and market risk factors (ERP). The weakness in this model is not allowed to calculate the average return on β company in a short period (Anin and Falaschetti, 1998).

Boone, *et al.* (2008) suggests an alternative approach for calculating *the ERP* is based on Ohlson Models & Juettner-Nauroth (2000), as used by Easton (2004). Basically, Easton wear Ohlson framework and Juettner-Nauroth (especially in equation 1):

$$P_t = \frac{EPS_{t+1}}{R} + \frac{EPS_{t+1}\left(\frac{EPS_{t+2} - EPS_{t+1}}{EPS_{t+1}} + \frac{RDPS_{t+1}}{EPS_{t+1}} - R \right)}{R((1+R) - \gamma)}$$

However, Easton uses the additional assumption that = 1 (there are no abnormal growth in earnings beyond the observation period). The result can be written in equation 2,

$$P_t = \left[EPS_{t+2} + RDPS_{t+2} - EPS_{t+1} \right] / R^2$$

By using equation 2, R lowered so that the split into the following three equations,

$$R^2 - R(DPS_{t+1} / P_t) - (EPS_{t+2} - EPS_{t+1}) / P_t = 0$$

Description:

P_t	= current stock price
EPS_{t+1}	= forecast EPS a year to come
EPS_{t+2}	= forecast EPS two year to come
DPS_{t+1}	= forecast DPS a year to come
R (in equation 1)	= *equity risk premium* is realized by OJ
R (in equation 2)	= *equity risk premium* (R_{PEG}) according to Easton.

Equation 3 assumes that abnormal earnings will always be there and will experience positive changes in earnings estimates. Rated R, $_{t+2}$ EPS> EPS $_{t+1}$> 0, thus solving the estimates will have a positive sign (Easton, 2004).

Easton stated that his approach into account the differences in short-term earnings growth. Furthermore, he discusses the methodology and evaluate the price-earnings growth (PEG) and suggests that researchers who need ERP estimates on the company relies on its approach.

This study used the approach to estimating the ERP Easton, since based on the above description can be concluded that the CAPM formula can not be used because of belonging to the Indonesian market is growing, while the Fama French Three Factor Model also can not be used in this study because the study period only one year while the model is not allowed to use on β company in a short period.

2.2 Risk Factors and *Equity Risk Premium*
Collins and Huang (2011) state that risk factors are very important in predicting the cost of capital which in turn is linked to the equity risk premium. Furthermore, they include several proxies that can be used in the measurement of risk factors include firm size, financial leverage, Beta, and growth (the ratio of book value to market value).

2.2.1. The size of the Company and the *Equity Risk Premium*
Large firm size can be expressed in total assets, sales and market capitalization. The larger total assets, sales and market capitalization, the greater the size of the company. The greater the assets, the more capital invested, the more sales the more the velocity of money and the bigger market capitalization, the greater the company is known in the community. Of the three variables, asset values are relatively more stable compared to the value of market capitalization and sales in measuring the size of the company. Therefore in this study of firm size measured by natural log of total assets.

Gebhardt, *et al.* (2001) showed that there is more publicly available information about the larger companies and their shares more liquid. The more information available about the company and more liquid stocks, the lower the perceived risk in the enterprise, the lower the equity risk premium that is realizable. These results strengthen the statement of Banz (1981) that there are negative effects between firm size and average return. Therefore, this variable has the expected negative sign. Consistent also with the results of Boone, *et al.* (2008), (Easton (2004), and Gebhardt et al., (2001) who concluded that the firm size negatively affect the equity risk premium. Collins and Huang (2011) uses the market value of equity as the size of the company found that firm size negatively affect the equity risk premium. Based on the above description then proposed a second hypothesis is:

H1: Firm size negatively affect the Equity Risk Premium.

