# THE INFLUENCE OF LEVERAGE POLICY, DIVIDEND POLICY AND EARNINGS PER SHARE TO THE VALUE OF FIRMS IN GO PUBLIC'S MANUFACTURING COMPANIES LISTED IN THE INDONESIA STOCK EXCHANGE

A Thesis

Presented as a Partial Fulfillment of the Requirements to Obtain a Bachelor Degree in Management Department



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Department of Management International Program Faculty of Economics Universitas Islam Indonesia Yogyakarta 2012 THE INFLUENCE OF LEVERAGE POLICY, DIVIDEND POLICY AND EARNINGS PER SHARE TO THE VALUE OF FIRMS IN GO PUBLIC'S MANUFACTURING COMPANIES LISTED IN THE INDONESIA STOCK EXCHANGE



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#### A BACHELOR DEGREE THESIS



#### DECLARATION OF AUTHENTICITY

Herein I declare the originality of this thesis; I have not presented anyone else's work to obtain my university degree, nor have I presented anyone else's words, ideas or expression without acknowledgement. All quotations are cited listed in the bibliography of this thesis.

If in the future this statement is proven to be false, I am willing to accept any sanction complying with the determined regulation for its consequence.



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#### ABSTRACT

The objective of this research is to know how leverage policy, dividend policy and earnings per share influence firm's values in go public manufacturing companies which are listed in The Indonesia Stock Exchange. The variable used in this research are leverage policy which is measured with leverage ratio, dividend policy which is measured with dividend payout ratio, and earning per share, as independent variable, and the values of firm measured with Tobin's Q as dependent variable.

Population of this research is implemented to manufacturing companies listed in the Indonesia Stock Exchange from 2006 – 2010. The number of sample in this research is 20 companies with 100 observations. The data of this research is secondary data, and the analysis method which has been used for this research is multiple regression analysis.

The result of this research is that the first hypothesis showed that Ho is rejected and Ha is accepted, it means the leverage variable has a significant influence to the firm value variable. It showed that the proposed hypothesis is successfully supported. The second hypothesis showed that Ho is rejected and Ha is accepted. It means that the EPS (Earning per share) variable has a significant influence to the firm value variable. It showed that the purposed hypothesis is successfully supported. The third hypothesis showed that Ho is rejected and Ha is accepted. It means dividend variable has a significant influence to the firm value variable. It showed that the purposed hypothesis is successfully supported.

The conclusion of this research confirmed that leverage policy, dividend policy and earnings per share give simultaneous influences which are significant to the firm value. It showed that the fourth purposed hypothesis is successfully supported (Ho is rejected and Ha is accepted).

Key words: leverage policy, dividend policy, firm value, leverage ratio, dividend payout ratio, earnings per share, tobin's Q

#### ABSTRACT

Tujuan penelitian ini adalah untuk mengetahui apakah kebijakan leverage, kebijakan dividend dan earning per share dapat memberikan pengaruh kepada nilai perusahaan manufaktur yang Go Public yang terdaftar pada Bursa Efek Indonesia. Variable yang digunakan dalam penelitian ini adalah kebijakan leverage yang diukur dengan leverage ratio, kebijakan dividend yang diukur dengan dividend payout ratio, dan earning per share sebagai variable independen, dan nilai perusahaan sebagai variable dependent diukur dengan menggunakan tobin's Q.

Populasi dari penelitian ini diimplementasikan untuk perusahaan manufaktur yang terdaftar pada Bursa Efek Indonesia dari tahun 2006 – 2010. Jumlah sample yang digunakan dalam penelitian ini adalah 20 perusahaan dengan 100 observasi. Data yang digunakan dalam penelitian ini merupakan data sekunder and metode analisis yang digunakan dalam penelitian ini adalah analisis persamaan berganda.

Hasil penelitian yang diperoleh adalah; hipotesa pertama menunjukkan bahwa Ho ditolak dan Ha diterima, artinya variabel leverage mempunyai pengaruh yang signifikan terhadap variable nilai perusahaan. Hal ini menunjukkan bahwa hipotesis yang diajukan berhasil didukung. Hipotesa kedua menunjukkan bahwa Ho ditolak dan Ha diterima, artinya variabel EPS mempunyai pengaruh yang signifikan terhadap variabel nilai perusahaan. Hal ini menunjukkan bahwa hipotesis yang diajukan berhasil didukung. Hipotesa ketiga menunjukkan bahwa hipotesis yang diajukan berhasil didukung. Hipotesa ketiga menunjukkan Ho ditolak dan Ha diterima, artinya variabel deviden mempunyai pengaruh yang signifikan terhadap variable nilai perusahaan. Hal ini menunjukkan bahwa hipotesis yang diajukan berhasil didukung.

Kesimpulan dari penelitian ini membenarkan bahwa kebijakan leverage, kebijakan dividend dan earning per share memberikan pengaruh yang simultan terhadap nilai perusahaan. Hal ini menunjukkan bahwa hipotesis ke empat yang diajukan berhasil didukung (Ho ditolak dan Ha diterima).

Key words: leverage policy, dividend policy, firm value, leverage ratio, dividend payout ratio, earnings per share, tobin's Q

#### **CHAPTER I**

#### **INTRODUCTION**

#### 1.1. Research Background

In this globalization era, competition in the business world is getting tighter. For go public firms, competition does not only happen in one industrial sector, but also in every industrial sector. These phenomena can be seen in LQ45 index that trade activities involving large numbers of share being traded are not only dominated by manufacturing companies. However, investors are still interested in manufacturing industries because of their existence in Indonesia business. Related to that condition, each company has to be able to operate with high efficiency level to keep its competitiveness and excellence so that optimal net profit can be gained.

Companies make profit policy to accommodate the profit gained that can be allocated in two components: in dividend and retained earnings. Dividend represents a part of available profit to all stockholders in the form of cash. Retained earnings are parts of profit available for all stockholders retained by a company for the purpose of re-investment to achieve the company development target.

Formally, a capital market can be defined as a market for various long term financial instruments (securities) which can be traded in the forms of debt and/or capital, either published by government, public authorities, or also private enterprise (Husnan, 2003). The function of Indonesia capital market is not only to collect funds from society to be distributed in productive sectors, but also to contribute in earning distributions through company ownership. The target can be reached gradually by the increase of types and numbers of securities traded, in line with the increase of institutions supporting the capital market.

Dividend policies represent decisions made by a company especially to determine the profit level distributed in the form of dividend. Dividend policies are very important to be done because this financial policy will influence investor's reaction or attitude, such as reducing the dividend can be responded negatively by all investors because the reduction is often meant as a financial difficulty faced by the company. Besides the financial policy affects on financing options and company capital budget related to source of funds (funding), the actions chosen by the company is very essential because if a company chooses to allocate the profit in the form of dividend, this will reduce the total of internal source of funds or *self financing* ability. On the contrary, if a company chooses to keep the obtained profit, the ability to fulfill the need of funds from internal sources will be greater, and this matter will make the company's financial position get stronger because the dependency of funds coming from external sources becomes smaller.

In addition, dividend policies are important because the policies affect on firm values for future periods. The increase of firm values becomes the main target of the company. The bigger dividend payment tends to increase the share price. It means that the company value will also increase. However, the greater dividend payment will result in reducing the available fund for investment and reduce the level of company growth which finally decreases the share price. Based on the considerations, the dividend policy generates two conflicting effects.

A dividend policy involves two parties having conflicting interest, such as stockholders and their dividend, and on the other hand the company maybe interested in their profit balance. Each company always pays attention to their growth. Retained earning calculation is an essential activity in any company which is keen to growing. This activity has been utilized to know internal funding needs and increase the company profitability. On the other side, the company also has to be able to distribute earnings in the form of dividend among stockholders aiming to maximize the present value of future dividends and appreciation in the market prices of shares. The greater the level of dividend paid, the smaller the amount of profit balance. As a result, this can pursue the company growth level. If a company plans to retain most of their remaining earning in the company, the amount of funds available to pay the dividend becomes smaller. The creditor interest can also influence the level of cash dividend distributed. Mounting Debts will greatly influence the amount of available net profit to all stockholders including the received dividend because the obligation to pay debts is given a higher priority than the allocated dividend. Therefore, the management has to pay attention about all stockholders' prosperity. Besides the company has to maintain the company growth, they are also responsible to maintain the continuity of company existence in determining the dividend policy.

The dividend indicator policies are *Dividend Payout Ratio* and *Dividend Yield*. The use of *Dividend Payout Ratio* (DPR) as the dividend policy indicator in this research because DPR represents financial ratio which is commonly used by all investors to know the returns from their investment, and it is simpler than the Dividend Yield. Generally, stipulating the dividend policy is influenced by factors which are categorized in two groups which are financial and non-financial. Financial factors include financial growth prospect, expense of capital, profitability, financing requirement of company, liquidity, borrowing ability, capability to pay the debt, dividend stability, and also mounted asset expansion. Non-financial factors are such as the tax regulation, the agreement in debt limitation level, opportunity to capital market, business conduct, and stockholder position as a leasing payer

The declines amount of dividend payment to the owner of share can influence investor candidates or current investors in buying shares in the stock market. Therefore, the company's ability to yield profit from its asset called as effectiveness in exploiting all sources of funds (*profitability ratio*) can influence share prices. Understanding share prices and their influencing factors will be important because they can provide information to either candidates or current investors in doing investment in the form of share. A company normative target is maximizing the prosperity of the company owner (company ownership comes from the share owned by investors) and it can be realized by increasing the stockholder's prosperity through the positive changes of high share prices to improve stockholders' equity value.

For investors, information about Earning per Share (EPS), Dividend per Share (DPS) and Financial Leverage (FL) become basic requirements which are very essential in decision making. The information are used to reduce risk and uncertain outcome which possibly occur so that any decision that will be taken is expected to give the best results. Darmadji and Fakhruddin (2001) stated that higher value of EPS will encourage stockholders to invest because this means that the amount of dividend shared to the stockholder is greater. The increase of share prices causes the increase in firm values. In contrast, when the profit decreases the share prices will also decrease. Beaver (1970) concluded that statistically the reaction of share prices is significant in a day before and after the profit is announced. Aharony and Swary (1980) have shown in their research that the moment of market reaction happens when the dividend announcement. The value of company shares can be represented as company achievements which are determined by financial performance that can be seen and measured from company's financial condition. Financial leverage describes the financial activity done by the company. Therefore, financial leverage can be used as an input to measure the change of share prices.

According to Weston and Brigham (1984), company capital structure represents a mix or combination of debt and equity desired by the company, while the equity is represented by both of preferred and common stocks. Companies use debt to fulfill the companies' needs to increase profits. However, the use of debt has a risk that it has to be paid back. Debt causes fixed liabilities since the payment of interest and repayment of debts must be paid. On the other hand, debt can be used to finance the company's operational activities for profit making, and the payment of interest provides deductions that can reduce the income tax on the company's profits.

Weston and Brigham (1984) stated that financial leverage indicates the extent to which fixed income from securities can be used in company's capital structure. The higher the use of the fixed-income securities (debts), the larger the financial leverage, and vice versa. As mentioned above that debts causing financial leverage are utilized to finance the company operations, investment, and expansion. Yet the financial leverage also involves some risks.

According to Weston and Brigham (1984), risks involved in financial leverage that could be more than basic business risks and should be borne by the shareholders are called companies with a heavy financial leverage. Companies with heavy financial leverage usually become less successful due to financial difficulties (financial stress) that make them unable to pay their debts. In other words, the financial leverage has both positive and negative impact. The positive impact is that financial leverage can be used to support growth of companies, and improve their financial condition. On the other hand, financial leverage can also lead to company decline or even bankruptcy.

In this case, company's performance is measured by the result on the debt used in their capital structure, which is done by using measurement of *growth of sale, operating profit* and *earning per share* as company performance indicators. Growth of sale is a variable influenced by both of company's internal and external condition. The increases in the growth of sale will give positive influences on company profitability (operation profit) and company value, and it is reflected in the increase of share prices. Weston and Brigham (1984) stated that financial leverage has an influence on the *Earning per Share* (EPS) and *Dividend per Share* (DPS), which means those variables also influence the share prices.

Base on the explanation above, this research will analyze about "The influence of leverage policy, dividend policy and earnings per share to the value of firms in go public manufacturing companies listed in the Indonesia Stock Exchange".

