

THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

The Importance of Eva in Determining the Firm Value through the Systematic Risk and Fundamental Factor

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Abstract:

This study aims to determine the effect of liquidity, activity, leverage, asset size, systematic risk to value of manufacturing firms listed in the Indonesia Stock Exchange. This study used an explanatory design using secondary data from JCI, Stock Return, stock price and financial statement data obtained from Manufactures Firm listed on the Indonesia Stock Exchange. Samples were taken by purposive sampling as many as 38 companies for 6 years of observation, using path analysis. This basic model was used to analyze the path to estimate the relationships directly or indirectly between exogenous and endogenous variables. The results showed that the first, liquidity, leverage, and asset size did not significantly influence the systematic risk, while the activity significantly and negatively related to the systematic risk. Secondly, liquidity and activity had no effect on Firm value, while negative and significant effect Leverage, Asset Size has significant and positive impact on Firm value. Third, systematic risk did not affect the value of the Firms.

Keywords: activity, asset size, leverage, liquidity, systematic risk, firm value

1. Introduction

1.1. Background Research

Stock market as the market in general is a meeting place for sellers and buyers. Here are bought and sold is a long-term financial instruments or more than 1 (one) year, either in the form of equity (stock) and debt (bond), both published by the government (public authorities) as well as by private companies (private sector). So the stock market trying to bring together sellers and buyers of capital or funds. Buyer of capital or funds here are those, both individuals and institutions or enterprises, both domestic investors and foreign investors. In investing beside making expectation of profit (return) as the investor would do, of course there will be risk factor, since the investment activities on investing in financial assets like stocks and bonds or even real assets there are always two important things to consider, namely the risk (risk) and profitability (return).

Sources of risk can be divided into 2 (two) groups: systematic risk which is the risk that affects all the enterprise and unsystematic risk which is the risk that affects (small group) Firm. Systematic risk according to Beaver, Kettle and Scholes (1970):

- “A systematic component reflects common movement of single security’s return with the average return of all other securities in the market, the large the value, the greater the riskiness of the security a β of the implies an averages riskiness”

From the definition, it shows that systematic risk or beta of a stock is an indicator showing the sensitivity of the movement of the stock return on return movement of other stocks in the market. Their connection with the individual stock market bring the idea that the amount of the systematic risk of a stock should be expected of the fundamental aspects of the Firm with the characteristics of the market. If the link between the fundamental aspects is known then it will greatly help investors in analyzing the sensitivity of the movement of the stock return towards the stock movement. Results of research Hanafi (Urban, 1997) which states that the announcement of financial statements of listed companies information showed a large effect on stock trading activity in the Indonesian stock market.

Systematic risk is very important for investors to invest, because the risk is real will be borne by the investor. Therefore, this risk can not be fully diversified, stock markets must provide compensation for investors to bear it (Young; F. O’Byrne, 2001). The description above indicates that Beta factors become important as a consideration for investment. Seeing the importance of these factors it is very necessary to know what variables are affecting the Beta shares. Use of Beta not only can reduce the number of variables that must be estimated and the data usage (Beta) historical (adjusted) is more reliable, but the use of Beta also allows us to identify the fundamental factors that may affect the Beta (Husnan, 1998). Beta is a systematic risk that can also be associated with changes in a specific Firm (Tandelilin, 2001).

The domestic manufacturing industry had the opportunity to grow, because the Indonesian government has made tightening efforts against imported products in 2009. Manufacture products that has been tightened are electronic products, textiles, food and beverages, footwear and toys. On the other hand, the government has adopted a policy to provide fiscal stimulus and lower fuel prices. Bank

Indonesia (BI) also began to lower the BI rate that is expected to reach 7.5% before the financial crisis struck. Implementation of this policy is an opportunity for manufacturing businesses. Determination of the object of this study is focused on manufacturing companies listed on the Stock Exchange due to an assumption that the industrial sector, especially the manufacturing industry as a driving force and a booster of economic growth, a strategic position for further improved performance. The increase in the manufacturing sector is intended to promote national economic growth quality. But in reality, since the 1997 economic crisis, the performance of the manufacturing industry has decreased quite dramatically. The condition is caused mainly due to great foreign debt burden, especially in large companies that swelled due to the falling Exchange Rate of rupiah, and still continue declining competitiveness in many export products. Even until the third quarter of 2009 the manufacturing industry is considered very poor compared to other sectors.

From the aspect of systematic risk, companies in the manufacturing group, on average, are very volatile. As shown in Table 1:

Keterangan	2005	2006	2007	2008	2009	2010
Average risk	0.69	1.01	0.84	0.12	0.73	0.67
Average Firm's value	709547.75	631996.36	2764695.26	3107820.41	2651622.33	2.940094.63

Table 1: Average Developments of Systematic risk and Manufacturing Firm Value in Period 2005-2010

Source: output, data processed, 2012

According to Table 1 above it appears that the average risk of systematic manufacturing companies in the group for 2005 was \$ 0.69 and then increased to 1:01 in 2006 and then dropped in 2007 to 0.84. For 2008 the systematic risk dropped to 0:12 and then increased again in 2009 to 0.73, and the last in 2010 dropped to 0.67. This fluctuation systematic risk gives illustration that to invest in stock markets, risk factors also should be a concern for investors because if there are miscalculations there will be loss on the investments that have been made. From Table 1 above, it appears that the value of EVA period 2005-2010 also fluctuated even though the Firm's value on average are at a positive number, which means a Firm earn more than their cost of capital invested. Search results on Table 1 provides information that the fundamental factor has increased over the last three years, indicating that the risk of the Firm will decrease and followed by an increase in the value of the Firm, but what happened is the risk tends to increase while the Firm's value is fluctuating. Liquidity, activity, leverage, asset size, and PBV according to financial theory will have negative effect on the risk and positive effect on Firm value. However, from the results of research Kumianny A Saputra et al (2002), stated that the systematic risk significantly influence the value of the Firm. According to. Turnbull (1977) the value of the Firm was affected by the systematic risk. Based on those descriptions on the phenomenon condition empirical, fundamental indicators and conditions of empirical industrial manufacturing as well as research gap, the researchers willing and interested to do research empirical studies on Effects of Fundamental Factors Against Risk Systematic and Value Manufacturing Firm listed on the Indonesia Stock Exchange (BEI). The purpose of this study is to determine the effect of Liquidity, Activity, Leverage, Asset Size of the Risk Systematic and Firm Values and benefits of this research is that it can be a reference for scientific development, particularly in the areas of finance and investment and can be used as a reference for the similar research in the future.