2.2.2. The ratio of book value to market value of equity and *Equity Risk Premium*

Book to market equity ratio is a ratio used to find firm value by comparing the book value of the company's market value. The book value is calculated by looking at historical cost or value of its accounting firm, while the market value reflected in the company's stock price. Gebhardt, et al. (2001) states that the ratio of book to market equity is the most important variable in explaining firm value. Consistently market requires a higher discount rate for companies that have a book to market equity ratio is high.

Fama and French (1992) states that the ratio of book to market equity as risk factors for equities, that is, the higher the book-to-market equity ratio, the higher the risk of equity. Therefore, this variable has the expected positive sign. In accordance with the results of Boone, et al. (2008) which states that the book-to-market equity significantly positive effect on the equity risk premium. Collins and Huang 2011 found that the ratio of book value to market value of equity has a positive effect on the equity risk premium. Based on the results of research on the third hypothesis proposed is:
H2: The ratio of book to market equity has a positive effect on the Equity Risk Premium.

2.2.3. *Leverage* and the *Equity Risk Premium*

Leverage ratio is the ratio between total debt to total assets. This ratio calculates how far the funds provided by creditors. High ratio means that firms use financial leverage (financial leverage) is high. The use of high financial leverage will increase the profitability of the share capital quickly, but on the contrary, if sales are down, earnings of capital stock will decline rapidly as well. The risk of companies with high financial leverage will be higher as well (Hanafi and Halim, 2000). Bhandari (1988) suggest that leverage has a positive relationship to the level of expected return. Findings stated that stocks with high leverage ratio value has a relatively high level of return on its market beta. High leverage ratio is a signal to distinguish between good companies and bad, because only a healthy and strong company that could owe to bear the risk. The high level of *leverage* will increase the likelihood of insolvency (bankruptcy) and will further increase the risk of the company, according to the statement Baxter (1967) in the Fama and French (1992) that the addition of debt to a certain point will increase the value of the company, but when passing through the optimal point, the addition of debt will lead to bankruptcy, thus decreasing the value of the company.

Gebhardt, et al. (2001) states that higher levels of financial leverage is expected to increase the perceived risk and increase the company's equity risk premium. Consistent with Boone et al. (2008) who find that leverage is significantly positive effect on the equity risk premium. Collins and Huang (2011) found that leverage has a positive effect on the equity risk premium. Based on the findings above, the fourth hypothesis proposed is:
H3: Leverage has a positive effect on the Equity Risk Premium.

2.2.4. Beta and *Equity Risk Premium*

CAPM assumes that there is a linear relationship between the ERP in an asset with systematic risk or beta. Based on the CAPM, the variation rate of return of shares that are expected to occur can be explained by the beta (Lin, 2009).

Beta is a measure of systematic risk of a security or portfolio relative to market risk (Jogiyanto, 2000). Beta stocks are used to determine how much risk there is in a stock. Beta value of the securities described the volatility of returns on market returns. Normally, the beta of a stock tends to approach one. Stocks with a beta greater than one stock is very sensitive to market changes, such shares are referred to as the aggressive stock, fluctuations in stock returns is greater than the fluctuations of the market return. Conversely, if the beta is smaller than one then the stock is not sensitive to market

changes, called defensive stocks, fluctuations in stock returns is smaller than fluctuations in the market return (Hanafi and Halim, 2000).

In the equilibrium model CAPM, beta values greatly affect the expected return rate, the higher the beta value and the market return, the higher the return required by investors. As a result, the beta is expected to correlate positively to the expected level of return. Boone, et al. (2008) found that beta-significant positive effect on the equity risk *premium*. Based on the above description then the fifth hypothesis is:

H4: Beta positive influence on Equity Risk Premium.

2.3. Factors Corporate Governance and *Equity Risk Premium*

The concept of corporate governance can be defined as a series of mechanisms to direct and control an enterprise that runs its operations in accordance with the expectations of the stakeholders (stakeholders). The concept of corporate governance developed along with the demands of the public who want a realization of the business life of a healthy, clean and responsible. This demand is actually a public response to the increasingly widespread cases of corporate irregularities around the world.

