

# Study On Dividend Policy: Antecedent and Its Impact On Share Price

Murhadi, Werner-Ria

Universitas Surabaya, Indonesia

9 March 2008

Online at https://mpra.ub.uni-muenchen.de/25596/ MPRA Paper No. 25596, posted 12 Oct 2010 19:19 UTC

# Study On Dividend Policy: Antecedent and Its Impact On Share Price

## Werner R. Murhadi Universitas Surabaya

## **ABSTRACT**

This research aims to test dividend signaling theory in an Indonesian capital market. Signaling theory states that dividend policy has information content that can influence to share price. Examination of theory of signaling is related to research phenomena in other countries indicating that by percentage there is degradation of company which is pay dividend and there even exist mentioning this as phenomenon of disappearing dividend. Examination of theory of signaling is also related to the research result showing the existence or inexistence of the influence of dividend policy to share price. Besides, in this research is also conducted by examination of agency theory. This research of agency theory tests the influence of: (1) Free Cash Flow to share price, (2) Structure of Ownership to share price, and (3) Structure of ownership to dividend policy. This research also tests life cycle theory, seen influence of cycle of company life to dividend policy. Companies which enter in growth phase tend not to pay a lot of dividend, compared to company at matured step.

This research use quantitative approach by using method of path analysis. This research use samples in the form of company allocating dividend for period 1995-2005 which listed on PT Jakarta Stock Exchange. Final samples which are utilized in this research are equal to 1052 year observation. This research also tests sensitivity, widened time of even from 1 day at especial model, becoming 5 and 10 day. Besides test of sensitivity is also conducted changed approach of market model become mean adjusted model in determining expected return.

Research finding indicates that signaling theory still relevant in influencing movement of share price. Besides, research finding also supports agency theory told by Jensen in seeing influence of free cash flow to share price. For the influence of structure of ownership to share price, the result supports entrenchment argument. While influence of structure of ownership to dividend policy found by result which do not support agency theory. Life Cycle theory in this research is obtained by result which is research confirmation before all, where there are influence of cycle step of company life to dividend policy.

Keywords: Signaling theory, agency theory, life cycle theory.

#### 1. Research Background

Dividend announcement by a company is a signal to shareholders. Basically, managers and shareholders have different information, where managers have more complete information than shareholders. The shareholders will interpret the increase in dividend payments by the company, as the signal that management has a high cash flow forecast future (Black, 1976). Conversely, the decline in dividend payments interpreted as anticipation manager of the limited cash flow in the future. Lintner (1956) advocated the view that firms increase dividend payments only if the manager believes that these high dividend payments can be maintained in the future. This

research was continued by Fama and Babiak (1968) showed support for the model developed by Lintner. Bhattacharya (1979) and Miller and Rock (1985) predicts that the dividend payment announcement containing information about the condition of cash flow that is in good company for current and future (Allen and Michaely, 2002).

The study discusses the direct relationship between dividends and stock prices have been a lot done, but the results are still ambiguous (Jensen and Smith, 1984). Miller and Modigliani (1961)-hereinafter referred to as MM-argued that the assumption of perfect markets, rational behavior and perfect certainty, find the relationship that the value of the company and the current dividend policy is irrelevant. MM Research ignore that there is information that is not the same between the parties to a transaction. In fact, there is informational asymmetry, where the parties conducting the sales have more information about the company's condition compared to the potential investors. The presence of different information will encourage the role of dividends as a signal to outsiders (Dong, Robinson and Veld, 2005). Absence of significant influence of the dividend was also raised by Black and Scholes (1974). Meanwhile, Litzenberger and Ramaswamy (1979) in his research to include the finding that dividend taxes have a negative effect on stock price movements. This is because the tax on dividends is higher than the taxes imposed on capital gains, and tax on capital gains realized only when the transaction (Brigham and Daves, 2002). Bajaj and Vijh (1990) states that the impact of dividend changes on stock prices is large and the impact of dividend yield are stronger in small firms. On the other hand, Ammihud and Li (2002) stated that there was a tendency in America where a decline in the share price reaction to announcement of dividend payments since mid-1978. This indicates that the dividend policy of diminishing the information content of so-called Disappearing Dividend. This controversy really comes down to the question whether the actual dividend payout policy contains information on the company's stock price? If the true dividend payout policy has information content, whether investor's only dividend considerations alone or dividend policy is seen as inseparable part of public policy entity? Easterbrook

(1984) states that it is difficult to explain the effect of dividend policy on stock price movements in isolation.