2. Literature Review

2.1. Risk and Return Concept

The main topic on the stock analysis is an assessment of the financial asset. Value itself is a function of the return and risk. Therefore, the concept of risk and return is a very important concept in the investment. In the theory of financial management explained that their theory of the trade-off between risk and return that investors expect high returns from investments have high risk.

Stock returns can be divided into realized return and expected return. Realized return indicating the real facts of the stock return. This return can be calculated with the data accurately. Expected return is an estimate of the return of an asset that is expected to be obtained by investors within a specified period. As an estimate, these returns have an uncertainty to happen or not happen in the future. From the explanation above it can be concluded that the return is income earned by investors in the form of profits and losses can all depend on the price fluctuations of the assets owned by the investor. Motivation of investors to invest is to get returns and as the consequents investors must dare to bear the investment risk. Investors need to consider the level of risk of an investment as a basis for making investment decisions. An investor will face two kinds of risk which are systematic risk and unsystematic risk. Fluctuations of these risks vary from one stock with another stock. Because of the differences, each stock has different levels of sensitivity to changes in the market. For examples factors of capital structure, asset structure, liquidity, profitability, and others. Therefore, an investor needs to do a risk analysis on stock (Halim, 2003).

Risk is the possibility of differences between the actual return earned by the expected return. More likely the greater the differences, the greater the risk of the investment. Van Horne and Wachowics, Jr. (1992) defines risk as the variability of the return of the expected return. So to calculate the risk used is the standard deviation of the return deviations that have occurred with the return expectations.

The size of the risk that is more complete expressed by Ferri and Jones (1979) that the risk can be measured by various proxies including Business risk (variability in future income: sales revenue and pre-tax cash flow), such as the coefficient of variation in sales, the coefficient of variation in pre -tax cash flow and a standard deviation of standardization growth in sales, as well as the standard deviation of standardization growth in cash flow.

In general, market risk is measured by beta or results of CAPM or APT, while the unique risks (unsystematic) is the result of the variability of a Firm's size, income, sales and other unique aspects of others Firm.

2.2. Theory of Capital Asset Pricing Model (CAPM)

This model invented by Sharpe (1964) can be used as a predictive relationship between risk assets and the expected return. CAPM is a model that links the expected level of a risky asset with the risk of such assets on balanced market conditions. This model is based on systematic risk in estimating expected returns.

Risk measures used in CAPM is beta, as a measure of systematic risk, beta is a very important variable because beta is a systematic risk of a security that is can not be avoided, through diversification. Beta is a measure of the relative risk that individual stock relative to the stock portfolio of all stocks (Jones, 1998). The higher the beta and the market return, the higher the rate of return implied by the investor. The size of the relevant securities risk is the risk contribution measure against the risk of the portfolio securities.

Model CAPM is an equilibrium model that describes the relationship of risk and return in a more simple and only use one variable (variable Beta). Risk securities indicated by Beta, because in the balanced market, portfolio that is formed is already well diversified, so that the relevant risk is systematic risk (beta). According Handerson, Trennephol and Wart (1994) *beta is measure of sensitivity of an individua security return for a 1% change in the return of the market,*

The scale of beta has a certain sense, if the value is greater than 1.0 ($\beta > 1$), then securities have a higher risk than market risk (agressive stock). If the beta less than 1.0 ($\beta < 1$) means the risk of securities is smaller than market risk (defensive stocks). Then, if the beta is 1.0 ($\beta = 1$) means the risk of securities is the same with market risk.

Beta can also be calculated through regression techniques using the CAPM model. If using this model, the regression equation becomes:

$$R_i - RBR = \beta_i \cdot (RM - RBR) + e_i$$

So dependent variable of the equation is $R_i - RBR$ and independent variable is $RM - RBR$.

According to the CAPM only systematic risk affecting the yield of an asset. Systematic risk is linked to macro-economic factors that can affect yields an asset, such as inflation, exchange rate, and fluctuations in business circumstances. Other risks can be lost through the process of diversification. Litner (1965) is also one of the pioneers of the CAPM theory, especially in single index models. Single index model based on the observation that the price of a security fluctuates in line with the market price index. If used single index model or market models, the beta is calculated by the following equation:

$$R_i = \alpha_i + \beta_i \cdot R_M + e_i$$

William Sharpe (1963) developed a model called the single index model. This model can be used to simplify the calculations in the model Markowitz by providing input parameters required in the Markowitz model calculations, in addition, the single index model can also be used to calculate the expected return and risk portfolio.

2.3. Some of the Firm's Theory of Value and Economic Value Added

2.3.1. The value of the Firm

Firm is defined as a commercial Firm and size is defined as the magnitude. While the value is defined as the monetary worth of something: the market price. Abdurachman defining value as: (1) in terms of economics in general is the power or the power of something, goods or services to control other goods or services in exchange (2) in finance is the value of something, as determined in accordance with one of the rules or conceptions. The term value generally means a price on something that will be acquired in the open market or the market value.