Forum for Corporate Governance in Indonesia (FCGI) defines corporate governance as "a set of rules that regulate relations between shareholders, management companies, lenders, governments, employees and stakeholders internal and external relating to the rights and obligations or in other words a system that controls the company ". The main purpose *of* corporate governance is to create added value for all interested parties or stakeholders (FCGI, 2003).

IICG defines corporate governance as processes and structures implemented in running the company with the primary objective increasing shareholder value over the long term by taking into account the interests of other stakeholders. Corporate governance problems can be traced from the development of agency theory that tries to explain how the parties involved in the company (managers, owners and creditors) will behave, because they basically have different interests.

Implementation of Corporate Governance (CG) in a company brings many benefits. One of them according to FCGI, by performing the CG, some of the benefits to be had, among others:

1. Improve corporate performance through the creation process of making better decisions, improve operational efficiency and further enhance the company's services to stakeholders.
2. Facilitate obtaining a cheaper financing fund that ultimately enhance corporate value.
3. Restore investor confidence to invest in Indonesia.
4. Shareholders will be satisfied with the performance of the company as well as to enhance shareholder's value and dividends.

In addition to managing corporate funds from shareholders, the company also manages the fund manager of the bondholder (the bondholders) or a creditor. Conflicts of interest between managers and the bondholder happened in terms of debt policy. This conflict arises when management took the projects that have a greater risk than predicted by the creditor. In this case the creditors are not harmed if funds would be invested in high-risk projects, because it will increase the risk of bankruptcy a company that will ultimately affect the value of a company with declining market value of debt or bonds that have not matured. Conversely, if high-risk projects that provide great results, the compensation received by creditors in the form of interest not rise. This shows that the debt can make the transfer of wealth from the bondholder to the shareholders that will be avoided by the bondholder.

Chen and Steiner (1999) concluded that managerial ownership and debt policy has a negative relationship. This is due to factor substitution between the two. In addition, the high-risk conditions managers choose high-risk projects with the purpose of obtaining a high *return*. Risk reduction is done by using debt financing from lenders. However, the use of debt at high risk levels can reduce the agency costs of equity but can lead to agency costs of debt.

Application of the better corporate governance makes companies increasingly trusted by the creditors, investors and other partners. Therefore, the funding originating from companies that debt will increase because the company has been trusted lenders so that access to funding sources of debt becomes easier. Although the proportion of corporate debt increases, shareholders will not be worried because the company that the application of corporate governance both will run the principle of transparency, akuntanbilitas, responsibility, independence and fairness and equality. With the implementation of good corporate governance will improve investor confidence which ultimately impact the fall in equity risk premium.

Collins and Huang (2011) states that corporate governance affects the risk and cost of capital. They further stated that the company has good governance will improve investor confidence and lower the cost of capital. Bowen et al (2008) express the characteristics of the board of commissioners will have an impact on the cost of capital and the equity risk premium. Furthermore, Bowen et al (2008) concluded that the higher the percentage of independent board, the smaller the cost of capital and the equity risk premium. The same was found by Lefort and Urzúa, (2008). Collins and Huang (2011) explore managerial ownership as a proxy for corporate governance. The results showed that managerial ownership has a positive effect on the equity risk premium.

Based on the description and the research problem, then the third hypothesis proposed is:
H5: the percentage of independent commissioners negatively affects the Equity Risk Premium.
H6: managerial ownership has a positive effect on the Equity Risk Premium.
H7: the number of commissioners has a positive influence on the Equity Risk Premium.