In this research further discussed antecedents of dividend policy and its impact on stock prices. In addition to dividends, to examine other factors that influence stock prices, among others, is the investment opportunity set (Miller and Modigliani, 1961; Myers, 1977; Lang and Litzenberger, 1989; Howe, He and Kao, 1992; and Kaestner and Liu, 1998); free cash flow (Jensen, 1986; Lang, Stultz and Walkling, 1991; Myers and Majluf, 1984; McCabe and Yook, 1997; and Yudianti, 2005); ownership structure (Jensen and Meckling, 1976; Morck, Shleifer and Vishny, 1988); life cycle stage (Anthony and Ramesh, 1992). While the dividend policy antecedents drawn from several previous studies such as the company's life cycle stage (Senchack and Lee, 1980; Fama and French, 2001; and De Angelo, De Angelo and Stulz, 2006); ownership structure (Megginson, 1997; Han, Lee and Suk, 1999; Short, Zhang and Keasey, 2002; Grinstein and Michaely, 2003; serta Thomsen, 2004); investment opportunity set (Megginson, 1997; Smith and Watts, 1992; Gaver and Gaver, 1993; and Ho, Lam and Sami, 2004); level of stringency of regulation in industry based on Smith and Watts (1992); and the availability of free cash flow that is in the company (Kallapur, 1994).

Based on the background of the problem, then it can be summarized ten issues that will be tested empirically in this study, namely: 1) Does dividend affect the company's stock price changes?; 2) Is Investment Opportunity Set affect the company's stock price changes?; 3) What is free cash flow effect on stock price changes?; 4) Does ownership structure influence the stock price change?; 5) Does the company life cycle stages influence the stock price change? and 6) What is the life cycle stages influence the dividend, 7) Does ownership structure affect the dividend, 8) Is the investment opportunity set affect the dividend, 9) Is the regulation within the industry effect in dividend, and 10) What is free cash flow effect on dividend policy?

#### 2. Literature Review

Positive relationship between dividend payout policy and stock price movements have been documented by several researchers. Classical studies by Lintner (1956) obtained results: 1) companies emphasize more stable dividend payments; and 2). Earning a major determining factor in dividend policy. Research followed by Fama and Babiak (1968), who found strong support for the model developed by Lintner. While Pettit (1972) found that the company increased its dividend payment will increase the average return over the two days after such announcement, and vice versa. Aharony and Swary (1980) by using naïve expectations model  $(Exp.D_{i,q} = Act.D_{i,q-1})$  find that the announcement of increased dividend payments in conjunction with quarterly earnings announcements provide useful information so that an increase in stock price. However, these studies did not mention what information is contained in the payment of dividends. Brickley (1983) conducted research on both the regular dividends or special designated dividend (SDD) in conjunction with increased wealth for shareholders, obtained results support the signaling theory where increasing dividend payments to the market contain information about the outlook for dividends and earnings in the future. The study also found that regular dividends have information that more positive than the announcement of SDD. Bajaj and Vijh (1990) by using the sample period 1962-1987 shows that the rate of dividend has a significant influence in the direction of stock price movement. The study also found that the influence of the degree to dividends on stock prices is stronger in companies with small scale. Market did not have complete information about small medium enterprise, so that the announcement of dividend payment is the key information for shareholders.

Meanwhile, Ammihud and Li (2002) conducted research on the content of the information contained in dividend payout policy. This research used samples 16.189 research companies that pay dividends (14.911 increased dividend payment, and 1.278 decreased dividend payment) with the observation period 1962-2000, it is concluded that the disappearing dividend phenomenon occurred which showed a decrease information content contained in dividend payout policy. Decline in information content is predicted an increase in institutional ownership, where institutions have better information than individual shareholders. This has an impact

on dividend announcement, the information contained in dividend payments have been reflected in stock prices in the market. So the dividend payment policies become very expensive and contains less information. The consequence is disappearing dividend is the result of increased institutional ownership, or in other words a high institutional ownership will lead to a low dividend payout policy. DeAngelo, DeAngelo and Skinner (2002) conducted a study to prove whether the dividend is less informative / disappearing dividend. The results showed although the small number of companies that pay dividends, but the dividend itself continues to attract attention with a total real dividends paid increased 16.3% in 2000 compared with 1978. The study also found that based on the signaling theory, then the dividend policy still have information content, especially in small-scale firms that are less well-known and seldom featured in newspaper. Skinner (2004) found results that the current information content in the payment of dividend decreases when compared with the early 20th century. Skinner argued that in the early 20th century managers lacked the means to communicate the information contained in the company other than through the financial statements. In an environment like this, then the dividend policy can be a signal about the state of the company's prospects. But today, where the manager is almost always communicate the information found on the company by using a variety of information technology-based media so that there is information content in dividend payout policy is reduced. On the other hand, Brav.et.al. (2005) conducted a survey on dividend payout policy in the 21st century. The survey was conducted of 384 financial executives and conducted depth interviews by asking the 23 factors that determine the dividend policy. Some of the results showed that: 1) Dividend policy is conservative, which the company refused to make payment of dividend reduction, and 2) executives continue to believe that the dividend payout policy contains useful information for investors.