For Firm that go public, an important element from the Firm's value is the value of the stock, resulting in financial literature known as the stock market value. Obviously, the value of the Firm not only depends on the value of stocks but also the value of the debt. Longbrake (1972), defines the value of a firm as investor expectation about the effect of the firm's investment and financial policy.

This theory explained that the Firm's value is a function of the dividend and the rate of return of an equity. Basically, this theory stated that the value of the Firm is the result of the assessment and expectations of investors on Firm's shares in stock market. An investor will determine present value of an equity (securities) with specified hopes for changes in assets and liabilities of a Firm. For financial policies, it is reviewed at two important effects, namely profit and risk.

2.3.2. Economic Value Added (EVA)

The new approach in valuation of Firm is to calculate Economic Value Added (EVA) of a Firm. EVA is a measurement of the success of Firm's management to increase value added for the Firm. The assumption is that if management performance good / effective, it will be reflected in an increase in the Firm's stock price (Tandelilin, 2010). EVA was first popularized by Stern Steward through the Firm's Management Service, a consulting firm from the United States, Britain, and Germany. In contrast with analysis ratio, EVA as a new concept for assessing the performance of Firm can stand alone and can simultaneously measure the profitability and growth (Rao, 1994: 67). EVA is meant for more than just a measure of financial performance but in fact also serve intensive compensation system and integrated financial management. Through EVA all the principles of financial management processes tied to only one size makes the whole system becomes easier to administer and understand. In this case EVA as a modest size but more integrated financial management system. One measurement serving all units and functions within the Firm and make it more obvious responsible mission of creating value.

Researcher Taaki Wakasugi et al (1977) stated that in addition to strengthening management by not ignoring interests of shareholders, the profit potential of EVA is helping companies more effectively in communication with the investing community. Researcher Obyrne (1997) stated that: positive EVA means a Firm earn more than cost of capital, it adds to the advantages the EVA, if further to

increase capital base and maintain its profitability, a negative EVA means Firm gain less than cost of capital, it means the Firm failed to increase the profits of capital base and in making new investments, which also further acquired smaller capital.

Mathematically, formula for calculating EVA in a Firm can be written as follows:

EVA = net profit after minus taxes - the amount of capital cost operations in rupiah after minus taxes.

EVA = EBIT (1- tax) - (operating capital). (Percentage of capital costs after taxes).

This is in accordance with the Steward Ill (1991) stated the amount of EVA can be positive, negative or zero. It means that:

1. EVA > 0 means add value. In this case, employee is entitled to a bonus, creditors continued to receive interest, and shareholders can get a return that is equal to or more than planted.
2. EVA = 0 means economic breakeven for all profits used to pay obligations to funders of both creditors and shareholders, so employees do not get a bonus.
3. EVA < 0 means not provide additional on the Firm, because available profits could not meet the expectations of funders. In this case the employee does not receive a bonus only creditors still get the interest and shareholders do not get a return on funds invested.

2.4. Several Reviews about Researched Concepts Definition

2.4.1. Liquidity

According to Sutrisno (2001), liquidity ratio to see whether the Firm is able to fulfill its obligation within the due date, we generally used Current ratio. According to Martono (2010), Liquidity is a ratio that shows the relationship between Firm's balance and other activities with debts. Liquidity is predicted to have a negative relationship with Beta, which is rationally considered that the more liquid the Firm is, the risk is also smaller. Tandelilin research (1997) shows that current ratio has a significant negative relationship with systematic risk. Nining Setyowati research (2010), Setiawan (2003) found that in Bullish market, CR did not show any significant influence towards stock's systematic risk.

In theory, Firm's liquidity is also one of several points of consideration for investors to invest their money, because it is closely related with the Firm's ability to fulfill its short-term debts, where the higher the liquidity is, the return received by investor is also higher, and reduce the stock's systematic risk that need to be measured. Dwi Martani, Rahfiani Khairurizka (2007), Hamzah (2007), Ulupui (2006). This indicates that investor will get higher return if the Firm's ability to fulfill its short-term debt is also high.

2.4.2. Activity

Activity ratio assumes that it is better to have appropriate balance between sales and other activities factors which is supplies, debts, fixed activities and other activities. According to Martono (2010) activity ratio is a ratio that measures Firm's efficiency in utilizing its assets. Activities is predicted to have negative relationship with Beta, which is rationally considered that the more active the Firm is, the smaller the risks. Commonly used Activity ratio includes *Inventory turnover, average collection period, working capital turnover, total asset turnover*. Total asset turnover (TATO) is one of Activity ratio that shows the ability and efficiency of the Firm in utilizing its activities and their rotations. Because of that, TATO can be used to measure how efficient the whole activities of the Firm are supporting its sales. Kennedy research (2005), Roswati (2007), Manao and Nur (2001), Hamzah (2007) stated that activities measured using TATO have a positive affects towards stock's return. On the other hand, Ulupui (2006), Tuasikal (2001) stated that TATO shows negative result and insignificant. White, Sondhi and Fried (2002) stated that ratio between companies can be different because of the time where the assets is acquired differ.