3. RESEARCH METHOD

3.1 Sample Selection
The sample in this study were manufacturing companies listed on the Indonesia Stock Exchange with the observation period in 2006, while data that is needed is a manufacturing company that is listed on the Indonesia Stock Exchange from 2005-2008. Selection of the sample using purposive sampling method with k riteria used are:
1. The company does not lose in the first year and second year after the observation period, in accordance with the terms of ERP calculation approaches Easton (2004) that the value of $_{t+2}$ EPS> EPS $_{t+1}$> 0;
2. In 2006 the company's equity is positive. Point is based on the assumption that companies that have negative equity has been impacted by economic events that is temporary in nature (Hermeindito, 2008). It can be concluded if the events do not occur then the equity is negative, this will have an impact on investor assessment of the performance of the company in general, so it is estimated that the condition is not good in predicting the company's ERP.
3. Beta company in 2006 is positive. Point is based on the statement of the Hanafi and Halim (2000) that theoretically if the beta of a stock is negative, the required return for stocks will be smaller than the risk-free return. It can be concluded that the negative beta can not identify the size of the ERP in the company.

4. The company is not delisted during the period of 2006 and year ending December 31;
5. The Company has issued and published audited financial statements in a row and have the necessary data during the study. The data used in this study are the independent auditors' report and financial statements of companies in 2005-2008, as well as daily stock prices and JCI in 2006.

3.2. Variable Definition and Measurement Research

3.2.1 Dependent Variables

Dependent variable in this research that equity risk premium (ERP), is a major component of the expected return demanded on risky investments. Expected return is an important determinant of the cost of equity and capital costs, an important input in financial analysis and valuation firm (Demodaran, 2009). In this study, the ERP is calculated using the approach Easton (2004) based Model-Ohlson & Juettner Nauroth as follows:

$$R^2 - R(DPS_{t+1} / P_t) - (EPS_{t+2} - EPS_{t+1}) / P_t = 0$$

Description:

P_t	= current stock price
EPS_{t+1}	= forecast EPS a year to come
EPS_{t+2}	= forecast EPS two year to come
DPS_{t+1}	= forecast DPS a year to come

From these equations will produce two values R with two different signs. By law Easton (2004), the estimated $R_{PEG, t+2}$ $EPS > EPS_{t+1} > 0$ so that the value of having a positive sign that will be taken.

3.2.2 Independent Variables

The independent variables include the following:

1. Company size (UP)

Size firms measure with *the natural logarithm* of total assets of the company that became the sample of this study.

$$UP = Ln\ TA_t$$

2. Ratio Book Value To Market Value Of Equity (BTP)

Ratio Book Value to Markets of Equity measured by dividing the book value of equity at the market value of equity.

$$BTP = \frac{Book\ value\ of\ equity_t}{Market\ Value\ of\ Equity_t}$$

3. *Leverage* ratio (LEV)

Leverage ratio is measured by dividing total debt to total assets.

$$LEV = \frac{Total\ Debt_t}{Total\ Asset_t}$$

4. Beta (BETA)

Beta value is obtained by dividing the covariance of firm returns and market returns *(Cov R_t, R_M)* on the market return variance *(Var R_M)*. Covariance of return the company and

the market return $(Cov\ R_i\ R_M)$ can be calculated by the following formula (Hanafi and Halim, 2000):

$$Cov\ R_{it}.R_{Mt} = \frac{\sum(R_{it}-E(R_{it}))(R_{Mt}-E(R_{Mt}))}{x}$$

Description:

R_{it} = return stock i in period t
$E(R_{it})$ = average stock return in period t
R_{Mt} = market return in period t
$E(R_{Mt})$ = average stock return in period t
x = Number of enterprises into the sample

Value of stock return variance $(Var\ R_M)$ obtained by the formula:

$$Var\ R_{Mt} = \sum(R_{Mt} - E(R_{Mt}))^2$$

So the formula to find the beta is:

$$\beta = \frac{Cov\ R_{it}.R_{Mt}}{Var\ R_{Mt}}$$

5. Independent Commissioner (KI)

Independent commissioner is the percentage of members of the board of commissioners who have no connection with either company as a shareholder or manager of the company or companies' affiliation. Independent Commissioner is measured by the formula:

$$KI = \frac{\textbf{Number of independent commissioners}}{\textbf{Number of commissioners}}$$

6. Managerial Ownership (KM)

Managerial ownership is the percentage of shares held by the board of directors and board of commissioners. Managerial ownership is measured by the formula:

$$KM = \text{Total shares held by the board of directors and board of commissioners}$$

7. Number of Commissioners

The number of independent commissioners is the sum of all members including the chairman of the board of commissioners and independent commissioners.