#### 1.2. Problem Identification

Based on the background mentioned above, the researcher identifies these research problems as follows:

- a. Is there any influence of leverage policy, dividend and earning per share to firm's value in manufacturing business listed in BEJ during the period of 2006-2010 both of partially and also simultaneously?
- b. What is the most dominant variable in determining the company value?

#### **1.3. Research Objectives**

The objectives of this research are:

- a. To know the influence of leverage policy, dividend and earning per share to firm values at manufacturing business listed in BEJ during the period of 2006-2010 partially and also simultaneously.
- b. To measure the most dominant variable in determining the firm value.

#### 1.4. Research Contribution

This research is expected to provide contributions, as mentioned below.

1.4.1. Theoretical Contribution

The result of this research is expected to provide benefits especially to the economic development, as a reference or reading material that provides both empirical and theoretical information to any parties who conduct research regarding these problems, and can be an additional source that has been available before.

- 1.4.2. Practical Contribution
  - a. For the Company Management

The result of this research is expected to be used as an input or basis for the improvement of company good performance which can be seen from its good financial ratio. The good financial ratio shows good prospects of the company in the future. This will attract investors to invest their capital to the company so that this will automatically support the company's development and provide information resource in decision making.

b. For Investors

This research can be used as a consideration in terms of investment decision making.

#### **CHAPTER II**

#### **REVIEW OF RELATED LITERATURE**

#### 2.1. Firm Value

According to Damodaran (2006), there are many aspects of firm's valuation where we can agree to disagree, including estimates of true value and how long it will take for prices to adjust to that true value, but there is one point on which there can be no disagreement. Asset prices cannot be justified by merely using the argument that there will be other investors around who will pay a higher price in the future<sup>1</sup>.

In financial management, there are some approaches used in firm valuation. Refers to Damodaran (2006), there are four approaches to firm valuation: (1) *discounted cash flow valuation*, it is related to the value of an asset to the present value of expected future cash flows on that asset; (2) *liquidation and accounting valuation*, it is built around valuing the existing assets of a firm, with accounting estimates of value or book value often used as a starting point; (3) *relative valuation*, it estimates the value of an asset by looking at the pricing of 'comparable' assets relative to a common variable like earnings, cash flows, book value or sales; (4)

<sup>&</sup>lt;sup>1</sup> Damodaran (2006) explained in detail about the source of bias in valuation. The first is in the inputs that we use in the valuation when do companies valuation. The second is *call post-valuation tinkering*, where analysts revisit assumptions after a valuation in an attempt to get a value closer to what they had expected to obtain starting off. The third is to leave the value as is but attribute the difference between the value we estimate and the value we think is the right one to a qualitative factor such as synergy or strategic considerations.

*contingent claim valuation*, it uses option pricing models to measure the value of assets that share option characteristics.

In this research, the researcher chooses relative valuation approach because it is much more likely to reflect market perceptions and moods than discounted cash flow valuation. This can be an advantage when it is important that the price reflects these perceptions as it is the case when the objective is to sell a security at that price today (as in the case of an IPO), and relative valuation generally requires less information than discounted cash flow valuation and other valuation approaches (Damodaran, 2006). It means the relative approach can accommodate the research purpose which is to know the relationship of Financial Leverage (FL), Dividend Policy (DPR), and Earning per Share (EPS) to the Firm value.

There are some guidances suggested by Damodaran (2006) about how to do relative valuation, there are: identify comparable assets and obtain market values; convert these market values into standardized values; compare the standardized value or multiple for the asset being analyzed to the standardized values for comparable asset, controlling for any differences between the firms that might affect the multiple, to judge whether the asset is under or over value. In more specific, market price for standardize value can be calculated by using Tobin Q (Damodaran, 2006).

Tobin's Q or Q ratio was devised by James Tobin (1969), who hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs. In many research in the past, it is revealed that Tobin's Q has important role in many companies' financial aspects in order to define firm phenomena's, such as the cross-sectional different in investment and decision making diversification (Jose, Nichols and Steens, 1986; Malkiel, Furstenberg, and Watson, 1979); the relationship between managerial equity ownership and firm value (McConnell and Servaes, 1990) and (Morck, Shleifer, and Vishny, 1988); the relationship between managerial performance and tender offer gains (Lang, Stulz, and Walkling, 1989); financing dividend and compensation policies (Smith and Watts, 1992). Despite of that, there are only few research that using of Tobin's Q in analyzing the decision making in the company because the use of Tobin's Q is less familiar and the Q data limitation and accuracy is very limited compared to the other financial variables such as beta (Pruitt and Stephen, 1994).

Based on market value formulation formulated by Linderberg and Ross, Chung and Pruitt (1994) formulated approximate Q that is more conservative in terms both of data requirement and the calculation. Thus, Chung and Pruitt (1994) formulate approximate q as follows:

approximate 
$$Q = (MVE + PS + DEBT) / TA$$

Where:

MVE	= the product of a firm's <i>share price</i> and <i>the number of</i>
	common stock shares outstanding per 31 December,

- PS = the liquidating value of the firm's outstanding *preferred stock* per 31 December,
- DEBT = the value of the firm's *short-term liabilities* net of its short-*term assets*, plus the book value of the firm's *longterm deb*t per 31 December,

TA = the book value of *the total assets* of the firm per 31 December,

Following the previous research done by Gultom and Syarif (2008), Q formula is adjusted with the company's financial transaction in Indonesia, and then the formula used to measure the Tobin's Q is as follows<sup>2</sup>:

$$Tobin's Q = \frac{MVE + DEBT}{TA}$$

#### 2.2. Earning Per Share (EPS)

1) Definition of Earning Per Share (EPS)

According to Darmadji and Fakhruddin (2001), the definition of earnings per share or EPS is a ratio that shows the amount of profit

<sup>&</sup>lt;sup>2</sup> Preferred stock was neglected because the firms in Indonesia that used preferred stock is very limited, and then it influenced the numbers of research sample (Gultom and Syarif, 2008).

(income) obtained by investors or shareholders for each share. The profit is used as the main factor in measuring the company success so that investors often focus on the earnings per share (EPS) in analyzing stock profitability.

Shareholders' perspective in investing is encouraged by the increase of EPS because it represents the bigger amount of profit that is potentially available to shareholders. To analyze the causes of changes in EPS, the *profitability ratio* analysis can be used (Fabozzi, 1999). Profitability ratios represent firm's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time.

Earnings per share can be calculated by using the formula:

Where: EPS = Earning per Share EAT = Earning after Tax

S = Number of common shares outstanding

According Ang (1997), earning per share is the ratio between earning after tax on a fiscal year with the number of common share outstanding. There are two types of EPS as follows:

#### a) Historical EPS

Historical EPS is calculated based on company performance in the past fiscal year, which means that the historical EPS is a value that has occurred in the past.

b) Projective  $EPS^3$ 

Projective EPS is a targeted EPS that expect to reach using the assumption based on the *emiten* (company listed in stock exchange) forecasted performance.

This research used only historical EPS that taken directly from the annual financial statement that already audited by public accountant.

2) Relation Between Stock Price and Earning Per Share (EPS)

According to Brealy and Myer (1986), all investors often use the terms of income stock and growth stock in defining the stock. Commonly, they tend to buy shares having high growth level because those shares often give good expectation in terms of future profit gained, and investors tend to be more interested in earnings growths for future period than the amount of next announced dividend. On the contrary, they buy income stock especially to obtain cash dividend.

While Syamsudin (2001) stated that the company management, common stockholder and stockholder candidates is usually interested in Earning per Share (EPS) because it represents the amount of *Rupiah* that

<sup>&</sup>lt;sup>3</sup> The projective EPS usually used to determine or forecast the future EPS by using the current EPS data and the result cannot be exactly measure and responsible.

can be obtained for each common stock. Commonly, all stockholder candidates are interested in big amount of EPS because it is an indicator that represents the company's success. Usually, the total amounts of EPS will not be fully distributed to common stockholders because the proportion of the distributed dividend depends on the company policy in terms of dividend payment. The large amount of EPS means the higher ability owned by a company to provide potential earnings for each share.

The increase in Earnings per Share (EPS) indicates that a company has successfully improved the investor's prosperity level, and this will encourage the investor to add more capital to be invested to the company. The higher EPS will give impacts on stockholder's excitement because it means there are greater amount of profit provided to them (Darmadji and Fakhruddin, 2001). The increasing EPS implies that the increase in profits makes the stock prices tend to be higher, and vice versa.

# 2.3. Dividend Per Share (DPS)

1) Definition of Dividend Per Share (DPS)

According To Van Horne and Wachowicz (1998), stock dividend is only an additional payment in the form of stocks for stockholder. The stock dividend is nothing more than company recapitulation because after the stock dividend given to the stockholder, the company ownership proportion remains unchanged. Theoretically, in the investor's perspective, stock dividend is not related to firm values because they may accept additional stocks, but their ownership proportion in the company is unchanged. It is commonly followed by the decreasing (in proportionally) of market share prices so that the cash value of their shares is unchanged. If stockholders wish to sell their shares to obtain income returns, the stock dividend may help them sell the stock easier. Without the stock dividend, stockholders are still able to sell some of their shares to obtain cash. Dividend per Share (DPS) represents total dividends paid out over an entire year (including interim dividends but not special dividends) divided by the number of common stock outstanding (Ang, 1997). Stock dividend is a dividend paid as additional shares of stock rather than as cash for the common stock owned by stockholders. The stock dividend influences on the estimation for stockholder equity in the company balance sheet, but the proportions of company ownership in the form of shares remain unchanged. Accounting categorizes the stock dividend into small percentages and big percentages stock dividend (Van Horne and Wachowicz, 1998).

According to Darmadji and Fakhruddin (2001), dividend represents the net income distributed to stockholders after reducing by retained earnings based on the result in *RUPS* (general meeting of shareholders). Dividend can be in the form of cash or stock dividend. According to Keown, et al (2000), a company's dividend policy covers two fundamental components, which are: a) Dividend Payment Ratio

Dividend payment ratio shows the percentage of earnings distributed to shareholders in the form of cash dividends. For example, if dividend per share is \$ 2 and earning per share is \$ 4, payment ratio is 50 % (\$ 2: \$ 4). DPR can be formulated as:

Dividen Payment Ratio = Dividend per Share

b) Long Term Dividend Stability

For the investor, the dividend stability is as important as gained dividend. The dividend stability is reflected on changes in Dividend per Share (DPS) for each period recorded in the historical data, and DPS reflects the amount of earnings per share distributed to common stockholders. DPS can be formulated as:

# DPS = Amount of Dividend Paid Number of Common Share Outstanding

By formulating the dividend policy, a company faces the *trade*  $off^4$ . It means that a company chooses how much debt finance and how much equity finance to be used by balancing the costs and benefits. The decision to pay big amount of dividend, means the company simultaneously retains less amount of earning (if there is any of it). In

<sup>&</sup>lt;sup>4</sup> The Trade-Off Theory of Capital Structure is the hypothesis from Kraus and Litzenberger (1973).

the future, it may cause higher dependency to the external resource of funds for company financing. On the contrary, the smaller amount of funds in dividend payment means the higher profit retained that makes less dependency from external financing resource.

2) Relationship between Dividend Per Share (DPS) and The Stock Price

According to Sharpe, et. al (1997), the positive change in dividend is the increase in future announced dividend, which means it is a sign that the management increases the company future earnings. Therefore, announcement in increasing dividend is good news and it will be followed by the increase in investors' expectations regarding company earnings. It means that there is an implication that the announcement of increasing the amount of dividend will make the company share prices also increase.