2.4.3. Leverage

According to Schall and Haley (1983) Leverage is the presence of fixed cost among other possible expenses that can happen within the Firm. This leverage is called operational leverage. Weston and Brigham (1993) stated that if the economic condition is very good then it is very possible for the Firm to close its cost of capital from debts, the higher leverage will be more profitable, and in poor economic condition, higher leverage usage will be less profitable. If that is the case then if the return on asset exceed the cost of debt, then leverage become profitable and the higher the leverage factor, the higher also the rate of return for regular shareholders. Leverage is predicted to have positive relationship with beta, because the higher the Firm's usage of debts, then the risk is also higher. Ogden et al (2003) defines leverage based on its decision. *Leverage decision is the decision of a firm's management regarding the mix of debt and equity securities that it uses to finance its asset*. The use of this measurement is supported by Panayiotis et al (1996), Bagnani et al (1994), Ogden et al., (2003), D'Souza and Meggison (1999), Han et al., (1999), and Theodossious et al., (1996). Eugene and Houston (1998) defines that financial leverage is a measurement that shows how far fixed-revenue security is used in a Firm's capital model. Next, it is said that the amount of debts usage can be measured by financial leverage. Iturriaga (2001) defines leverage as the total debt. Panayiotis et al (1996) use proxy financial leverage with total debt to total asset. This proxy is coherent with Ohlson (1980), Pastena and Ruland (1986), Palepu (1986), Gombola, et al. (1987) dan Platt and Platt (1990). From several Leverage measurements, it can be concluded that its definition and measurement is the definition of capital structure. Exceedingly high capital structure will have negative impact on Firm's performance, because higher level of debts increases the interest rates of the Firm, reducing profit. (Robert Ang, 1997). Capital structure is the comparison between foreign capital (outsiders) and debt on owned capital (insiders). Proportion of debts can have a positive and negative influence towards the fluctuation in stock prices of the Firm, however at certain point increases in debts can reduce the Firm's value because the value received from the usage of the debt is lesser than the cost. Leland and Pyle (1977) by the fact that high leverage implies higher bankruptcy risk. Ehrhard and Brigham (2003), the value of a business based

n the going concern expectation is the present value of all the expected future cash flows to be generated by the assets, discounted at the Firm's WACC From this it can be seen that the WACC has a direct impact on the value of business. Douglas (2002) stated that the influence of leverage towards the Firm's value is positive because debts help repair the management incentives to act efficiently and strive to increase the Firm's value. Berger et al (1997) stated that the relationship is positive. Their arguments is, if managers use small amount of debts because they don't like risk and work pressure then a simple increase in leverage will show an increase in value. The higher the leverage, the higher the Firm's value. Why ? because an increase in leverage will increase debt and the risk of bankruptcy. This will increase the fear of risk by the management. This will push the management to make an efficient decision, and allocate all the resources to increase Firm's performance.

2.4.4. Asset Size

Jogiyanto (2009) stated that the size of activite is measured as the logarithm from the total activite. This variable is predicted to have negative relationship with risk. In financial research, the size of activite is used as measurement to the size of the Firm. According to Smart et al (2004) Firm can be measured using total asset or total sales. According to Braisford J T Barry (2002) firm size is measured by the total value of asset, next it is explained that the larger the Firm, the more diversified it becomes therefore reduce the chance of bankruptcy. Larger firms are considered to have smaller risk than smaller firms. The reason is that larger firms are considered to have easire access to stock market, therefore have a smaller Beta. It is hipotesized that large firms tend to invest its money to project that have low variant and Beta to avoid excessive profit. By investing to project with low Beta, it will reduce the Firm's risk. Therefore it is hipotesized that the relationship between Firm's size and Beta is negative. If the Firm becomes larger, the amount of share that the manager has will decrease because of the limitation of their personal wealth and diversification problem. On the other hand, Firm's size become one of the instrument used by creditor in giving loans towards the Firm. This variable is predicted to have negative relationship with risk. Bathala dkk, (1994) Watts and Zimmerman (Hartono, 2000) tried to prove the hipotesis about this relationship by forming a theory called Possitive accounting theory. Larger firms are subject to political pressure. Large firms that report an exessive amont of profit will attract the attention of politician and will be investigated for conducting a monopoly. Watts and Zimmerman further hipotesized that large firms tends to invest their money on project with low variant and beta that will help reduce the Firm's risk. High amount of total asset will indicate that the Firm has reached the maturity stage or well established. On this stage, cash flow is already positivem there is not much need for investment. the smaller the need for investment, the larger the dividends that can be given to the shareholders. This condition will affect the prospect of the Firm. Firm that has a good prospect at a relatively long period of time will still be attractive to investors, therefore the price of its stocks will remain stable at a relatively high price. Wald (1999) stated that the relationship is positive, his opinion is that the amount of physical asset is highly correlated with the amount of interest rate because assets that is financed with debts will have high risk. Tandelilin (1997), Daves *et al* (2000), Short dan Keasey (1999), Demsetz dan Lehn (1985), on their research shows that Firm's size affect positively on Firm's value. On their research it is explained that the potential influence from the amount of asset on the Firm's performance and value can be enumerated by two ways of thinking. The first is, financial influences. Argument by Short and Keasy (1999) is that the higher the asset, the higher the Firm's value. Why ? because according to them there is two possiblle cause. The first is, the higher the Firm's asset, then the access to source of funds is also higher. This two things will help the Firm in funding future investments projects. the more profitable investments that the Firm funded, the higher the Firm's value is.

2.5. Systematic Risk

To predict the rate of expected stock (expected stock return) it can be explained by the theory of Capital Asset Pricing Model (CAPM), which stated only systematic risk or market risk which is reflected through the beta affect the Firm value measured by stock return. However, CAPM was opposed on the grounds that it is not just a single beta that influence Firm value, then appears Theory Arbitrage Pricing Theory developed by Ross (1976) which stated that the determined of Firm value or stock return is a multi-factor beta. Lau, Leedan McInish (2002) found systematic risk as measured by beta has a positive relationship with stock return on the condition of the month that experienced positive excess return and a negative relationship on the condition of months that experienced a negative excess return. This is contrary to Lam (2002) which found that systematic risk is represented beta was unable to explain changes in stock return.

Theoretically risk have a relationship with Firm value. This is due to vote on the shares by investors in the market, basically influenced by market forces or external forces and unique strengths inherent in each Firm or internal forces. External forces are usually diproxy with market beta. According to. Turnbull (1977), Brenner and Syemour (1977) the Firm value was affected by systematic risk, then it is said for every different estimation of risk premium, the Firm value can be determined. This argument basically said the Firm value is determined by market risk or systematic risk. Thus, the opinion of Clarke (1980) a reduction in the systematic risk of the firm would generally increase of the firm value. The same opinion was also expressed by Brous and Now (1992) found that the market value is influenced by beta (systematic risk).