3.3 Analysis Method

Testing of the hypothesis in this study using multiple regression analysis with regression equations used to test hypotheses is:

$ERP = \alpha + \beta_1 \beta_4\ BTP\ UP + + LEV + \beta_2 \beta_3 \beta_5\ BETA + KI + KM + \beta_6 \beta_7\ JK$

description:

ERP: *Equity Risk Premium*
α: constant coefficient
$\beta1$-7: Regression Coefficients of independent variables
UP: Size of company
LEV: *leverage* ratio of firms
BETA: Beta company
BTP: The ratio of book value to market value of equity
KI: The percentage of independent commissioners
KM: The percentage of shares the board of directors and commissioners

JK: The number of commissioners

4. RESULTS AND DISCUSSION

4.1 Research Sample
The sample in this study was chosen based on criteria that have been established. Total companies listed in Indonesia Stock Exchange as many as 344 companies in 2006. Of these there are 134 companies (39%) that fall into the category of manufacturing companies and is the population of the study sample selection. Of the total 134 companies will be selected companies that will be sampled based study sample selection criteria previously mentioned. Based on this observation, as many as 93 companies (27%) excluded because they do not meet the criteria. Total company that became the study sample were as many as 41 companies or 12% of the total companies listed in Indonesia Stock Exchange and by 34% of the total manufacturing enterprise.

4.2 Hypothesis Testing Results
Table 1 shows that firm size has a significant effect on the *equity risk premium* .. Company size and significant negative effect on the ERP suggests that investors in Indonesia Stock Exchange using the company's size as measured by total assets as a basis for decision making. These results are in line with Komalasari (2000) in Amurwani (2006) which suggests that information asymmetry tends to decrease with increase in the size of the company. The consequences of information asymmetry is reduced transaction costs on firms will decline and the increased liquidity of shares, and in turn will certainly affect the decisions of investors in investing.

These results give support to the Gebhardt, *et al.* (2001) who found that the publicly available information on the company's increasingly larger and more liquid stock they will lower the perceived risk in the company, the *equity risk premium* will be lower. It also does not support research Boone, *et al.* (2008) which states that firm size negatively affect the *equity risk premium*.

Table 1
The results of hypothesis testing

Independent Variablel	Variablel Dependent (ERP)		
	B	t	sig
(Constant)	1.772	1.633	0.112
UP	-0.838	-1.880	**0.069 **
BTP	0.140	3.505	**0.001 ***
LEV	0.332	1.741	**0.091 **
BETA	-0.106	-1.640	0.110
KI	0.159	0.711	0.482
KM	0.881	3.132	**0.004 ***
JK	0.181	1.651	0.108
R^2	0.533		
F-Test	5.391		
Sig F	**0.000 ***		

** Sig at level 10%
*** Sig at 1% level

Other test results showed that the book-to-market equity has a significant positive impact on the equity risk premium. The results of this study, consistent with previous research

which states that the book-to-market equity significantly positive effect on the equity risk premium (Boone, et al., 2008). These results are also consistent with research conducted by Fama and French (1992) who interpret the book to market equity ratio as a risk factor for equities, that is, the higher the book-to-market equity ratio, the higher the risk of equity in the company. but it also strengthens the research Gebhard et al. (2001) who found that the ratio of book to market equity has a strong influence on the equity risk premium, it is reflected in the market that consistently apply a high return for firms with book-to-market equity ratio smaller than one or in a state is growing ..