Dividend payout policy is a policy that cost expensive, because companies have to provide large amounts of funds for dividend payments. Companies generally refuse to reduce dividend payments and adopt a conservative policy with stable

dividend payments. Only companies with a high level of profitability and future prospects are bright, which is able to distribute dividends. Many companies are always communicating the company's future prospects are bright and did not face financial problems. However, the Company is less prospective and facing financial problems certainly will find it hard to pay dividends. This had an impact, the company paid dividends provides a sign on the market that the company has bright future prospects and are able to maintain the level of dividend policy that had been set in the previous period. Companies with bright future prospects will have an increasingly higher share price. Based on these thoughts, and then developed the following alternative hypothesis:

# H<sub>1</sub>: dividend positive effect on stock prices

Companies with large investment opportunities indicate that the company has a bright future prospects, so it will have a positive impact on stock prices. This is as proposed MM (1961) that changes in stock price is more determined by the ability to generate earnings and high investment opportunities. Meanwhile, Myers (1977) described that the company's current market value is a combination of existing assets plus the opportunity to grow in the future. Myers stated that the greater proportion of corporate value as indicated by the large investment opportunities, the greater the equity value of the company (Linn and Park, 2005). Kaestner and Liu (1998) found that the set of investment opportunities that exist for companies is the main factor that determines the movement of stock prices. Another study conducted by Chen et.al. (2000) showed that firms with high investment opportunity set has a significant positive response to share price, While companies with a low investment opportunity set has a negative response to the stock price. The company was founded with the principle of going concern, which the company is expected to live and grow forever. To be able to live and grow then it is not independent of environmental conditions that exist around the company. A conducive environment that provides high investment opportunities, the company can be utilized to develop their business. Growing company will be reflected from the company's stock price increases. So companies with high investment opportunities will have bright prospects ahead and will affect the company's stock price. Based on these thoughts, and then developed the following alternative hypothesis:

H<sub>2</sub>: Investment opportunity set has positive influence on stock prices

Jensen (1986) argues that managers of public companies have an incentive to expand the company beyond the optimal size, although the expansion is done on projects that have a negative net present value. Condition of overinvestment is done by using internal funds generated by the company in the form of free cash flow. Problem of free cash flow refers to the activity that more investment managers (although the negative NPV) rather than dividing it in the form of dividends. Jensen stated that the tendency of managers to use measures of free cash flow in overinvestment activity based on the idea as follows (Kallapur, 1994): 1) cash retention gives managers the authority that managers will lose money if the company often make the issuance of shares to the market in order to finance investment; 2) increasing the size of the company will encourage prestige and salaries for managers; and 3) the tendency of companies to provide rewards to the mid-level managers in the form of promotion than the bonus money, so the bias will occur at the company's growth. Naturally, the more free cash flow which is owned and while it is relatively small growth opportunities, this will encourage greater free cash flow problem (Michaely and Robert, 2006). Meanwhile, Myers and Majluf (1984) developed a frame of mind to know the relationship between financing and investment in the firm have better information than investors. Based on the idea that the issuance of new shares is an option with the highest costs, the company with free cash flow to build financial slack by restricting dividends paid, to take advantage of investment opportunities that exist. Cash can be saved in the form of marketable securities. Financial slack can be used to take the opportunity to invest in projects that provide a positive NPV. This will have an impact also on the increase in stock price.

Research conducted Lang, Stulz and Walkling (1991) conducted a test of free cash flow theory proposed by Jensen. The results showed support for the theory of free cash flow is presented Jensen (1986), where a company with a lot of free cash flow will tend to enlarge the company by taking negative NPV projects, so this will reduce the wealth for shareholders. Meanwhile, McCabe and Yook (1997, p. 697) conducted a study to test the relevance of free cash flow theory proposed by Jensen with the theory of Myers and Majluf. This study supports the theory of Jensen's free cash flow and there is no evidence supporting the theory of Myers and Majluf.

Free cash flow research in Indonesia is carried out by Yudianti (2005) by using agency theory to develop the main hypothesis that there is positive free cash flow to shareholder value. Results showed the group a positive free cash flow have significant positive impact on shareholder value, while in negative free cash flow result is not significant. This indicates the group have positive free cash flow information content which responded positively by the market, whereas in the group of negative free cash flow indicates that the company had negative free cash flow does not necessarily mean that shareholder value is always low.