According to Keown, et. al (2000), there are three opinions about the influence of share price policy, which are:

a) Irrelevant Dividend Policy

Some of controversies in dividend issue are relied on different perspectives among academic and professional community. Some experienced practitioners assume that any changes in share prices are caused by announced dividends so that it can be concluded that dividend is important. While, most of academic community, such as

<sup>&</sup>lt;sup>5</sup> According to Keown, et. al (2000), it is a theory that investors are not concerned with a company's dividend policy since they can sell a portion of their portfolio of equities if they want cash.

some professors in finance that argue positively about the irrelevant dividend policy, concluded that the source for different perspectives in defining the influence of the amount of dividend to the share prices comes from the un-carefulness in defining the dividend policy itself. Under the foregoing assumptions, it may be shown that the market value of a firm's equity is independent of its dividend policy.

b) High Dividends Increase The Stock Prices

Practically, dividends are more predictable than capital gains, because the management can control the dividend, but they cannot dictate the share prices. Dividends are also less risky than capital gains and should be discounted at a lower rate, thus dividend income should have a higher value than capital gains. Therefore, stockholders prefer to receive dividends than capital gains. As a result, the increase of dividend causes the increase in stock prices, and vice versa.

c) Low Dividends Increase The Stock Price

This third opinion shows about how low level of dividend influences the share prices and gives the negative influence to investors. This argument is based on the differential tax applied on income from dividend and capital gains. In the case of the tax applied, the investors want to maximize earning after tax. They try to defer the tax payment when the condition is possible. Stocks that allow investors to defer taxes are the stock having low dividend but giving high return in capital, and will possibly sell at a premium relative to stocks that require investors to pay taxes currently. While the stocks that require investors to pay taxes currently are the stock that has high dividend but lower in capital gains income. Those reflect that policy which results in paying low dividend will cause higher share prices. It means that high dividend can cause financial loss to the investor, while low and retention (high tolerance) dividend give positive impacts to the investor. By using those methods, both of shares can give comparable results in terms of Earning after Tax (EAT). That is the basis logic for the low dividend policy.

#### 2.4. Financial Leverage (FL)

1) The Definition of Financial Leverage (FL)

Financial Leverage (FL) assumed that dividend for the preferred stockholders has always been paid periodically. This assumption is needed because the main purpose of this FL is to know the amount of funds available for common stockholders after having reduced by interest expenses and amount of dividend for preferred stocks.

According to Weston and Copeland (1997), financial leverage is the extent to which debt (liability) is used in the capital structure (financing) of the firm. The concept of financial leverage is the ratio between the book value of total debt (D) and total asset (TA). If we discuss about Total Asset (TA), it refers to the total book value of asset based on the accounting report. Financial leverage can be measured with ratios such as debt to total assets as follows:

$$FL = \frac{D}{TA}$$

Where:

FL = Financial Leverage

Total Debt

TA = Total Asset

According to Weaver and Weston (2001), financial leverage is influenced by some factors as follows:

a) Growth Rate of Sale

The future growth rate of sale is a measure of the extent to which the earnings per share of a firm is likely to be magnified by leverage. Therefore, if profit and sale increase, this means financing decision in using certain amount of debt will successfully improve the shareholders earnings.

b) Cash Flow Stability

Cash flows stability and debt ratio are directly related. With greater stability in sales and operating earnings, a firm can incur the fixed charges of debt with less risk than when its sales and earnings are subject to substantial decline. When operating cash flow is low, the firm may have difficulty in meeting its interest obligations. c) Industry Characteristics

The relationship between industry membership and capital structure has received considerable attention. Harris and Raviv (1991) noted that it is generally accepted that firms in a given industry will have similar leverage ratios while leverage ratios vary across industries. In addition, a growth industry promises higher profit margin, but the margin will be likely reduced if in the industry area other businesses can enter the industry. in which the number of firms can be easily through additional entry.

d) Asset Structure

Asset structure influences the source of financing in several ways. A firm with long-lived fixed assets, especially if the demand for their output is relatively assured, uses long-term mortgage debt extensively. Firms having their assets mostly in receivables and in inventories whose value is dependent on the continued profitability of the individual firm rely less on long-term debt financing and more on short-term financing.

e) Management Attitudes

The management attitudes that most directly influence the choice of financing are those concerning control of enterprise and risk. Large corporations whose stocks are widely owned may choose additional sale of common stock because such sale will have little influence on the control of the company. In contrast, the owner of small firms may prefer to avoid issuing common stock in order to ensure continued control. Because they generally have confidence in the prospects of their companies and because they can see the large potential gained for themselves.

f) Lender Attitudes

Commonly, the corporation discusses its financial structure with lenders and gives much weight to their advice. Nevertheless, if management seeks to use leverage beyond norms for the industry, lenders may be unwilling to accept such debt increase. They emphasize that excessive debt reduces the credit standing of the borrower and the credit rating of the securities previously issued.

According to Husnan (1995), financial leverage occurs when the company uses any sources of fund that generates fixed liability. If the company uses debts for their source of fund, the company must pay interest expenses. Financial leverage analysis focuses on the changes on earnings after tax as an impact from changes in operating profit.

2) The Relationship Between Financial Leverage and The Stock Price

Financial leverage is defined as the company ability in using fixed liability (debt) to increase EBIT resulting in the increase of the

earnings per share (EPS). The increase in *Earning per Share* (EPS) indicates that a company was successful to improve the level of investor prosperity and this will encourage the investor to add some additional capitals to be invested in the company. The higher EPS will give excitement to stockholders, because it means the greater amount of profit provided to them (Darmadji and Fakhruddin, 2001). The increase of EPS implies that there is an increase in profits that make the share prices tend to be higher. On the contrary, when the profit decreases, the share prices decrease.



Figure 2.1. Conceptual Framework
### 2.6. Hypothesis Formulation

Hypothesis is a supposition; a proposition or principle which is supposed or taken for granted, in order to draw a conclusion or inference for proof of the point in question; something not proved, but assumed for the purpose of argument (Supranto, 1988).

The hypotheses for this research are as follows:

- H1 = There is an influence of Financial Leverage (FL) to firm value
- H2 = There is an influence of Earning per Share (EPS) to firm value
- H3 = There is an influence of Dividend Payout Ratio (DPR) to firm value
- H4 = There is an influence of combinations in Earning per Share (EPS), Dividend Payout Ratio (DPR) and Financial Leverage (FL) to firm value.



### **CHAPTER III**

### **RESEARCH METHOD**

### **3.1.** Population and Sample

This research population is manufacturing firms listed in Indonesia Stock Exchange (IDX) during five periods, which is starting from year 2006 until 2010 where the period is the latest period after company faced the monetary crisis period (*Indonesia Capital Market Directory*, 2006-2010).

### **3.2.** Sampling Method

The sampling method used is the purposive sampling method; it is the sampling method that is based on certain criteria, that during the research period the companies:

a. Which are listed and not in delisting condition in Indonesia Stock Exchange for the period of 2006-2010.

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- b. Published the financial statement per 31 December for the period of 2006-2010.
- c. Made and announced the cash dividend for the period of 2006-2010.

Based the characteristics above the number of sample that used is 20 manufacturing firms, with 100 observations<sup>6</sup>.

<sup>&</sup>lt;sup>6</sup> See appendix.

### **3.3.** Source of Data and Technique of Data Intake

The source of data in this research is secondary data taken from Indonesia Stock Exchange (IDX) which already published, consisting of changes in stock prices and company financial reports. While the technique used for the data sampling is a direct quote which means that the data gained directly from Indonesia Stock Exchange without any changes.

### 3.4. Definition of Operational Variable

The operational variable is constructed by four variables which are risk, debt policy, stock price and dividend policy. Those variables are measured as follows:

### a. Firm Value as Dependent Variable

The firm value as dependent variable is measured by using the Q ratio. The Q ratio was devised by James Tobin of Yale University, who hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs. According to Lindenberg & Ross (1981), Q ratio calculated by compares the *Market value of all outstanding shares* and *debts* with *total asset* as follows:

$$Q = \frac{(MVE + D)}{TA}$$

Where:

- TA = Firm's total assets, i.e. cash, receivables, inventory and plant book value per 31 December,
- D = Debt per 31 December

### b. Financial Leverage (FL) as Independent Variable

Financial Leverage (FL) assumed that dividend for the preferred stockholders has always been paid periodically. This assumption is needed because the main purpose of this FL is to know the amount of funds available for common stockholders after reduced by interest expenses and the amount of dividend for preferred stocks.

According to Weston and Copeland (1997), financial leverage is the extent to which debt (liability) is used in the capital structure (financing) of the firm. The concept of financial leverage is the ratio between the book value of total debt (D) to total asset (TA). If we discusses about Total Asset (TA), it means the total book value of asset according to accounting report.

Financial leverage can be measured with ratios such as debt to total assets as follows:

$$FL = \frac{D}{TA}$$

Where:	FL	= Financial Leverage
	TA	= Total Asset
	D	= Total Debt

# b. Dividend Policy (in terms of Dividend Payout Ratio) as Independent Variable :

The dividend policy is a policy used by a company to decide how much to pay out dividends to shareholders. Using dividend is one of the ways to decrease *agency cost of equity* because it reduces the conflict between management with stockholders (Rozeff, 1982; Easterbrook, 1984 in Ismiyanti and Hanafi, 2003). Dividend payment will reduce the company cash flow (free cash flow hypothesis), so it minimizes the management (as an agent in the agency theory) to conduct any actions for their own personal benefit (perquisites). The allocated earnings as dividend are considering from company net income. Dividend variable obtained from ICMD (Indonesia Capital Market Directory) on summary of financial statement section. According to Ismiyanti and Hanafi (2003), dividend policy can be formulated as follows:

$$DPR = \frac{DPS}{EPS}$$

Where: DPR = Dividend Payout Ratio

DPS = Dividend per Share

EPS = Earnings per Share

### c. Earnings Per Share (EPS) as Independent Variable

According to Darmadji and Fakhruddin (2001), the definition of earnings per share or EPS is a ratio that shows the amount of profit (income) obtained by investors or shareholders for each share. The profit is used as the main factor in measuring the company's success, so investors often focus on the earnings per share (EPS) in analyzing stocks profitability.

Shareholders' perspective in investment is encouraged by the increase of EPS because it represents the bigger amount of profit that is potentially available to shareholders. To analyze the causes of changes in EPS, the *profitability ratio* analysis can be used (Fabozzi, 1999). Profitability ratios represent firm's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. According to Ang (1997), Earnings per Share is the ratio between earning after tax on a fiscal year and the number of common share outstanding, as follow:

 $EPS = \frac{EAT}{S}$ 

:

Where:	EPS	= Earning per Share
	EAT	= Earning after Tax
	S	= Number of common shares outstanding

### 3.5. Analysis Method

### a. Classical Assumption Test

The classical assumption is the statistical requirements that must be met in multiple linear regression analysis based on ordinary least square (OLS). it means in a linear regression model, the errors have the possibility to be zero and are uncorrelated, and have equal variances The *best linear unbiased estimator* (BLUE) of the coefficients is given by the ordinary least squares (OLS) estimator<sup>7</sup>. To meet the criteria of BLUE, the regression for this research must be examined by some tests as follows.

### 1) Normality Test

According to Ghozali (2001), the normality test is done to see whether the residual values are normally distributed or not. A good regression model must have a residual value that is normally distributed. The proper method to test the data normality is by seeing the normal probability plot. The normal distribution will form a straight diagonal line, and the positions of data plots will be compared to the diagonal line. If the data distribution is normal, then the line that reflects the data will follow the diagonal line.

<sup>&</sup>lt;sup>7</sup> Here "best" means giving the lowest possible mean squared error of the estimate. The errors need not be normal, nor independent and identically distributed (only uncorrelated and homoscedastic).

### 2) Heteroscedasticity Test

According to Ghozali (2001), Heteroscedasticity occurs when the variances of the error terms differ across observations. Thus, heteroscedasticity is the absence of homoscedasticity. Heteroscedasticity test can be seen in a plot graph (scatter plot) where the spread of dots is generated to be formed randomly, and it does not form in a certain pattern, and below the number 0 on the Y axis. If there is no indication for heteroscedasticity in this regression, so it means that the regression model is competent to be used in forecasting the dividend policy based on its independent variable.

### 3) Multicollinearity Test

According to Ghozali (2001), multicollinearity test is to see whether or not there is a high correlation between the free variables in a multiple linear regression model. If there is a high correlation between independent variables, the relationship between the independent variable and the dependent variable will be disturbed. An indicator that indicates the existence of multicollinearity in a regression model is formal detection-tolerance or the variance inflation factor (VIF). As a rule of thumb, the tolerance value must be greater than 0.1 (10%), and VIF values must less than 10. If multicollinearity test result does not fulfill the requirements thus regression model will not be appropriately used.

### 4) Autocorrelation Test

According to Ghozali (2001), autocorrelation test is to see whether there is a correlation between a period t and the previous period (t -1). In other words, a regression analysis has a function to find the influence of independent variables on the dependent variable, so there should be no correlation between the current observations and the previous observation data. To detect the presence of the autocorrelation (a relationship between values separated from each other by a given time lag) in the residuals (prediction errors) from a regression analysis, can be measured by using the Durbin–Watson Test (DW Test) as follows:

- a) If the value of DW is located between the upper limit (du) and (4-du), therefore auto correlation coefficient will be zero; it means that there is no autocorrelation exists.
- b) If the value of DW is lower than the lower limit (dl), therefore auto correlation coefficient will be bigger than zero. It means the autocorrelation is positive.
- c) If the value of DW is bigger than 4-dl, the autocorrelation will be smaller than zero, meaning that the autocorrelation is negative.
- d) If the value of DW is located in between the upper limit (du) and the lower limit (dl), or between (4-du) and (4-dl), meaning that the result cannot be concluded (Test inconclusive).