The study also found that leverage has a significant effect on the equity risk premium. The results of this study, consistent with previous research which states that leverage is significantly positive effect on the equity risk premium (Boone, et al., 2008). These results are also in accordance with Gebhardt, et al. (2001), higher levels of financial leverage is expected to increase the perceived risk and increase the company's equity risk premium, also in accordance with the opinion of Baxter (1967) in the Fama and French (1992) stated that the addition of debt to a certain point will increase the value of the company, but when passing through the optimal point, the addition of debt will lead to bankruptcy, thus decreasing the value of the company. Baxter's statement reinforced by the results of his research which found that companies with high leverage ratios have a positive influence on the risk of the company.

The results of this study indicate that beta does not have a significant negative impact on the equity risk premium. The results of this study is consistent with previous research which stated that based on the concept of CAPM, the higher the beta the higher the risk will increase the equity risk premium and the company and the results of research Boone, et al., (2008) who found that a significant positive effect on the beta equity risk premium. These results also do not support research conducted by Fama and French (1992) which examined the U.S. capital markets from 1963 to 1990, found that beta has little ability to explain the expected return on stocks. However, the results of this study support the Martin and Lilo (2003) found that there is no influence between the average return expected by the company beta on emerging markets. This is also strengthened by the results of research Bekaert, et al. (1997) that examines the burgeoning markets in 27 countries the period July 1991 - June 1996.

The results also showed that the percentage of independent commissioners do not have a significant effect on the equity risk premium. This indicates that investors do not perceive that an independent commissioner would be able to reduce investment risk. The results of this study is consistent with Collins and Huang's research found that the proportion of board members (board of commissioners for the context of Indonesia) will be able to lower the cost of capital. Difference in results is probably due to differences in the measurement of equity risk premium and cost of capital and the board of commissioners. This study found that managerial ownership has a positive effect on the equity risk premium. These results indicate that the higher the percentage of shares owned by management will be the higher risk of investing in the company. To anticipate these risks, investors will require a higher return on kesediaanya invest in companies that rate high management ownership, so that the equity risk premium increases. This finding is consistent with Collins and Huang (2011) who found a positive effect on managerial ownership cost of capital (another measure of equity risk premium). These results are also consistent with the entrenchment theory which states that the higher ability to survive diposisinya, the worse the performance of the company and the higher the investment risk. Ability to survive can ditujunkan with the percentage of shares owned. Management that has dominant shares will be able to survive better than management had relatively small shares.

The study also found that the number of commissioners has no effect on the equity risk premium. The results are in line with the thinking that it is very difficult to determine the number of commissioners. Members of the board of commissioners that are too small may reduce its ability to oversee the board of directors because not enough personnel to discuss. Whereas if too much will lose a sense of responsibility or any member of the board will release the responsibility to other parties as dikemukan in the free-rider theory.

4.3 Assessing Goodness of Fit (F test) A Model

The accuracy in estimating the regression function can be measured actual value of his Goodness of Fit. Statistically, at least it can be measured by the coefficient of determination and statistical value of F. The coefficient of determination ($R^{2)}$ was essentially measures how much the ability of models to explain variation in the dependent variable. Based on multiple linear regression to test the research model by using the ERP variables R^2 values obtained his value by 0.533 or 53.3%. Thus it can be concluded that 53.3% variation of the ERP variables can be classified by the UP, BTP, LEV, BETA KI, KM, and JK, while the remaining balance of 46.7% is explained by other variables outside the model.

Based on the results of testing on the F statistical test carried out by using the ERP dependent variable and seven independent variables consisting of UP, BTP, LEV, BETA KI, KM, and JK obtained F value of 5.391 significant at $\alpha = 0.01$ means that the regression model good enough to predict the Equity Risk Premium companies sampled in this study.