Therefore, the Firm value is strongly influenced by stock price so the relationship of risk-rated companies, was studied in terms of stock prices risk, as the research of Brenner and Syemour (1977), the results of Mackay and Moeller (2007) clearly indicated there is a relationship between risk and Firm value. But despite the significant relationship, there is also opinion of no relation between risk and Firm value. This is in accordance with the opinion of Dennis and Gregory (1994) *in contrast to prior studies we find no evidence of change in systematic risk following either equity offering or share repurchase.* This opinion is also supported by Hasty (1975). All of this showed that market risk does not affect the Firm value.

2.6. Research Hypothesis

Based on the main problem and purpose of the research, theory concept and previous research, as well as conceptual framework that has been described previously, the hypothesis proposed in this research can be described:

1. Liquidity, activity, and Asset Size have a significant negative effect on Systematic Risk, while leverage have a significant positive affect on Systematic Risk.
2. Liquidity, activity, and Asset Size have a significant positive affect on Firm value, while leverage have a significant negative effect on Firm value.
3. Systematic Risk have a significant positive affect on Firm value.

3. Research Method

3.1. Population and Sample

The population of all companies in the category of manufacturing industry which has been listed on the Indonesia Stock Exchange sampling technique in this research is using purposive sampling method. This technique is used for their ratings or specific requirements from researcher, as a basis in determining eligible sampled Firm. In this research, the Firm sample should have the following requirements: 1), listed on Indonesia Stock Exchange with continuous interval of 2005-2010. 2), the data audit report of the independent auditors provided an interval of the research period. 3), active Firm pay dividends. 4), does not have negative income and total equity in 2005-2010.

This research used data time series and cross section (pooling data), and based on technical criteria such side, the number of samples that meet the criteria are 38 companies in lapse period from 2005 to 2010. In addition, companies that were not been sampled due to insufficient data or data were disclosed in detail.

3.2. Data Analysis Technique

Data analysis technique that had been used is path analysis which is basic model for analyzing pathways in estimating strength of causal relationships illustrated in Path models. Processing the data were using Analysis of Moment Structure (AMOS) program, SPSS and Microsoft Excel program. There are some steps being taken in this research. First, in the form of the model that corresponds with proposed theoretical study and empirical study. Second, the model describes the path diagram form. Third, do the confirmatory analysis to test the significance of the proposed model. Fourth, test path diagram to know the influence directly or indirectly on a relationship (Ferdinand, 2002).

Testing the significance proposed model by using goodness of fit index in form of: Chi Square Statistic test, RMSEA index test, (*The Root Mean Square Error of Approximation*), GFI test (*Goodness of fit index*), CFI test (*Comparative Fit Index*). To test the hypothesis influence among variables (test of causality) was used on rate of alpha (α) by 5%.

3.3. Analysis Tools

In accordance with the conceptual framework in Figure 3.1, the model of functional relationships between concepts are built are as follows:

$$Y_1 = f (X_1, X_2, X_3, X_4) \quad (1)$$

$$Y_2 = f (X_1, X_2, X_3, X_4, Y_1) \quad (2)$$

In which :

- X_1 = Liquidity
- X_2 = Activity
- X_3 = *Leverage*
- X_4 = *Asset Size*
- Y_1 = Systematic Risk
- Y_2 = Firm Value

H. Operational Definition

Based on the hypothesis which has been stated variables that to be analyzed can be defined as follows:

- Liquidity (X_1) illustrates the Firm's ability to meet obligations that will due soon, in this research liquidity was measured by current ratio, which this ratio showed a comparison between current assets with current liabilities during the year and expressed as percent (%),
- Activity (X_2) showed how big companies in the use of their assets while looking the comparison between the sale of assets held during the year, in this research the activity measured by asset turnover (ATO) and expressed as percent (%),
- *Leverage* (X_3) comparison on using source of Firm external funding with source of Firm internal funding, or the ratio between the long-term debts with its own capital. In this research, leverage measured by debt to equity ratio, as measured by percent%.
- *Asset Size* (X_4) The size of assets used as representative measure (proxy) the size of Firm. Variable size of assets is measured as the logarithm of total assets (Log Total Assets).
- Systematic Risk (Y_1) Systematic risk is the beta coefficient which shows the sensitivity of a security's return of the return of market represented by Beta (β). The Firm's stock market risk is measured by actual beta stocks annual manufacturing companies that

go public in Indonesia Stock Exchange. In this research, systematic risk is the regression coefficient of the regression results return of a Firm with a stock price index.

- Firm Value (Y_2) Firm value is a reflection of the level of Firm's success in managing its resources in year t. Variables which is an indicator of the success of Firm to increase its value in this research Firm value were using EVA. EVA attempt to measure the added value produced by a Firm by reducing the burden of capital costs incurred as a result of investments made. In this research the value of EVA was obtained in the form of rupiah and have a positive or negative value. EVA have a positive value means the Firm has economic value added, whereas if EVA is negative EVA it means the Firm has no economic value.