#### b. Statistical Analysis

This research developed multiple regression models to know the influence of interdependency to the both of dependent and independent variables used in this research (Crutchley, Jensen, Jahera and Raymond, 1999; also Chen and Steiner, 1999 in Ismiyanti and Hanafi, 2003).

The statistical analysis done by doing the tests below.

### 1) Analysis of Multiple Regression

The analysis can be done by using multiple regressions as follows:

Y	$= a + b_1 X_1$	$+ b_2 x_3$	$(2 + b_3 X_3 + e)$
Where:	ЙY	:	Firm Value
	<b>X</b> <sub>1</sub>		Leverage Policy
	X2	1	Earning per share
	$X_3$	:	Dividend Policy
	<b>Z</b> a	:	Constanta.
	$D_{b_{1}b_2}$	$\mathcal{I}$	Regression coefficient.
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### 2) Simulation Significance Test (Statistical Test of F)

According to Ghozali (2001), the statistical test of F basically shows if all independent variables which are put in the regression model collectively influence independent/dependent variables. A criterion for decision making is if the f value is bigger than 4, then H<sub>0</sub> will be refused in level of significance of  $\alpha = 5\%$ . On the other words, H<sub>a</sub> will be accepted; it means that all independent variables collectively have significant influences on the dependent variable.

### 3) Coefficient of Determination Test

According to Ghozali (2001), the coefficient of determination is used in the context of statistical models whose main purpose is the prediction of future outcomes on the basis of other related information. It is indicative of the level of explained variability in the model. The coefficient, also commonly known as R-square, is used as a guideline to measure the accuracy of the regression model. The coefficient of determination ranges from 0 to 1. An  $R^2$  of 1.0 indicates that the regression line perfectly fits the data, a very reliable model for future forecasts. On the other hand, an  $R^2$  of 0 indicates that the model fails and/or unfit the data and cannot be used as a model for future forecasts.

### 4) t-Test Statistics

According to Ghozali (2001), the t-test simply tests whether or not two independent populations have different mean values on some measures. In examining the hypothesis, the t-Test uses the level of significance of  $\alpha = 5\%$ . It means that if P value > 0.05 then H<sub>a</sub> will be rejected. While if P value (sig) < 0.05 then H<sub>a</sub> will be accepted, this means that the results are statistically significant.

All examinations done in this research (both of classic assumption test and statistical tests) used SPSS 15 for Windows version.

### **CHAPTER IV**

### DATA ANAYLISIS AND HYPOTHESIS TESTING

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### 4.1. Statistical Descriptive of Company Sample

By using criteria's mentioned before to select the sample, this research used 20 manufacturing companies as a research sample and has been observed in the last 5 years which is from the year 2006 – 2010 that make this research have 100 observation. The chosen period was used because those companies in the last 5 periods showed a significant increase and showed Dividend Payout Ratio in their financial reports (www.idx.co.id)

# 4.2. Data Description

According to Santoso (2004), statistical descriptive analysis has a purpose to find data characteristics such as *mean*, *standard deviation*, minimum and maximum data values. The results of the statistical descriptive test are shown in the table below.

### Table 4.1. Data Description

#### **Descriptive Statistics**

Variable	Ν	Minimum	Maximum	Mean	Std. Deviation
Leverage	100	0.0941	0. 94819	0.40131	0.1866336

EPS	100	6.00	21020.00	1915.61	7586.23496
Devidend	100	0.434	0.989	0.428164	0.2522819
Firm_Value	100	0.7487	10.6316	3.1913	1.9213422
Valid N (listwise)	100				

Source: Processed Secondary Data (SPSS), 2012

From the Table 4.1, it can be seen that **leverage** is 0.0941 for the minimum value, and the maximum value of 0.94819. The mean is 0.40131, and the standard deviation is 0.1866. The **EPS** shows that the minimum value is 6.00 and the maximum value is 21020.00, while the mean is 1915.61, and the standard deviation is 7586.234. The **Dividend** has 0.0434 for the minimum and 0.989 for the maximum values. The mean of Dividend is 0.409862, and the standard deviation is 0. 2522. For **Firm Value**, the company value is 0. 7487 for the minimum value, and for the maximum value is 10.6316. While the mean for Y is 3. 1913, and the standard deviation is 1. 9213422.

# 4.3. Data Analysis

### 4.3.1. Classical Test Assumption

Before the result from the regression analysis is being used to test the hypothesis, the classical assumption test must be conducted to test the regression model. The classical assumption tests used in this research are:

### a. Normality Test

According to Ghozali (2001), the normality test is used to see whether the residual values are normally distributed or not. A good regression model must have a residual value that is normally distributed. The result of the normality test can be seen in the Figure 4.1 below.



Source: Processed Secondary Data (SPSS), 201

Based on the graphic above, it shows that the dots spread around the diagonal line and the spread follows the way of the diagonal line. It means that the regression model is proper to use, because it fulfills the normal assumption.

b. Heteroscedasticity Test

Heteroscedasticity occurs when the variances of the error terms differ across observations. Heteroscedasticity test can be seen in a plot graph (scatter plot) where the spread of dots is generated randomly, and it does not form a certain pattern, and below the number 0 on the Y axis.

Graphic 4.2. The Result of Heteroscedasticity Test



### Scatterplot

**Dependent Variable: Firm Value** 



Source: Processed Secondary Data (SPSS), 2012

On the graphic above, it shows that the dots is spreads on the upper and below the zero (0) on the Y axis , and does not create a certain pattern. The spread direction is also on the upper and below. Those things can be concluded that there is not any heteroscedasticity in the regression model which means the regression model is proper to use in predicting the value of firm based on independent variable inputs (leverage, dividend policy and EPS).

c. Multicollinearity Test

According to Ghozali (2001), Multicollinearity test is done to see whether or not there is a high correlation between the free variables in a multiple linear regression model. The result for multicollinearity can be shown in the table below.

 Table 4.2. The Result of Multicollinearity Test

 Coefficients<sup>a</sup>

		Unstan Coeffi	dardized cients	Standard Coefficie	ized nts			Collinearit	y Statistics
Model		В	Std. Error	Beta		t	Sig.	Tolerance	VIF
1 (Cor	nstant)	4.874	.390		<b>A</b> 1	12.511	.000		
Leve	erage	-6.148	.711	-	.631	-8.649	.000	.963	1.038
EPS	;	.00017494	.000		.353	4.768	.000	.935	1.069
DPF	R	1.103	.536		.151	2.058	.042	.954	1.048
a. Depend	ent Varia	ble: Firm Valu	ie						

Source: Processed Secondary Data (SPSS), 2012

From the table above, the results of tolerance value for *leverage*, *EPS* and *dividend* variable are 0.963, 0.935 and 0.954. Those values greater than 10 percents (0.10). While at the same time, if it is seen based on the value of VIF (Variance Inflation Factor), each variable has the values of 1.038, 1.069, and 1.048. Those values are below the determination value which is less than 10. It means that there is no multicollinearity between the dependent variables in the regression model.

d. Autocorrelation Test

According to Ghozali (2001), the autocorrelation test is a test to see whether there is a correlation between a period t with the previous period (t -1). The result for the autocorrelation test can be seen in the table below.

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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.190 <sup>a</sup>	.036	.005	1.82704	2.102

a. Predictors: (Constant), DPR, Leverage, EPS

b. Dependent Variable: Firm Value

Source: Processed Secondary Data (SPSS), 2012

From the table above, we can see the result for Durbin-Watson (DW) which is 2.102. The value will be compared to DW table with the 20 companies. Independent variables and the level of trust is 5 %. Because the DW value is 2.102 between the margin (du) = 1.736 and (4-du) = 2.264, it can be concluded that there is no autocorrelation occurs.

Based on the classic test assumption above, it can be concluded that all of the data used in the research have fulfilled all classical assumptions. Therefore, the regression model used is appropriate to predict the influence of Leverage, Dividend and Earning per Share to the firm's values.

### 4.3.2. Hypothesis Test

### a. Multiple Linear Regression Analysis

According to Sugiyono (2005), the goal of multiple linear regressions (MLR) is used to model the relationship between the explanatory and response variables. In this research, leverage, dividend and EPS are independent variables, and the value of firm is a dependent variable (Y).

Based on the multiple regression analysis with SPSS for Windows, the researcher obtained the value of the parameter coefficients (beta), t-values and sig as follows:

**Table 4.4.** Multiple Regression Test

			Commone			
	19	Unstand Coeffi	lardized cients	Standardized Coefficients		
Model	<u>I</u> U	В	Std. Error	Beta	t	Sig.
1	(Constant)	4.874	.390	10	12.511	0.000
	FL	-6.148	.711	631	-8.649	1.18e-013
	EPS 7	.0001749	3.6e-005	.353	4.768	6.63e-006
	DPR	1.103	.536	.151	2.058	.042
a Do	anandant Varia	ble: Firm Valu				

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Source: Processed Secondary Data (SPSS), 2012

Then, Multiple regression equation obtained from the Table 4.4 is<sup>8</sup>:

### Firm Value = 4.874 - 6.148 Leverage+ 0. 0001749 EPS + 1.103 Dividend

Where:	Firm Value	:	Tobin <b>Q</b>
	FL	:	Financial Leverage <sup>9</sup>

<sup>&</sup>lt;sup>8</sup> in the **Table 4.4**. *Multiple Regression Test Result*, the number that being used in equation came from the beta (B) column only.

<sup>&</sup>lt;sup>9</sup> Financial Leverage = Debt / Total Asset

EPS	:	Earning per Share <sup>10</sup>
Dividend	:	Dividend Payout Ratio <sup>11</sup>

From the Table 4.4 above, there results for hypothesis as follow:

### 1. Hypothesis 1 Test (H1)

H1 stated that there is an influence of Financial Leverage (FL) to the firm value. Based on the table above, sig values (P-Value) obtained for Leverage is 1.180827550696e-013 that is below the significance level of 5%, then Ho is rejected and Ha is accepted, it means the leverage variables have a significant effect on the firm value variable. The statistical result shows that the proposed hypothesis is successfully supported. While the result from the Beta value for FL which is -6.148 (negative), it means that financial leverage gives a negative influence to the firm value.

From the finding about the negative and significant relationship between FL and the Firm Value, it is related to some theories below:

In the *trade-off* theory, the debts give the positive influence to the firm value but in certain points only. If the firm used debts beyond that points, it gives a negative influence to the firm value because the increase of debts is not linear with the increase of financial distress and agency problem that followed. That turning

<sup>&</sup>lt;sup>10</sup> Earning per Share = EAT / Number of common stock outstanding

<sup>&</sup>lt;sup>11</sup> Dividend Payout Ratio = Dividend per Share/Earning per Share

point called as optimal capital structure that show optimal firms debts used. It can be concluded that this research finding (negative and significant influence of FL to the firm value) means that firms used as samples are not in their optimal capital sturcture, so it gives a negative influence to the firm value. More specified on *trade-off theory*, firm value depends on tax-shield effect and bankruptcy cost and thus there is a non-linear relationship, *inverse U-shape*, between the leverage and firm value (Myers, 1977; Scott, 1976)<sup>12</sup>.

Supported by previous research done by Fischer, et al. (1989), they analyzed the effect of having fixed costs associated with actively adjusting leverage. When a firm earns profits, debt gets paid off and leverage falls automatically. Only periodically will large readjustments be made in order to capture the tax benefits of leverage. Empirically, most of the data reflects the process of paying off the debt by using profits. Thus, profitable firms will be less levered even if the trade-off theory is at work and the adjustment costs are taken into account.

Based on *pecking* order theory perspective, this research result explained that the sample firm's is not sensible to issue any more debt, so the firm must issue equity to prevent loss in terms of gaining the new funds. This research result is also in line with

<sup>&</sup>lt;sup>12</sup> Inverse U-shape is *n*-shape. It means the peak point (*optimal capital structure*) possibly located in the middle of chart (in the data range).

Fama and French (2002), they noted the negative relationship between profits and leverage because the firm' is not sensible to issue any more debt.