5. Conclusion, Implications, Limitations, and Suggestions

5. 1 Conclusion

Penetian aims to influence the size of the company, the ratio of book value to market value of equity, leverage, beta, independent commissioners, managerial ownership, and the number of Equity Risk Premium komisris. The study found the company's size and significant negative effect on the ERP. The study also found that the ratio of book value to market value of equity has a significant positive impact on the equity risk premium. The study also found that a significant positive effect of leverage on equity risk premium. The results of this study indicate that beta does not have a significant negative impact on the equity risk premium. The results also showed that the percentage of independent commissioners do not have a significant effect on the equity risk premium. This study found that managerial ownership has a positive effect on the equity risk premium. The study also found that the number of commissioners has no effect on the equity risk premium.

5.2 Implications of Research Findings

This study has two implications of the implications of the theoretical and practical implications. In the context of the theoretical results of this study which found that firm size, the ratio of indigo books on the market value of equity, leverage, managerial ownership and add to empirical evidence supports the theory of CAPM, Agency, entrenchment, and corporate governance. In a practical context, the results of this study will be used as a basis for investors and management to investment decision-making and corporate policy.

5.3 Limitations of Research

The limitations in this study are as follows:
1. Sample of firms in the study is limited. This is because the criteria that must be met in order for these companies can be used as a sample of this research.
2. Period of this study included only 1 (one) year of observation so that the ERP calculation is less able to represent changes in broader ERP in previous years.

5.4 Suggestions for further research

1. It is recommended for further research in order to take samples from different types of companies such as finance companies or service companies that can be seen how the independent variables in this study affect the dependent variable for this type of enterprise services and finance.

2. Extend the observation period of the study to obtain a more accurate calculation of the ERP that is expected to further explain the ERP and the factors that influence it.

REFERENCES

Almilia, Luciana Spica dan Sulistyowati, Dwi. (2007). *Analisa Terhadap Relevansi Nilai Laba, Arus Kas Operasi Dan Nilai Buku Ekuitas Pada Periode Sekitar Krisis Keuangan Pada Perusahaan Manufaktur di BEJ*. Makalah disajikan dalam Proceeding Seminar Nasional: Inovasi Dalam Menghadapi Perubahan Lingkungan Bisnis. FE Universitas Trisakti Jakarta.

Annin, Michael and Dominic, Falaschetti. (1998). *Equity Risk Premium Article*. IL: Ibbotson Associates.

Amurwani, Aniek. (2006). Pengaruh *Luas Pengungkapan Sukarela dan Asimetri Industri Informasi terhadap Cost of Equity Capital*. Universitas Islam Indonesia. Jogjakarta.

Banz, Rolf W. (1981). The Relationship between Return and Market Value of Common Stock. *Journal of Financial Economics*. Vol. 9.

Basu, S. (1977). Investment performance of Common Stocks in Relation to Their Price-Earning Ratios: A Test of the Efficient Market Hypotesis. *Journal of Finance*, 12.

Bekaert, Geert., Erb, Claude., Havery, Campbell., dan Viskanta, Tadas. (1997). The Cross-Sectional Determinants of Emerging Market Returns. *Journal of Finance*.

Bhandari, L. (1988). Debt/Equity Ratio and Expected common Stock Returns: Empirical Evidance. *Journal of Finance*, 43.

Boone, Jeff P., Khurana, Inder K. and Raman, K. K. (2008). Audit Firm Tenure and the Equity Risk Premium, *Journal of Accounting Auditing and Finance*, Forthcoming. (Online) (Diakses 16 November 2009) Tersedia di: http://ssrn. com/abstract=940401

Collins, D, & Huang, H. (2011) Management Entrenchment and the Cost of Equity

Capital. *Journal of business Research, 64; 356-362*

Damodaran, Aswath. (2008). Estimating The Equity Risk Premium, *Journal of Accounting and Economics*. (Online) (Diakses 3 November 2009) Tersedia di: http://www.stern.nyu.edu/fin/workpapers/ papers99/wpa99021.pdf