4. Results and Discussion

4.1. The Effect of Liquidity, Activity, Leverage and Asset size on the Systematic Risk

- Variable liquidity negatively affect the systematic risk. It means the increased liquidity, will be followed by a decrease systematic risk; conversely, a decrease in liquidity will be followed by an increase of systematic risk assuming other factors that affect the size of systematic risk is considered constant. The results showed no effect on the liquidity of systematic risk. The results of this study is not fit with previous estimates and investment theory, that liquidity effect negatively on systematic risk. According to Bodie (2005) *the two common liquidity ratios are the current ratio and quick ratio. These ratios measure the firm's ability to pay bills coming due with its most liquid assets.* Liquidity problem is one possible factor of bankruptcy. The company's assets that run smoothly are less risky than non-smooth assets. This results provide empirical understanding for the exchange of management that perpetrators do not pay attention liquidity in view of systematic risk.
- The results of this study are consistent with the research of Setiawan (2003) Gudono and nurhayati (2001). Bodie et al (1989) in Tandelilin (1997). Instead Beaver et al. (1970), Farelly et al. (1982), Capstaff (1992) in Abdurahim (2003) stated Liquidity negatively affect beta stocks. Dewi research, Chandra Prima (2007), NiningDwiSetiowatiAndayani (2010) which stated that bullish market liquidity conditions showed a significant effect on systemic risk. Steph Subanidja (2007) stated that current ratio has positive effect is not significant on the systematic risk. The results show that hypothesis which is variable current ratio negatively affect and significant cannot be proven.
- Variable activity negatively affect the systematic risk, it means that the increase in activity, will be followed by a decrease systematic risk; on the contrary, decreased activity, will be followed by an increase in systematic risk, assuming other factors that affect the size of the systematic risk is considered constant. The results showed significantly influence on activity of systematic risk. The results are consistent with previous estimates and support the investment theory, that activity negatively affect the systematic risk. This condition illustrates that the use of high activity by company had impact on systemic risk. This finding is fit with research results by Chun and Ramasamy (1989), Setiawan (2003) which stated the activity measured by ATO have influence with risk, while Tandelilin (1997) in his research stated contrary.
- Variable leverage positively affect the systematic risk. It means the increase in leverage, will be followed by an increase in systematic risk; conversely, a decrease in leverage, will be followed by a decrease systematic risk, assuming other factors that affect the size of systematic risk is considered constant. The results showed that leverage as measured by debt to equity ratio does not significantly influence the systematic risk on manufacturing companies in Indonesia Stock Exchange. The results of this study are not match with the previous forecast, and also not in accordance with the logic of investment theory. The results provide empirical understanding of the management that if leverage rose it not give effect to systematic risk. This is caused by certain companies that have a high amount of debt, but got regulator protection (Dewi, Dewi Chandra Prima, 2007). Chan and Chen (1991) in the Na'im and Sufiyati (1998). Hamada (1972), *common stocks systematic risk may not be stable merely because of unanticipated capital structure change* and t Dichev (1998), *bankruptcy risk is unrelated to systematic risk Bankruptcy risk is not rewarded by higher return.* Opinions of Dichev (1998) stated that systemic risk is not related with bankruptcy risk (risk arising from patterns of financing / debt-based funding). So logically market risk does not affect leverage. Unsystematic risk precisely has the dominant factor affecting leverage. This can be explained based on the theory of market efficiency. If the efficient market strong, the market risk is significant whereas if the efficient market is weak and half strong the unsystematic risk is significant. Research results of Mainingrum and Falikhatun (2005) stated composition of the debt on its own capital (equity) that excess of 100% indicates manufacturing companies that go public in Indonesia prefer to seek funds through loans rather than use their own capital.
- Variable asset size negatively affect the systematic risk, it means that increase in asset size will be followed by a decrease systematic risk; conversely, a decrease in asset size will be followed by an increase in systematic risk, assuming other factors that affect the size of the systematic risk is considered constant. The results showed that asset size did not significantly affect systemic stock risk so that proposed hypothesis is rejected. These results are consistent with the research of Mulyono (2002), Amirudin Umar and Harmani (1998) Daves et al (2000). These results are not consistent with the research by Wald (1999), Amiruddin Umar and Harmani (1998) that stated relationship of asset size with risk is positive, the reason is that high levels of physical assets such as property plant and equipment correlated with higher debt for assets financed with debt so the risk too high. This assumption is a common assumption, as Watts and Zimmerman (1978) tried to prove the hypothesis about this relationship to form a theory called the positive accounting theory. Big companies are the subject of political pressure. Big companies reporting excessive profits attract attention of politicians and will investigate on suspicion of monopoly (Hartono and Na'im, 1977). Nining Setyowati In Andayani et al, (2010) found that investment made by the investor in the event of stronger prices in the market do not take into consideration the size of the assets owned by the company, although the size of

the assets of significantly influence when the market weakens. This research is not in line with the results of Abdurahim (2003) Husnan (2006) which indicated that asset size adversely affect the stock beta. Big companies are assumed to have a lower risk compared to small companies, because big companies have more access to stock markets so they have small risk.

4.2. *The Effect of Liquidity, Activity, Leverage and Asset size on the Company Value*