This research result is also supported by the previous research result below; the previous research done by McConnell and Servaes (1995) hypothized that corporate value is negatively correlated with leverage for firms with strong growth opportunities (indicated by high Tobin's Q), and positively correlated with leverage for firms with weak growth opportunities (or low Tobin's Q)<sup>13</sup>. While in the previous research made by Aivazian, et al (2005), and Yanming (2007) about the negative relationship leverage to the firm value, they found that the negative influence of financial leverage to firm value caused by agency cost.

While, in the previous research done by Rayan (2008) that examined the relationship between the leverage and firm value in South Africa using data from Johannesburg Stock Exchange (JSE) for the period of 1998 – 2007, he found that an increase in financial leverage is negatively correlated with firm value. This research result also supports the research done by Odit and Chittoo (2008)

<sup>&</sup>lt;sup>13</sup> It means, the firms with strong growth opportunities highly suggested to not use the debt (that increase the leverage) to get new fund in financing the new investment in order to develop the firm. They can used many other option such as issuing new stocks (increasing the equity) to get new investment fund to finance their new project in order to increasing the firm value that also means increasing the shareholder wealth. By choosing the *equity financing*, it means the firm's not spend their fund to the outsider. In other words, firms tend to spend extra money to pay more the equity return to the investor in form of higher dividend.

about the influence of financial leverage to investment decisions in mauritian firms. Their research result provides a significant negative relationship between leverage and investment. Further, The strong negative relationship between financial leverage also reveals in the previous research done by Prasetyo (2010). By using Indonesian listed firms in the periods of 2000 – 2009, he found that on Indonesia listed firms, the effect of monetary crisis still impacted in the year of 2000. This monetary crisis had a deeply impact to all Indonesian firms. The weakness of IDR against US Dollar has made the value of debt has increased specially for firms with debt domination in US Dollar.

From the discussion above, It can be concluded that financial leverage is one of factors that influences the firm value and can be used by investors in their decision making for investment activity, so Ha is accepted and Ho is rejected.

### 2. Hypothesis 2 Test (H2)

H2 stated that there is an influence of Earning per Share (EPS) to the firm value. Based on the statistical result, it shows that the value of EPS is 0.0001749 (beta) and 6.63e-006 (t-Test). It means that EPS variable shows positive and significant influences to the firm values. In this situation the investor will evaluate the

stock based on the probability level of each share. Earnings per share information are important and it should give attention as a tool used by the investor for investment decision making. Therefore, earnings per share will influence the share price, where the investor considers that the number of company earnings per share is good enough (acceptable) and would provide acceptable returns which match with the risk. Then, the demand of company's share would be increased too. It can be concluded that earning per share is one of factors used by investors in their decision making for investment activity. Then, the higher EPS will give impacts on stockholder's excitement because it means there are greater amount of profit provided to them (Darmadji and Fakhruddin, 2001). The increasing EPS implies that the increase in profits makes the stock prices tend to be higher, and vice versa.

The discussion about company earnings in financial management does not really focus in the relationship between earning's and the firm's value, but it more concerns about how to maximize the earnings. According to Samuelson and Marks (2003), there are two main theories about earning's maximization. Those are revenue (sales) maximization and profit maximization theories. The revenue maximization, firms try to improve their sale to increase their income level. While profit maximization theory is a process that companies undergo to determine the best output and

price levels in order to maximize its return. The company will usually adjust influential factors such as production costs, sale prices, and output levels as a way of reaching its profit goal. According to Samuelson and Marks (2003), there are two main profit maximization methods used, and those are Marginal Cost-Marginal Revenue Method and Total Cost-Total Revenue Method. Profit maximization is a good thing for a company, but can be a bad thing for consumers if the company starts to use cheaper products or decides to raise prices.

### 3. Hypothesis 3 Test (H3)

Based on the statistical result on Table 4.4, it show that the value of dividend variable is 1.103 (beta) and 0.42 (t-Test). It means, dividend variable shows positiv and significant influences to the firm values. Many research that give theoritical contributions provide empirical evidances related to the important factor for the company dividend policy. Debateable Issues in the dividend policy are still unsolved yet (Naceur et al., 2007). In line with that, Bhattacharyya (2007) explained that the dividend policy is a very difficult case and becomes a challenge for financial economist experts. Three decades ago, Black (1976) expressed that the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just do not fit together. While, Brealey and Myers

(2005) put the dividend problem into one of ten important problems that is unsolved in finance yet. Some empirical studies with the result showing a support to the perspective in dividend irrelevance theories are explained below.

Black and Scholes (1974) tested the relationship between security returns and dividend yield by forming well diversified portfolios and ranking them on the basis of their systematic risk and then divided yields within each risk class. Black and Scholes (1974) stated that dividend yield had no effect on security returns. Similar with the research done by Pettit (1974) that showed the company common stocks price was not determined by the company's dividend policy, the result of Miller and Scholes' research (1983) also showed the evidence that supports the statement that dividend policy does not give any influence to the stock price.

Many empirical studies showed the result that supports to the view about *bird in the hand* theory as follows: Long (1978) accurately tested the *Citizen utilities case*<sup>14</sup>. He found the prove that the shareholder is more favorable for the cash dividend. The research result from Bhattacharya (1979) also supported the *bird in the hand* theory. Litner (1962) and Gordon (1963) explained that the investor is more favorable about high dividend because the

<sup>&</sup>lt;sup>14</sup> Citizen utilities have two classes of shares. Class A pays a cash dividend, and class B pays a stock dividend.

accepted dividend has less risk or it can decrease the uncertainty compared with the un-distributed profit in the form of retained profit (capital gain).

In the previous study done by Farelly and Baker (1989), they reported the same results for what they call as a dividend achievement. Farelly and Baker (1989) made a survey to the institutional investors in order to know about the important consideration for the dividend policy of the company. Their findings showed that the experienced investor believes that the dividend policy influences the share prices and the dividend. The result is also consistent with Lintner (1956). Glen, et. al (1995) provided an evidence that the firms in developing countries usually made dividend payout policy with the two-thirds *payout ratio* higher than the firms in developed country.

Companies in the developing country are more concerned about the dividend based on the payout ratio than the monetary variables. In their research, Bajaj and Vijih (1990), used samples from the year 1962 to 1987, showed that the amount of dividend gives significant influences, that is inline with the stock price. This research also provided an evidence that the dividend level has a significant influence to the stock price in the small scale company. It is because the market is relatively lack of information about the small scale company so that the announcement of dividend payment becomes the key information for shareholders. Allen, et al. (2000), Baker and Wrugler (2004) assumed that the dividend payments is the answer for the investor demands on the dividend. De Angelo and De Angelo (2006) stated that the dividend policy is inseparable from the shareholder's wealth. Therefore, the dividend policy influences the investment project choosen because of unperfect market effect such as individual taxes. Brav, et al's research result (2005) documented that financial executives are hesitant to make big changes to payout policy because this might alter a company's investor perspectives and adverserly affect its stock price. Amidu (2007) made a research to find whether the dividend policy has an effect to the company financial performance or not. The research was done in the firms listed in Ghana Stock Exchange (GSE), and used eight years cummulative data that is from 1997 until 2004. The research result from Amidu (2007) supported the statement about the relevancy of dividend policy to the company value, measured with *Tobin's* q which is the market value ratio from the asset to the book value of company assets, Return on Asset, and Return on Equity.

The result from many empirical studies showed the support to the view about *tax preferency* theory introduced by Farar and Selwyn (1967): Brenan (1970) has made a research that the result can be concluded that the investor demands the higher earning before tax to cover the tax expenses. By assuming that everything remains unchanged, the shares with higher dividend payment have lower prices. As explained by Rozeff (1982) and Easterbrook (1984), the higher the amount of dividend paid by the company, the higher the possibility that there is less amount of retained earning. As a consequence, the company must find external resources for company financing in order to make new investment. Because of that, they assumed that the dividend must be paid as low as the company can, as long as the funds from retained earnings invested in profitable projects or investment that can give positive NPV (Net Present Value).

The research made by Litzenberger and Ramaswamy (1979, 1980, and 1982) tested the relationship between dividend payment and return of security using *Brennan model*<sup>15</sup>. It can be summarized that a security with a greater risk must potentially pay a greater rate of returns. Then, the implication found from those research is that the payment of dividend is undesirable by the investors. Therefore, the higher return result is needed to pay the tax charged to the inventors because it can encourage them to keep the share with high dividend. The research results mentioned above are collaterally with the result from the research done by Poterba and Summers (1984) and Barclay (1987).

<sup>&</sup>lt;sup>15</sup> Brennan (1970) derives a model of share valuation in which shares with high payouts have higher required before-tax return than shares with low payout.

From the discussion above, It can be concluded that dividend variable is one of factors that influence to the firm value and can be used by investors in their decision making for investment activity.

From the Table 4.4 that result in specific regression, then the multiple regression equation can be interpreted as follows:

- The Constanta value of 4.874 shows when the condition of independent variables is assumed unchanged (equals to zero), the value of firm is 4.874
- 2) The regression coefficient of 6.148 shows that if leverage is increased by Rp 1,- then the value of firm will have an decrease of 6.148 where the other variables are considered unchanged (equals to zero).
- Regression coefficient of 0.0001749 shows that if the EPS is increased by Rp 1,- then the value of firm will increase 0.0001749, where other variables are considered unchanged.
- 4) The coefficient of regression for 1.103 shows that if DPR is increased by Rp 1,- then the value of the firm will be increased by 1.103 where other variables are considered unchanged. Positive regression coefficient values shows that the DPR has a positive influence or in line with the value of the firm.
- b. Statistical Test of F

According to Ghozali (2001), the statistical test of F basically shows if all independent variables which are put in the regression model collectively influence independent/dependent variables. The result for the statistical test of F is shown on the table below.

# **Table 4.5.** The Results of F Test<sup>16</sup>

ANOVA <sup>b</sup>								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	166.528	3	55.509	33.074	.000 <sup>a</sup>		
	Residual	161.123	96	1.678				
	Total	327.651	99	- 4				

a. Predictors: (Constant), DPR, Leverage, EPS

b. Dependent Variable: Firm Value

Based on the table above (Anova test), the researcher obtained the calculated value of F at 33.074 with a probability level of 0.000 (significance). Because the probability is smaller than 0.05 and the F value is bigger than 2.72, it means the regression model can be used to predict the value of the firm, or with the other words that leverage, dividends and EPS simultaneously affect firm values.

### 1. Hypothesis 4 Test (H4)

From the result above, it means that Ha is accepted and Ho is rejected. Then it can be concluded that the hypothesis (H4) is supported.

### c. Determination of Coefficient Test

<sup>&</sup>lt;sup>16</sup> Source: Processed Secondary Data (SPSS), 2012

According to Ghozali (2001), the coefficient of determination is used in the context of statistical models, with the main purpose is to predict future outcomes on the basis of other related information. The coefficient value determination is between zero and one. The result of this test can be seen in the table below.

 Table 4.6. Results of Coefficient Determination Test

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U	2	Model Sum						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate				
1	.713 <sup>a</sup>	.508	.493	1.2955164				
a Prodictore: (Constant) DPP Lovorage EPS								

Source: Processed Secondary Data (SPSS), 2012

Based on the table above, the *adjusted*  $R^2$  value is 0.493. It means that 49.3% variation of the value of the firm can be explained by the variation of the three independent variables. While the remaining 51.7% (100% - 49.3%) is explained by other factors outside the regression models. In line with the discussion result about the relationship between dependendt and independent variable, this model is not covering all of variables in determining absolut firm value. Based on the discussion, it reveals that the factors that may influence are Liquidity Ratios, Profitability Ratios, Market Ratios (financial ratios) ; and Gross Domestic Product (GDP), Inflation Rates, Interest Rate and Exchange Rate.( non financial ratios)



# **CHAPTER V**

# CONCLUSIONS AND RECOMMENDATION

# **5.1.** Conclusions

Based on the research result that has been explained, the conclusiona for this research are as follows:

- Based on F Statistics Test result, all variables (Financial Leverage, Earnings per Share and Dividend Payout Ratio) in this model can be used to estimate the firm value (Tobins'Q).
- 2. Based on t Test Statistics (partial test) result, Financial Leverage variable has a negative and significant influence to the Firm Value (Tobins'Q), while other independent variables such as Dividend Payout Ratio (DPR) and Earning Per Share (EPS) have a positive and significant influence to the Firm Value (Tobins'Q).
- 3. In this research, the value of Adjusted R Square is 0.493. It means that 49.3% variation of the value of the firm can be explained by the variation of the three independent variables. While the remaining 51.7% is explained by other factors outside the regression models such as both of other financial ratios (i.e. Liquidity Ratios, Profitability Ratios, Market Ratios) and non financial ratios (i.e. Gross Domestic Product (GDP), Inflation Rates, Interest Rate and Exchange Rate).