Damodaran, Aswath. (2008). *Measuring Country Risk*. Working Paper, SSRN.com. (Online) (Diakses 31 Oktober 2009) Tersedia di: pages.stern.nyu.edu/ ~adamodar/pdfiles/papers/ERPfull.pdf

Damodaran, Aswath. (2009). Equity Risk Premiums (ERP): Determinants, Estimation and Implications, *Journal of Accounting and Economics*. (Online) (Diakses 29 Oktober 2009) Tersedia di: http://ssrn.com/abstract=1492717

Diaz, Marsela. (2009). *Analisis Reaksi Pasar Terhadap Pengumuman Pergantian Kantor Akuntan Publik (Studi Pada Perusahaan Publik Di Indonesia)*. Makalah disajikan pada Simposium Nasional Akuntansi 12, Palembang.

Easton, P. (2004). PE Ratios, PEG Ratios, and Estimating the Implied Expected Rate of Return on Equity Capital. *The Accounting Review* 79 (1). pp 73-95.

Erb, cloude B., Harvey, Campbell R., dan Viskanta, Tadas E. (1995). Country credit risk and global portfolio selection. *Journal of Portfolio Management*, Winter.

Fama, Eugene F dan French, Kenneth R. (1992). The cross section of expected returns. *Journal of Finance*, 47 (2).

Francis, Jennifer., LaFond, Ryan., Olsson, P., dan Schipper, K. (2004). Cost of Capital and Earnings Attributes. *The Accounting Review* 74 (4): 967

Gebhardt, W., Lee, C., dan Swaminathan, B. (2000). Toward and Implied Cost of Capital. *Journal of Accounting Research* 39 (1): 135-176

Hartono. (2009). *Pertimbangan Return dan Risiko dalam Keputusan Investasi*. Makalah disajikan pada UPT Perpustakaan UNS. (Online) (Diakses 7 Desember 2009) Tersedia di: www.google.co.id di Return dan Risiko Investasi.

Hermeindito, kaaro. (2008). *Deviden dan Equity Negatif*. (Online) (Diakses 17 Juni 2010) Tersedia di: http://www.mail-archive.com/ahlikeuangan indonesia@yahoogroups.com/msg02348.html.

HSBC Premier: Global Investment Perspective. (2009). (Online) (Diakses 22 November 2009) Tersedia di: www.hsbcprimer.co.id

Jogiyanto. (2003). *Teori Potofolio dan Analisis Investasi*. Edisi Ketiga. Yogyakarta: BPFE UGM.

Leuz, C. and Verrechhia., R. (2005). *Firms' Capital Allocation Choices, Information Quality, and The Cost of Capital*. Working Paper, University of Pennsylvania.

Lefort F, Urzúa F.(2008) Board independence, firm performance and ownership concentration: evidence from Chile. Journal of Business Research, 61:615–22.

Martin, J. Rudrigo, Fuentes, San and Lilo, Salvador, Zurita. (2003). *The Equity Risk Premium in Emerging Market: The Case of Chile*. (Online) (Diakses 31 Oktober 2009) Tersedia di: http://www.cemla.org/pdf/redix/RED-IX-ch.pdf

Ohlson, J and B. Jouttner-Nauroth. (2000). Expected EPS and EPS Growth as Determinants of Value. *Review of Accounting Studies* 10.

Pasaribu, Rowland, Bismark, Fernando. (2009). Model Fama dan French sebagai Pembentukan Portofolio Saham Di Indonesia, *Journal Akuntansi dan Bisnis* 9 (1): 1–12

Susiyanto, Fendi. (2009). *Valuasi Pasar Saham dan Obligasi dengan Fed Model (2)*. Investment Solution. (Online) (Diakses 15 November 2009)

Tandelilin, Eduardus. (2001). *Analisis Investasi dan Manajemen Portofolio*. Edisi Pertama. Yogyakarta: BPFE.