- a. Variable liquidity positively affect the Company Value. It means that increased liquidity, will be followed by the increase in Company Value; on the contrary, decreased liquidity, will be followed by a decrease in Company Value, assuming other factors that affect the size of Company Value were considered constant. The results showed liquidity had no effect on Company Value. The results of this study do not match with previous estimates and theory, which the liquidity effect on Company Value. It provides an empirical understanding of management that increased liquidity have no effect on Company Value. This condition indicates that the information changes as the current ratio which can be obtained from financial statements have no effect on the decision on the share price. This may occur because investors in investing did not take seriously the liquidity of company, the company's liquidity did not affect investor perception of benefit in the future. The results of this study are consistent with Tuasikal (2002), Subalno (2009), NurIndrianto (1999) SugengSulistiono (1994). The results of this study are not consistent with research of DwiMartani (2007), Hamzah (2007), Gordon (1976), Ulupui (2007), EndangKurniati (2003) which stated that liquidity and significant positive effect on stock prices.
- b. Variable activity positive affect the Company Value. It means that increase in activity, will be followed by the increase in Company Value; on the contrary, decreased activity, will be followed by a decrease in Company Value, assuming other factors that affect size of Company Value were considered constant. The test results showed activity had no effect on Company Value. The results of this study do not match with the previous estimate and does not support theory of investment, that activity has positive effect on Company Value. The research provides empirical understanding of management that if activity rises, then market participants have no respond to change activity. Activity is measured by assets turnover used to measure how efficiently the entire assets of company to support sales activities (Ang, 1997). This research is in line with Kennedy (2003), Tuasikal (2002), found on non-manufacturing company activity are not useful in predicting the return stock. These findings are not consistent with the research of Budi Priharyanto (2009) which stated that ATO have significant influence on Food and Beverage company. On the contrary, Ulupui research (2007), said that ATO showed negative results.
- c. Variable leverage negatively affect Company Value. It means that increase in leverage, will be followed by a decrease in Company Value; conversely, a decrease in leverage, will be followed by an increase in Company Value, assuming other factors that affect the size of Company Value were considered constant. The research results showed that capital structure and negatively affect and significant on the manufacture company value listed on Indonesia Stock Exchange. The results are consistent with previous estimates that leverage negatively affect company value. The research results provide empirical understanding of management that if leverage rises, company value decrease. This condition shows that the use of debt by company have impact on company value. Leverage is measured by Debt to Equity ratio (DER) in the majority of manufacturing companies listed in Indonesia Stock Exchange is above 100%, indicating that company applies the concept of financing with debt. This condition indicates manufacturing company that go public in Indonesia prefer to seek funds through loans rather than use their own capital. One of the drawbacks to finance with debt is a threat of bankruptcy risk, but one of the advantages of financing with debt will not reduce the share of ownership of shares by major shareholders. The greater the DER showed that capital structure was use more of debt compared to equity capital. According to Bambang RJ (2001), debt ratio is meant the ability of a company to pay all its debts. Financing with debt has three important implications: (1) raise funds through debt can make shareholders retain control over the company with a limited investment, (2) creditor saw equities or funds deposited owners, to provide a margin of safety, so if shareholders only leave a small portion of total financing, the company risks are found mostly in the creditor, (3) if the company gain a greater return on investment that is financed with borrowed funds compared to the payment of interest, then the owner's return on capital will be greater, and vice versa. Policy regarding capital structures involves a tradeoff between risk and rate of return on debt-additions increase the expected rate of return. Modigliani and Miller (1958) stated in assuming a perfect capital market, capital structure was not affect the value of the company. The research was followed by Modigliani and Miller (1963) by incorporating elements of tax in its calculations. The result showed that the use of debt is more profitable because the cost of debt is smaller than the cost of the stock, and there is tax benefit from the use of debt. Later, however, the use of debt in large numbers will lead to increased interest expenses and loan installments so it will have an impact on increased risk of inability cash flow to cover those obligations. This is known as Trade-off Theory, which stated that the use of debt will result in tax savings, but on the other hand will lead to financial difficulties (financial distress). The results of this study are in accordance with research of Naccur and Goaid (1999), Harris and Nissim (2004), Lam (2002). Takarini and Eni (2000), Annio Indah Lestari (2006), Soebiantoro (2007), Ariadi (2009) Budi Priharyanto (2009), GulmurMurodonglu (2008). However, this research does not correspond with the research of Bambang Sudiyatno (2010) Werner Murhadi (2008), that found leverage positively affect Company Value. This condition showed that the use of debt by company have an impact on the increased stock price so company value is increase. Douglas (2002), stated that at the level of low debt risk, there is no shareholder-bondholder agency cost, on high-risk debt, so managerial control s increased to return followed by high agency cost between shareholder-Bondholder and the declining performance of the company.
- d. Assets Variable Size positive effect on company value. This means that an increase in Assets Size, will be followed by the increase in value of the Company; conversely, a decrease Assets Size, will be followed by a decrease in value of the Company,

assuming other factors that affect the size of the Company considered constant value. The test results showed positive effect on the size of asset value of the company. These results are consistent with previous estimates as well as to support the theory. These results provide empirical understanding of management that if the asset size goes up, then the company value also rose. This condition shows that the use of asset size by the company have an impact on company value. This result supports the idea of Short and Keasey (1999), Demsetz and Lehn (1985) that the relationship is positive. They argued that the potential influence of the amount of company's assets toward company value can be explained at least by two ways of thought. First, financial effect, a large company internally is more easily generate funding and easier access to external funding sources. Thus, large companies can realize any project profitable. Second, economies of scale, a large company would be able to create barriers to entry industry, it provides benefits to company performance. The argument opinion of Short and Keasey (1999) is the larger the company, the higher the company value. Why? They think there are two causes: first, the larger the company, the higher access to sources of financing and the higher potential for generating cash flow. Both of these things will be easier for large companies to finance profitable investment projects in future. The more profitable investment opportunities that company financed, the higher company value. This is caused by company that generate prospective cash flow (earnings) in future. It will get a positive response from the market in form of an increase in company's stock price. So, it can be said the greater the company's assets, the greater the ability to finance future profitable investments and higher company value. Second, the greater the company's assets, the higher the company operated with economies of scale. According to them the economies of scale will create entry barriers (barriers to entry) for competitors in the product market. This will greatly benefit the company, which will ultimately increase the company value. The company's high performance can lead to increased company value. Due to the high company value, it will provide a good signal in market. Consequently, the market stock price will rise and automatically the company value will increase as well. Instead, the results of this study are not consistent with the results of research by Michaely and Roberts (2006) which stated negative correlation between asset sizes with company value.