### 5.2. Recommendations

Based on the data analysis and hypotheses testing, this research has some limitations and suggestions for the future research. The research limitations and suggestions of this research are as follows:

 This research used 90 manufacturing companies listed in Indonesia Stock Exchange in the period of 2006 - 2010 as the research samples. For the future research, the sample must be enlarged by adding some firms from different industrial areas, or all of the companies listed in LQ 45.

- 2. This research only used Leverage, Dividend and Earning per Share as variables to predict the value of the firm. Hopefully, in the future research it can be expanded more by adding some variables regression models such as both of other financial ratios (i.e. Liquidity Ratios, Profitability Ratios, Market Ratios) and non financial ratios (i.e. Gross Domestic Product (GDP), Inflation Rates, Interest Rate and Exchange Rate).
- 3. For the manager or firm, to become good firms, they must avoid debt financing as long as internal financing still possible. By increasing earnings level, firms can give great visual attractive to investors showing that the firm is in great performance and give high level of return (dividend). In other words, earnings per share and dividend policy can be used to check the firm performance whether in good performance or not.
- 4. For the investors, Financial Leverage, Earnings per share and Dividend Policy information are important and it should give attention as a tool used for invesment decision making. Then, from this research result, the researcher suggests that the investor must take a look of the firm's capital structure and choose the firm's that used equity financing. Then, the firm that become a good role model for the investment target is the firm that havs high earnings and dividends.



### REFERENCES

- Aharony, Joseph and Swary, Itzhak. (1980). Quarterly Dividend And Earning Announcement And Stockholders Return: An Emperical Analyzis. The Journal of Finance Vol.35. No.1.
- Aivazian, V.A., Ge, Ying. and Qiu, J. (2005). The impact of leverage on firm investment: Canadian evidence. Journal of Corporate Finance. Vol. 11, pp. 277–291
- Allen, Franklin., Antonio E. Bernardo, and Ivo Welch. (2000). A Theory of Dividends Based on Tax Clienteles. Journal of Finance Vol. 55, pp. 2499-2536.
- Amidu, M. (2007) How Does Dividend Policy Affect Firm Performance?, A Ghanaian Case. Journal Investment Management and Financial Innovations. Issue No.1.
- Ang, Robert. (1997). Buku Pintar Pasar Modal Indonesia. Jakarta. Mediasoft Indonesia.
- Baker, Stein., Malcolm and Wurgler, J. (2000). The Equity Share In New Issues and Aggregate Stock Return.. The Journal of Finance.
- Baker, Stein and Wurgler (2003). When Does the Market Matter? Stock Prices and the Investment of Equity-Dependent Firms. Quarterly Journal of Economics.
- Bajaj, M., and Vijh, A. M. (1990). Dividend Clienteles and The Information Content of Dividend Changes. Journal of Financial Economics 26.
- Barclay, M. J. (1987). Dividends, Taxes, and Common Stock Prices: The Ex-Dividend Day Behavior of Common Stock Prices Before the Income Tax. Journal of Financial Economics. Vol. 19, pp.31-44.
- Beaver, W. H., P. Kettler, and M. Scholes. (1970). The Association Between Market Determined and Accounting Determined Risk Measures. Acconting Review. Vol. 45(4), pp. 654-682.
- Black, F. (1976). The Dividend Puzzle. Journal of Portfolio Management.
- Black, F. and Scholes, M. (1974). *The Effects on Dividend Yield and Dividend Policy on Common Stock Prices and Returns*. Journal of Financial Economics.
- Bhattacharya. (1979). Imperfect Information, Dividend Policy, and "the Bird in the Hand" Fallacy. Bell Journal of Economics. Vol. 10, pp. 259-270.

—— Gouri K. and Johnson, Richard A. (1977). *Statistical Concepts and Methods*. New York. John Wiley & Sons, Inc.

- Brav, A., J.R. Graham, C.R. Harvey and Michaely. (2005). *Payout Policy in the* 21<sup>st</sup> Century. Journal of Financial Economics. Vol. 77, pp. 483-527.
- Brealey, Richard and Myers, Stewart. (2005). Fundamentals of Corporate Finance. Third Edition. Singapore. Mc Graw-Hill.

- Brennan, M. (1970). Taxes, Market Valuation and Financial Policy. National Tax Journal. Vol. 23, pp. 417–429.
- Chung, Kee H. and Pruitt, Stephen W. (1994). A Simple Approximation of Tobin's Q. Financial Management. Vol. 23, pp. 3
- Damodaran, Aswath. (2006). Valuation Approaches and Metrics: A Survey of the Theory and Evidence. Stern School of Business.
  - ——, Aswath. (2006). Damodaran on Valuation 2<sup>nd</sup> Edition: Security analysis for Investment and Corporate Finance. John Wiley and Sons, New York.
- Darmadji, Tjiptono and Fakhruddin, Hendi. M. (2001). Pasar Modal Di Indonesia: Pendekatan Tanya Jawab. Edisi Pertama. Salemba Empat, Jakarta.
- De Angelo, H. and De Angelo, L. (2006). *The Irrelevance of MM Dividend Irrelevance Theorem*. Journal of Financial Economics. *Vol.* 79. pp. 209-315.
  - and R.M. Stulz. (2006). *Dividend Policy and the Earned/Conributed Capital Mix: a Test of Life Cycle Theory*. Journal of Financial Economics. Vol. 81, pp. 227-254.
- Donald, Black. (1976). The Behavior of Law. Academic Press. New York
- Donaldson G. (1961). Corporate Debt Capacity: A study of Corporate Debt Policy and the Determination of Corporate Debt Capacity. Boston, Division of Research. Harvard Graduate School of Business Administration
- Easterbrook, F.H. (1984). *Two Agency-Cost Explanations of Dividends*. American Economic Review. Vol. 74, p. 650-659.
- Fabozzi, Frank J. (1999). *Manajemen Investasi*. Indonesia Edition. Salemba Empat. Jakarta.
- Fama, E., French, K., (2002). *Testing tradeoff and pecking order predictions about dividends and debt*. Review of Financial Studies 15, pp. 1–33.
- Farrar, D. and Selwyn, L. L. (1967). *Taxes, Corporate Financial Policy and Return to Investors.* National Tax Journal. Vol. 20, pp. 443 454.

- Farrelly, G. E. and H. K. Baker. (1989). Corporate dividends: Views of institutional investors. Akron Business and Economic Review Vol. 20 (2), pp. 89-100.
- Fischer, E.O., Heinkel, R., and Zechner, J. (1989). *Dynamic capital structure choice: theory and tests*. Journal of Finance Vol.44, pp. 19–40.
- Glen, Jack D., Yannis Karmokolias. Robert R. Miller, and Sanjay Shah. (1995). Dividend Policy and Behavior in Emerging Markets. Discussion Paper No. 26 (International Financial Corporation).
- Gultom, M. Corry and Syarif, Firman. (2008). Pengaruh Kebijakan Leverage, Kebijakan Deviden dan Earning Per Share Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Yang Terdaftar di BEI. A Thesis. Universitas Sumatera utara.
- Ghozali, Imam. (2005). Aplikasi Analisis Multivariate dengan Program SPSS. Edisi Ketiga. Badan Penerbit Universitas Diponegoro. Yogyakarta.
- Gordon, M. J. (1963), *Optimal Investment and Financing Policy*, Journal of Finance, Vol. 18 (2), pp. 264-272.
- Harris, M., and A. Raviv. *The Theory of Capital Structure*. Journal of Finance Vol. 46, pp. 297-355.
- Husnan, Suad. (1995). *Manajemen Keuangan Teori dan Penerapan*. Yogyakarta: BPFE UGM.

. (2003). Dasar – Dasar Teori Portfolio Dan Analisis Sekuritas. Edisi Ketiga. Cetakan Ketiga. Penerbit UPP AMP YKPN. Yogyakarta

- Ismiyanti, Fitri. and Hanafi, Mamduh. (2003). Kepemilikan Manajerial, Kepemilikan Institutional, Risiko, Kebujakan Hutang dan Kebijakan Dividen: Analisa Persamaan Simultan. Makalah Seminar. Simposium Nasional Akuntansi VI. Ikatan Akuntansi Indonesia, pp. 260-276
- Jensen, Michael C.; Meckling, William H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics 3 (4), pp. 305–360
- Jose, Manuel L., Len M. Nichols, and Jerry L. Stevens. (1986). Contributions of Diversification, Promotion, and R&D to the Value of Multiproduct Firms: A Tobin's q approach. Financial Management (Winter), 33-42.

- Keown, Arthur J., et al. (2000). Basic Financial Management, Alih Bahasa, Chaerul D. dan Dwi Sulisyorini. Dasar-Dasar Manajemen Keuangan, Buku 2. Penerbit Salemba Empat. Jakarta.
- Kraus, A. and Litzenberger, R.H. (1973). A State-Preference Model of Optimal Financial Leverage. Journal of Finance, pp. 911-922.
- Lang, Larry H. P., Rene M. Stulz, and Ralph A. Walkling. 1989. *Managerial Performance, Tobin's Q, and the Gains from Successful Tender Offers.* Journal of Financial Economics (September), pp. 137-154.
- Lindenberg, Eric B., and Stephen A. Ross. (1981). Tobin's q Ratio and Industrial Organization. Journal of Business. Vol. 54, pp. 1-32
- Lintner, John. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. American Economic Review. Vol. 46.

(1962). Dividend, Earnings, Leverage, Stock Prices, and the Supply of Capital to Corporations. Review of Economics and Statistic. pp. 243-269.

- Litzenberger, R. and Ramaswamy, K. (1979). The effect of personal taxes and dividends on capital asset prices: Theory and empirical evidence. Journal of financial economic. Vol.7, pp.163-195.
- Litzenberger, R and Ramaswamy, K. (1980). Dividends, Short Selling Restrictions, Tax Induced Investor Clientele and Market Equilibrium. Journal of Finance. Vol. 35(2), pp. 469-482.
- Litzenberger, R. and Ramaswamy, K. (1982). The Effects of Dividends on Common Stock Prices: Tax Effects or Information Effects, Journal of Finance. Vol. 37, pp. 429-43.
- Long, John B., Jr. (1978). *The Market Valuation of Cash Dividends: A Case To Consider*. Journal of Financial Economics. Vol. 6, pp. 2-3, pp. 235–64.
- Malkiel, Burton G., George M. Von Furstenberg, and Harry S. Watson. (1979). *Expectations, Tobin's q, and Industry Investment.* Journal of Finance (May), pp. 549-564.
- McConnell, J.J., Servaes, H., (1995). *Equity ownership and the two faces of debt*. Journal of Financial Economics. Vol. 39, pp. 131–157.
- Miller, M. H. and M. S. Scholes. (1978). *Dividends and Taxes*. Journal of Financial Economics. Vol. 6(4), pp. 333-364

- Morck, Randall, Andrei Shleifer, and Robert W. Vishny. (1988). *Management Ownership and Market Valuation*. Journal of Financial Economics (January/March), pp. 293-315.
- Myer, C. Stewart. (1977). *Determinants Of Corporate Borrowing*. Journal of Financial Economics Vol. V, pp. 147-175.

(1984). *The Capital Structure Puzzle*. Journal of Finance Vol. 34, pp. 575-592.

- Nacelur. B. S. Goad's, Beelines. (2007). On the determinants and Dynamics of Dividend policy. Journal of International Review of Finance.
- Odit, P. Mohun and Chitto B. Hemant. (2008). Does Financial Leverage Influence Investment Decisions? The Case Of Mauritian Firms. Journal of Business Case Studies, Vol. 4. No. 9
- Prasetyo, H. Ries. (2010). Systematic Risk And Capital Structure In Emerging Indonesian Market. International Conference on Economics, Business and Management. IAC S IT Press. Manila, Philippines.
- Pettit, R. (1977). The Impact of Dividend and Earnings Announcements: A *Reconciliation*. Journal of Financial Economics.
- Poterba, J. M. and Summers, L. H. (1984). New Evidence that Taxes Affect the Valuation of Dividends. Journal of Finance. Vol. 39, pp. 1397-1415.
- Rayan, Kuben. (2008). *Financial Leverage and Firm Value*. Gordon Institute and Business Science.
- Rozeff, M.S. (1982). Growth, Beta, and Agency Costs as Determinants of Dividend Payout Ratios. Journal of Financial Research. Vol.5, pp.249-259.
- Samuelson, W., and Marks, S. (2003). *Managerial Economics* (fourth ed.). Wiley.
- Sartono, Agus. (1998). Manajemen Keuangan. Edisi 3. BPFE, Yogyakarta.
- Santoso, Singgih. (2004). *Mengolah Data Statistik Secara Profesional*. PT. Elex Media. Komputindo. Jakarta.
- Scott, J.H. (1976). A Theory of Optimal Capital Structure. Bell Journal of Economics. Vol. 7 issue 1, pp. 33-54.
- Sharpe, William F., Alexander, Gordon J.; and Bailey, Jeffrey V. (1997). Investment. Edisi Kelima. Terjemahan Henry Njooliangtik dan Agustiono, PT. Prenhallindo. Jakarta.

Smith, Clifford W., and Ross L. Watts. (1992). The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies. Journal of Financial Economics (December), pp. 263-292.

Sugiyono, (2005). Metode Penelitian Kualitatif. Bandung: Alfabeta.

- Sundjaja, Ridwan S. and Barlian, Inge. (2001). *Manajemen Keuangan Satu*, Edisi Keempat. Prenhallindo. Jakarta.
- Syamsuddin, Lukman. (2001). Manajemen Keuangan Perusahaan Konsep Aplikasi dalam : Perencanaan, Pengawasan, dan Pengambilan Keputusan. PT Raja Grafindo Persada. Jakarta.
- Weaver, Samuel C. and Weston, J. Fred. (2001). Finance and Accounting for Non-Financial Managers. McGraw Hill.
- Weston, J. Fred and Brigham, Eugene F. (1984). *Manajemen Keuangan*, Gunawan Hutahuruk Indonesia Translation. Edisi ketujuh, cetakan kedua, Erlangga. Jakarta.
- Weston, J. Fred and Brigham, Eugene F. (1997). *Managerial Finance 6th edition*, Dryden Press, Division of Rinehart and Wiston Publishers.
- Weston, J. Fred dan Thomas E. Copeland. (1997). *Manajemen Keuangan Jilid* 2. Edisi Kesembilan. Diterjemahkan oleh Jaka Warsana. Jakarta: Binarupa Aksara.
- Van Horne, James and Wachowicz. Jr, John. (1998). Prinsip-prinsip Manajemen Keuangan. Indonesia Edition. Jakarta: Salemba Empat.
- Yanming, C. (2007). Simultaneous Determination of Managerial Ownership, Financial Leverage and Firm Value. ShanXi University of Finance & Economics, P.R.China.

#### **Table I. Preview of Selecting Sample**

Below is the list of manufacturing company that used in the research before pass the selecting criteria's (Sampling method).

	Criteria A <sup>17</sup>	Criteria B <sup>18</sup>	Criteria C <sup>19</sup>
BASIC INDUSTRY AND CHEMICALS			-
CEMENT			
Indocement Tunggal Prakasa Tbk	Pass	Pass	rejected
Semen Gresik (Persero) Tbk	Pass	Pass	Pass
CERAMICS, GLASS, PORCELAIN			
Arwana Citramulia Tbk	Pass	Pass	Pass
Asahimas Flat Glass Tbk	Pass	Pass	rejected
Intikeramik Alamasri Industri Tbk	Pass	Pass	rejected
Keramika Indonesia Assosiasi Tbk	Pass	Pass	rejected
Mulia Industrindo Tbk	Pass	Pass	rejected
Surya Toto Indonesia Tbk	Pass	Pass	rejected
METAL AND ALLIED PRODUCTS			
Alumindo Light Metal Industry Tbk	Pass U	Pass	rejected
Alakasa Industrindo Tbk	Pass	Pass	rejected
Betonjaya Manunggal Tbk	Pass	Pass	rejected
Citra Tubindo Tbk [	Pass	Pass	rejected
Gunawan Dianjaya Steel Tbk	rejected	rejected	rejected
Indal Aluminium Industry Tbk	Pass	Pass	rejected
Itamaraya Tbk 📃 >	Pass	Pass	rejected
Jakarta Kyoei Steel Works Tbk	Pass	Pass	rejected
Jaya Pari Steel Tbk 🖉	Pass	Pass	rejected
Krakatau Steel Tbk. 🔄	Rejected	rejected	rejected
Lion Metal Works Tbk	Pass	Pass	rejected
Lionmesh Prima Tbk	Pass	Pass	Pass
Pelangi Indah Canindo Tbk	Pass	Pass	rejected
Pelat Timah Nusantara Tbk	rejected	rejected	rejected
Tembaga Mulia Semanan Tbk	Pass	Pass	rejected
CHEMICALS			
Barito Pacific Tbk	Pass	Pass	rejected
Budi Acid Jaya Tbk	Pass	Pass	rejected
Duta Pertiwi Nusantara Tbk	Pass	Pass	rejected
Ekadharma International Tbk	Pass	Pass	rejected

<sup>&</sup>lt;sup>17</sup> Which are listed and not in delisting condition in Indonesia Stock Exchange for period 2006-2010.

 <sup>&</sup>lt;sup>18</sup> Published the financial statement per 31 December for period 2006-2010.
<sup>19</sup> Made and announced the cash dividend for period 2006-2010.

	Criteria A	Criteria B	Criteria C
Eterindo Wahanatama Tbk	Pass	Pass	rejected
Indo Acidatama Tbk	Pass	Pass	rejected
Intanwijaya Internasional Tbk	Pass	Pass	rejected
Sorini Agro Asia Corporinndo Tbk	Pass	Pass	rejected
Chandra Asri Petrochemical Tbk.	rejected	rejected	rejected
Unggul Indah Cahaya Tbk	Pass	Pass	rejected
PLASTICS & PACKAGING			
Aneka Kemasindo Utama Tbk	Pass	Pass	rejected
Argha Karya Prima Ind. Tbk	Pass	Pass	rejected
Asiaplast Industries Tbk	Pass	Pass	rejected
Berlina Tbk	Pass	Pass	rejected
Dynaplast Tbk	Pass	Pass	rejected
Indopoly Swakarsa Industry Tbk.	rejected	rejected	rejected
Champion Pasific Indonesia Tbk.	rejected	rejected	rejected
Sekawan Intipratama Tbk 🛛 🚬 🗛	Pass	Pass	rejected
Siwani Makmur Tbk 💋	Pass	Pass	rejected
Titan Kimia Nusantara Tbk	Pass	Pass	rejected
Trias Sentosa Tbk	Pass	Pass	Pass
Yanaprima Hastapersada Tbk	rejected	rejected	rejected
ANIMAL FEED			
Charoen Pokphand Indonesia Tbk	Pass	Pass	rejected
JAPFA Comfeed Indonesia Tbk	Pass	Pass	rejected
Malindo Feedmill Tbk	Pass	Pass	Pass
Sierad Produce Tbk	Pass	Pass	rejected
	101		
Sumalindo Lestari Jaya Tbk	Pass	Pass	rejected
Tirta Mahakam Resources Tbk	Pass	Pass	rejected
PULP & PAPER			
Fajar Surya Wisesa Tbk	Pass	Pass	rejected
Indah Kiat Pulp & Paper Tbk	Pass 9-//	Pass	rejected
Kertas Basuki Rachmat Ind. Tbk	rejected	rejected	rejected
Suparma Tbk	Pass	Pass	rejected
Surabaya Agung Industry Pulp Tbk	Pass	Pass	rejected
Pabrik Kertas Tjiwi Kimia Tbk	Pass	Pass	rejected
Toba Pulp Lestari Tbk	Pass	Pass	rejected
OTHERS			
MISCELLANEOUS INDUSTRY			
MACHINERY AND HEAVY EQUIPMENT			
AUTOMOTIVE AND COMPONENTS			
Astra International Tbk	Pass	Pass	Pass
Astra Otoparts Tbk	Pass	Pass	Pass
Gajah Tunggal Tbk	Pass	Pass	rejected

	Criteria A	Criteria B	Criteria C
Goodyear Indonesia Tbk	Pass	Pass	Pass
Indo Kordsa Tbk	Pass	Pass	Pass
Indomobil Sukses Internasional Tbk	Pass	Pass	rejected
Indospring Tbk	Pass	Pass	rejected
Multi Prima Sejahtera Tbk	Pass	Pass	rejected
Multistrada Arah Sarana Tbk	Pass	Pass	rejected
Nipress Tbk	Pass	Pass	rejected
Prima Alloy Steel Tbk	Pass	Pass	rejected
Selamat Sempurna Tbk	Pass	Pass	Pass
TEXTILE, GARMENT			
Apac Citra Centertex Tbk	Pass	Pass	rejected
Argo Pantes Tbk	Pass	Pass	rejected
Asia Pacific Fibers Tbk	Pass	Pass	rejected
Centex (Preferred Stock) Tbk	rejected	rejected	rejected
Centex Saham Seri B Tbk	Pass	Pass	rejected
Eratex Djaja Tbk	Pass	Pass	rejected
Ever Shine Textile Industry Tbk	Pass	Pass	rejected
Hanson International Tbk	Pass	Pass	rejected
Hanson International Seri B Tbk	rejected	rejected	rejected
Indorama Synthetics Tbk	Pass	Pass	rejected
Karwell Indonesia Tbk	Pass	Pass	rejected
Nusantara Inti Corpora Tbk	rejected	rejected	rejected
Pan Brothers Tex Tbk	Pass	Pass	rejected
Panasia Filament Inti Tbk	Pass	Pass	rejected
Panasia Indosyntec Tbk	Pass	Pass	rejected
Polychem Indonesia Tbk	Pass	Pass	rejected
Ricky Putra Globalindo Tbk	Pass	Pass	rejected
Sunson Textile Manufacture Tbk	Pass 👂	Pass	rejected
Tifico Fiber Indonesia Tbk.	Pass	Pass	rejected
Unitex Tbk	rejected	rejected	rejected
FOOTWEAR	リリ・レージノー		
Primarindo Asia Infrastructur Tbk	Pass	Pass	rejected
Sepatu Bata Tbk	Pass	Pass	Pass
Surya Intrindo Makmur Tbk	Pass	Pass	rejected
CABLE			
Jembo Cable Company Tbk	Pass	Pass	rejected
Kabelindo Murni Tbk	Pass	Pass	rejected
KMI Wire and Cable Tbk	Pass	Pass	rejected
Sucaco Tbk	Pass	Pass	rejected
Sumi Indo Kabel Tbk	Pass	Pass	Pass
Voksel Electric Tbk	Pass	Pass	rejected
ELECTRONICS			

	Criteria A	Criteria B	Criteria C					
Sat Nusapersada Tbk	rejected	rejected	rejected					
CONSUMER GOODS INDUSTRY								
FOOD AND BEVERAGES								
Akasha Wira International Tbk	Pass	Pass	rejected					
Aqua Golden Mississippi Tbk	Pass	Pass	rejected					
Cahaya Kalbar Tbk	Pass	Pass	rejected					
Davomas Abadi Tbk	Pass	Pass	rejected					
Delta Djakarta Tbk	Pass	Pass	Pass					
Indofood CBP Sukses Makmur Tbk.	Pass	Pass	rejected					
Indofood Sukses Makmur Tbk	Pass	Pass	Pass					
Mayora Indah Tbk	Pass	Pass	rejected					
Multi Bintang Indonesia Tbk	Pass	Pass	Pass					
Nippon Indosari Corpindo Tbk.	rejected	rejected	rejected					
Prasidha Aneka Niaga Tbk	Pass	Pass	rejected					
Sekar Laut Tbk	Pass	Pass	rejected					
Siantar Top Tbk	Pass	Pass	rejected					
Tiga Pilar Sejahtera Food Tbk	Pass	Pass	rejected					
Ultra Jaya Milk Tbk	Pass	Pass	rejected					
TOBACCO MANUFACTURERS	N VI							
Bentoel International Investama Tbk	Pass	Pass	rejected					
Gudang Garam Tbk	Pass	Pass	Pass					
HM Sampoerna Tbk	Pass	Pass	rejected					
PHARMACEUTICALS								
Darya-Varia Laboratoria Tbk	Pass	Pass	rejected					
Indofarma Tbk	Pass 👔	Pass	rejected					
Kalbe Farma Tbk 🤤	Pass	Pass	Pass					
Kimia Farma Tbk	Pass	Pass	rejected					
Merck Tbk	Pass 👂	Pass	rejected					
Pyridam Farma Tbk	Pass	Pass	rejected					
Schering Plough Indonesia Tbk	Pass 9-1	Pass	rejected					
Taisho Pharmaceutical Indonesia	Pass	Pass	Pass					
Tbk								
Tempo Scan Pacific Tbk	Pass	Pass	rejected					
COSMETICS AND HOUSEHOLD								
Mandom Indonesia Tbk	Pass	Pass	rejected					
Mustika Ratu Tbk	Pass	Pass	Pass					
Unilever Indonesia Tbk	Pass	Pass	Pass					
HOUSEWARE	Pass	Pass	rejected					
Kedaung Indah Can Tbk	Pass	Pass	rejected					
Kedawung Setia Industrial Tbk	Pass	Pass	rejected					
Langgeng Makmur Industri Tbk	Pass	Pass	rejected					

#### **II.** The Sample

This research population is manufacturing firms listed in Indonesia Stock Exchange (IDX) during 5 periods, which is starting from year 2006 until 2010 where the period is the latest period after company faced the monetary crisis period, and the number of sample that used is 20 manufacturing firms. It consists of Financial Leverage (FL) for x1, Earning per Share (EPS) for x2, Dividend Policy (Dividend Ratio or DPR) for x3 and Firm Value for  $Y^{20}$ .