4.3. Effect of Systematic Risk on Company Value

Variable Systematic Risk positively affect the company value. It means that increase in Systematic Risk, will be followed by the increase Company Value; on the contrary, decreased in Systematic Risk, will be followed by a decrease in Company Value, assuming other factors that affect the size of Company Value were considered constant. The results showed systematic risk does not affect company value. The results of this research did not match with the previous estimate, it provides empirical understanding for systematic risk management that does not give effect to company value. The results of this research contribute systematic risk cannot be used to predict and explain the company value. No significant effect of systematic risk towards company value is caused by no signal captured by the offender exchanges in systematic risk. This results is consistent with research by Dea and Satwiko (2011), Ismiyanti and Hanafi (2004), Turnbull (1977) If the systematic risk or beta reflecting the impact of fluctuations in market and if the value of the company is reflected in expected return, the results could be used as justification for failure capability predictions of the CAPM theory. Gilser (1990) *This systematic risk means that the Black-Scholes option pricing models is inherent inconsistency with the discrete time version of the CAPM.* CAPM as one of the tools to analyze trade-off risk-return, where return directly would reflect fluctuations in the market price of a stock, is not applied in Indonesian Stock Exchange with a sample of manufacturing company. Instability of beta as predictor also expressed by Kon and Jen (1978) *we should expect to observe nonstationary risk level of managed portfolio as a result of timing activities, a changing investment opportunity set and ex post market movement.* And Dennis and Gregory (1994) *..... Return measurement error, causing estimates of systematic risk to be downward biased.* So, one of the reasons insignificant systematic risk on company value is because the risk is nonstationary, Kon and Jen (1978), (Dennis and Gregory, 1994). On the other hand, the reason why the risk is not significant to company value is the underlying condition side. This is in accordance with the opinion of the Brenner and Syemour (1977) *it can be shown that a non-zero beta might be expected to remain constant if there are no change in any of underlying condition.* Turnbull (1977), Hasty and Bruce (1975) *over time, change in the value of the firm and its sensitivity to underlying variable will in general, affect the values of the elasticities and hence systematic risk would not be expected to be stationary.* Systematic risk is also not bound for the calculation of return. It means that systemic risk has no effect on company value. Because the return reflects the stock price fluctuations in the market and these fluctuations cause fluctuations in company value. So, when systematic risk does not reflect of stock price fluctuations it means systematic risk does not affect the company value. But according to Dennis and Gregory (1994) *in contrast to prior studies, we find no evidence of change in systematic risk following both equity offering and share repurchase.* This argument also want to justify changes in systematic risk does not caused the company to make changes in equity offering and share repurchase that lead to not trigger changes in company value. It can also be used as an alternative reason why systematic risk is not significant with company value.

In the concept of valuation of shares, stock price has a negative correlation with stock return. So, beta stocks should have negative correlation. Empirically, several studies conducted by Sharp (1964), Lintner (1965), Jacob and Nancy (1989), Werner Murhadi (2008), Lau, Lee and McNish (2002), the results of the research explained between risk and benefit ratio has a positive relationship. Research conducted in Indonesia particularly CAPM test, the results are varied, meaning that anyone found a negative relationship functions and many are finding positive. The results of this research once more confirm the research of Weston Brigham (1993) which concluded that stock price is affected by the risk and profit projections, and because most investors are trying to avoid risk (risk averter) and in that case stocks that have lower risks while things other equally be preferred or the value of the shares is higher than the shares have a greater risk. According to Fama and French (1998) the individual characteristic of company is best predictor in explaining the value of the company.

A. Implications of Theoretical and Empirical Research

Based on the analysis and discussion of this research that are expected to give contribute to theoretical development of investment are as follows:

1. Implications of theories that could be addressed in this research are in order to increase company value in the stock market can be used for model of internal and external factors on structure of ownership, systematic risk and the value of the company.
2. The results of this research found that increase in company value as well as a decrease systematic risk is a result of increased liquidity, activity, Price Book Value and Asset size and decreased leverage of the company.

B. Limitations Research

Limitations of this research, the proposed model is the model of internal and external factors on the structure of ownership, systematic risk and company value where the program is more emphasis on the importance of assessing internal and external factors in the assessment of the ownership structure, risk and value of the company. There are still many variables that have not been accommodated in this model, such as earnings management, good corporate governance, corporate cash flow, dividend and corporate behavior, and other internal factors while external factors include monetary policy, economic growth, competition between companies and technological development so that for researchers who are interested in researching about the ownership structure assessment, the risks and value of the company can add those variables. The other limitations are located on the object of the research. Not only in manufacturing industry, but others such as banks, companies that included in LQ45.

5. Conclusions and Recommendations

5.1. Conclusions

1. Variable ratio activity negatively and significantly affect systematic risk, and liquidity ratios, and asset size had no significant effect on the systematic risk, so the hypothesis that stated liquidity, asset size negatively affect the risk, cannot be accepted, as well as the ratio leverage does not affect the systematic risk so the hypothesis that stated leverage positively influence on systematic risk cannot be accepted.
2. The leverage ratio is a negatively and significantly affect company value. While asset size ratio positively and significantly affect company value, liquidity ratio and the activity does not affect company value so the hypothesis that stated liquidity and activity positively and significant effect on company value cannot be accepted.
3. Systematic risk does not affect the company value, so hypothesis that stated systemic risk positively affect company value is not acceptable.

5.2. Recommendations

1. One of the company goal is how to increase company value and decrease the risk so shareholders can also feel calm to invest, so candidate investors will be interested in investing in our company. Various ways can be taken to increase company value which are to maintain and pay attention to variable Liquidity, Activity, and Asset size that can be increased while the company's leverage can be diminished.
2. Factors affecting the company value are not only internal factors, but there are also other factors, so for future research if possible external factors Integration, Technical need to be considered for inclusion in the model, in order to produce a better model.
3. There are some results that are inconsistent with previous research may be due to the characteristics, behavior and culture of the stock market in Indonesia is different from the characteristics and culture of the stock market in the developed countries. Therefore, to further research, behavioral and cultural aspects need to be considered for inclusion in the model so it will produce a better model.
4. Several factors are thought to have no effect on company value but has not been accommodated in this research, so it is suggested for further research to include variables such as profit management, the company's growth, good corporate governance and others.

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