#### I.1. Period 1 (2006)

No.	Company Name	Financial	Earnings per	Dividend	Firm
		Leverage	Share	Ratios	Value
1	Arwana Citramulia	0.59596	30	0.3333	1.6780
	Tbk				
2	Astra Internasional	0.54374	916	0.4258	1.8391
	Tbk				
3	Astra Otoparts Tbk	0.35234	365	0.2055	2.8382
4	Delta Djakarta Tbk	0.23887	2703	0.4809	4.1863
5	Goodyear Indonesia	0.38170	619	0.2294	2.6198
	Tbk				
6	Gudang Garam Tbk	0.39380	523	0.4780	2.5394
7	Indo Kordsa Tbk	0.33230	40	0.3000	3.0093
8	Indofod Sks	0.65314	70	0.4429	1.5311
9	Kalbe Farma	0.23366	66	0.1515	4.2798
10	Lionmesh	0.46116	277	0.1083	2.1684
11	Malindo Feedmill	0.49690	139	0.4532	2.0125
12	Multi Bintang 🦳	0.67477	3492	0.7560	1.4820
13	Mustika Ratu 🥌	0.09406	21	0.1524	10.6316
14	Selamat Sempurna	0.33438	50	0.3000	2.9906
15	Semen Gresik	0.25549	2173	0.5026	3.9142
16	Sepatu Bata Tbk	0.29976	1550	0.5000	3.3360
17	Sumi Indo Kabel Tbk	0.36762	145	0.3103	2.7202
18	Taisho Pharmaceutical	0.36953	4658	0.0566	2.7062
	Indonesia 🤳 🖯 🖯	ルビリル	63/		
19	Trias Sentosa	0.51720	9	0.5556	1.9335
20	Unilever Indonesia	0.48625	225	0.9111	2.0566

<sup>&</sup>lt;sup>20</sup> Leverage ratio is the ratio of total debt to market value of the firm. EPS is a ratio that shows the amount of profit (income) obtained by investors or shareholders for each share. The dividend policy is a policy used by a company to decide how much to pay out dividends to shareholders and measure by using Dividend Ratio (DPR). The firm value as dependent variable is measured by using the Q ratio.

# I.2. Period II (2007)

No.	Company Name	Financial	Earnings per	Dividend	Firm
		Leverage	Share	Ratios	Value
1	Arwana Citramulia Tbk	0.62377	47	0.2447	1.6031
2	Astra Internasional Tbk	0.49609	1610	0.0994	2.0157
3	Astra Otoparts Tbk	0.31692	589	0.0509	3.1553
4	Delta Djakarta Tbk	0.22207	2955	0.4738	4.5031
5	Goodyear Indonesia				
	Tbk	0.48328	1034	0.0851	2.0692
6	Gudang Garam Tbk	0.40910	750	0.3333	2.4444
7	Indo Kordsa Tbk	0.29736	86	0.7326	3.3629
8	Indofod Sks	0.63260	103	0.4175	1.5808
9	Kalbe Farma	0.21827	69	0.1812	4.5814
10	Lionmesh	0.53606	618	0.0809	1.8655
11	Malindo Feedmill	0.62817	83	0.3012	1.5919
12	Multi Bintang	0.68190	4004	0.7493	1.4665
13	Mustika Ratu	0.11527	26	0.2000	8.6750
14	Selamat Sempurna	0.38137	62	0.6452	2.6221
15	Semen Gresik 🔍	0.27561	297	0.5039	3.6284
16	Sepatu Bata Tbk	0.37455	2659	0.8390	2.6699
17	Sumi Indo Kabel Tbk	0.25330	253	0.3953	3.9480
18	Taisho Pharmaceutical		_ <u> </u>		
	Indonesia	0.30217	5629	0.0708	3.3094
19	Trias Sentosa	0.54130	6	0.8333	1.8474
20	Unilever Indonesia	0.49486	257	0.9222	2.0208



# I.3. Period III (2008)

No.	<b>Company Name</b>	Financial	Earnings	Dividend	Firm
		Leverage	per Share	Ratios	Value
1	Arwana Citramulia Tbk	0.60620	59	0.0847	1.6496
2	Astra Internasional Tbk	0.49744	2270	0.3833	2.0103
3	Astra Otoparts Tbk	0.29912	733	0.4011	3.3431
4	Delta Djakarta Tbk	0.24963	5229	0.6693	4.0059
5	Goodyear Indonesia Tbk	0.70975	19	0.3158	1.4089
6	Gudang Garam Tbk	0.35532	977	0.3582	2.8143
7	Indo Kordsa Tbk	0.28706	210	0.5952	3.4836
8	Indofod Sks	0.66758	120	0.3917	1.4979
9	Kalbe Farma	0.23826	69	0.3623	4.1971
10	Lionmesh	0.38862	962	0.0624	2.5732
11	Malindo Feedmill	0.94819	26	0.1538	0.7487
12	Multi Bintang	0.63430	10550	0.4739	1.5765
13	Mustika Ratu	0.14416	52	0.2504	6.9366
14	Selamat Sempurna	0.36708	63	0.9524	2.7242
15	Semen Gresik	0.22911	425	0.5063	4.3647
16	Sepatu Bata Tbk	0.32043	12120	0.0673	3.1208
17	Sumi Indo Kabel Tbk	0.20313	319	0.3918	4.9230
18	Taisho Pharmaceutical				
	Indonesia	0.27205	10171	0.7865	3.6758
19	Trias Sentosa	0.51948	20	0.5000	1.9250
20	Unilever Indonesia	0.52238	315	0.9048	1.9143



### I.4. Period IV (2009)

No.	Company Name	Financial	Earnings	Dividend	Firm
		Leverage	per Share	Ratios	Value
1	Arwana Citramulia Tbk	0.57660	34	0.2059	1.7343
2	Astra Internasional Tbk	0.44982	2479	0.3348	2.2231
3	Astra Otoparts Tbk	0.27176	995	0.6010	3.6798
4	Delta Djakarta Tbk	0.21147	7900	0.5696	4.7288
5	Goodyear Indonesia Tbk	0.63166	2953	0.0762	1.5831
6	Gudang Garam Tbk	0.32494	1795	0.3621	3.0775
7	Indo Kordsa Tbk	0.16662	159	0.3145	6.0018
8	Indofod Sks	0.61627	236	0.3941	1.6227
9	Kalbe Farma	0.26094	96	0.7292	3.8323
10	Lionmesh	0.45459	250	0.1200	2.1998
11	Malindo Feedmill	0.86598	224	0.2500	1.1548
12	Multi Bintang	0.89396	16158	0.7736	1.1186
13	Mustika Ratu	0.13459	49	0.2004	7.4299
14	Selamat Sempurna	0.42202	91	0.9890	2.3695
15	Semen Gresik	0.20332	566	0.5450	4.9185
16	Sepatu Bata Tbk	0.27680	4074	0.5297	3.6128
17	Sumi Indo Kabel Tbk	0.12431	94	0.3404	8.0443
18	Taisho Pharmaceutical		U		
	Indonesia	0.17397	13324	0.6379	5.7481
19	Trias Sentosa	0.40430	51	0.2941	2.4734
20	Unilever Indonesia	0.50454	399	0.8747	1.9820



## I.5. Period V (2010)

No.	Company Name	Financial	Earnings per	Dividend	Firm
		Leverage	Share	Ratios	Value
1	Arwana Citramulia Tbk	0.52464	43	0.3488	1.9061
2	Astra Internasional Tbk	0.47997	3549	0.1324	2.0835
3	Astra Otoparts Tbk	0.26544	1479	0.3137	3.7673
4	Delta Djakarta Tbk	0.16261	8715	0.6311	6.1496
5	Goodyear Indonesia				
	Tbk	0.63799	1618	0.1545	1.5674
6	Gudang Garam Tbk	0.30647	2155	0.4084	3.2630
7	Indo Kordsa Tbk	0.19016	298	0.4195	5.2589
8	Indofod Sks	0.47430	336	0.3958	2.1084
9	Kalbe Farma	0.17922	136	0.5147	5.5798
10	Lionmesh	0.40172	766	0.0653	2.4893
11	Malindo Feedmill	0.73524	530	0.0434	1.3601
12	Multi Bintang	0.58546	21020	0.5366	1.7081
13	Mustika Ratu	0.12638	57	0.2002	7.9124
14	Selamat Sempurna	0.46727	103	0.2913	2.1401
15	Semen Gresik	0.21996	612	0.5004	4.5463
16	Sepatu Bata Tbk	0.31542	4690	0.2435	3.1704
17	Sumi Indo Kabel Tbk	0.18041	15	0.6667	5.5431
18	Taisho Pharmaceutical				
	Indonesia	0.15928	9104	0.9337	6.2784
19	Trias Sentosa	0.39002	48	0.4167	2.5639
20	Unilever Indonesia	0.53468	443	0.0993	1.8703



### Table 3

#### **Average Result of Variables**

The table provides the average value of each variable. *Leverage ratio* is the ratio of total debt to market value of the firm. EPS is a ratio that shows the amount of profit (income) obtained by investors or shareholders for each share. The dividend policy is a policy used by a company to decide how much to pay out dividends to shareholders. The firm value as dependent variable is measured by using the Q ratio.

No.	<b>Company Name</b>	Financial	Earnings per	Dividend	Firm
		Leverage	Share	Ratios	Value
1	Arwana Citramulia Tbk	0.58544	42.6	0.2435	1.7142
2	Astra Internasional Tbk	0.49341	2164.8	0.2751	2.0344
3	Astra Otoparts Tbk	0.30111	832.2	0.3144	3.3568
4	Delta Djakarta Tbk	0.21693	5500.4	0.5650	4.7147
5	Goodyear Indonesia	1			
	Tbk	0.56888	1248.6	0.1722	1.8497
6	Gudang Garam Tbk	0.35793	1240	0.3880	2.8277
7	Indo Kordsa Tbk	0.25470	158.6	0.4723	4.2233
8	Indofod Sks	0.60878	173	0.4084	1.6682
9	Kalbe Farma	0.22607	87.2	0.3878	4.4941
10	Lionmesh	0.44843	574.6	0.0874	2.2592
11	Malindo Feedmill	0.73490	200.4	0.2403	1.3736
12	Multi Bintang	0.69408	11044.8	0.6579	1.4703
13	Mustika Ratu	0.12289	41	0.2007	8.3171
14	Selamat Sempurna	0.39442	73.8	0.6356	2.5693
15	Semen Gresik 🧲	0.23670	814.6	0.5116	4.2744
16	Sepatu Bata Tbk	0.31739	5018.6	0.4359	3.1820
17	Sumi Indo Kabel Tbk	0.22575	165.2	0.4209	5.0357
18	Taisho Pharmaceutical				
	Indonesia	0.25540	26084.6	0.4971	4.3436
19	Trias Sentosa	0.47446	26.8	0.5199	2.1487
20	Unilever Indonesia しし	0.50854	327.8	0.7424	1.9688