Free cash flow is the output of the policy pursued by the company either through an investment policy, financing and operational. Free cash flow obtained by these companies can be used to mark the investment in the future. High free cash flow that can be used to increase shareholder welfare, by taking a chance on a positive NPV projects. Improved free cash flow used for investment in positive NPV projects will enhance the company's stock price. But on the other hand free cash flow can also be used by management to increase the size of the company that may conflict with the interests of shareholders. This is done the management by taking a chance on projects despite giving a negative NPV. The management could do this purely motivated by personal interests. From here we can say that high free cash flow can have positive or negative effect on stock prices. Based on these thoughts, then developed the following no directional alternative hypothesis:

H<sub>3</sub>: Free cash flow effect on stock prices

Theoretically, institutional ownership will reduce the type I agency problem between management and shareholders (Jensen and Meckling, 1976, called it a convergence argument), but recent research shows that high institutional ownership will lead to the emergence of type II agency problem between majority and minority shareholders (Morck, Shleifer and Vishny, 1988, called it the entrenchment argument). Type I agency problem is the problem of conflict arising between the parties as agents of management with shareholders as principals, while type II agency problem is a conflict arising between the majority shareholders with minority shareholders. The study discusses the relationship of ownership structure and stock price have been carried out. However, these findings are still conflicting. Clay (2002) conducted research on the relationship of ownership structure and firm value, the results show that an average increase of 1% in institutional ownership will have an impact on increasing 0.6% in the market to book ratio, or an increase of USD 125 million from the average value of the company. The results support the view that with high institutional ownership will improve oversight of managers and impact on increasing corporate value. Other studies with different results carried out by Jennings (2002) shows a weak empirical relationship to the hypothesis that high institutional ownership will encourage the supervision thereby increasing company value. Ovtcharova (2003) showed support for the presence of correlation between long-term results with the percentage of stock ownership by institutions. By doing the analysis on companies that have a book to market ratio and size the same, then the firm with high institutional ownership will have an impact on higher-level results. Meanwhile, research in Indonesia to examine the relationship with the company's institutional ownership by Sudarma (2004), results show that ownership structure has a significant negative effect on firm value. These results indicate that the reduction in the composition of institutional ownership will affect the rising value of the firm. Sudarma recommends that companies in the Indonesia Stock Exchange needs to enlarge the public shareholding is held by the public so that more diffuse ownership.

A partial result of the test also indicates that institutional ownership variable has no effect on corporate value.

Policy is made by the management company which is a representative of shareholders in carrying out operational activities of the company. Ownership of the company by the institutions will encourage more effective oversight, because the institution is a professional who has the ability in evaluating the company's performance. Some research supports the view that high institutional ownership will improve oversight of manager. Increased surveillance will reduce conflicts of interest between shareholders and managers, so the impact on increasing corporate value. On the other hand, high institutional ownership may encourage managers to take action that can be detrimental to minority shareholders. Based on these thoughts, then developed a no directional alternative hypothesis as follows:

H<sub>4</sub>: Ownership structure affects stock prices

The main idea in business strategy according to Boston Consulting Group is to create a cost advantage or the advantage of demand in excess of competitors (Anthony and Ramesh, 1992). Cost advantages include activities to build capacity to achieve economies of scale, while the demand advantage emphasis on building a large market share, which is both, expected to create a barrier to entry for newcomers. Life cycle theory states that the most appropriate development strategy is to look at corporate life cycle stages. Anthony and Ramesh (1992) states that the company is in growth phase tend to have low levels of dividend payments, strong sales growth, high capital expenditure, and the relatively young age. While firms in mature stage characterized higher dividend payments, low sales growth, lower capital expenditure, and the relatively older age. Meanwhile, Aharony, Falk and Judah (2003) describe the characteristics of companies in every stage of life cycle as follows: Stages of start-ups marked with limited assets, the opportunity for growth, earnings and cash flow from operating activities of low and relatively young age. At growth stage is marked with more assets owned, rapid growth, earnings and cash

flow from operating activities which begin to grow, and age that entered the stage of medium. In the mature stage characterized by low growth and the company becomes cash cow. At the stage of decline marked by decreased growth, high financing costs and intense competition. Studies showing the relationship between company characteristics in terms of life cycle stages as the price are still very limited. Anthony and Ramesh (1992) conducted a study the relationship between firm characteristics when viewed from the stage of life cycle with the stock price. This study uses 3686 samples and by dividing the company's life cycle stages were divided into 3 namely: growth, mature and stagnant. The results showed the presence of a significant relationship between life cycle stages as the price except on the stage of stagnation.

In this study, the effect will be tested; with the consideration that the company is in growth stage (growth) will have the prospect of a better future so hopefully will affect the stock price movements. Meanwhile, companies that are in mature stages (mature) tend to have limited growth opportunities so that the movement of its shares to be relatively stable. Based on these thoughts, and then developed an alternative hypothesis as follows:

H<sub>5</sub>: Corporate life cycle stages influence the stock price

The relationship between ownership structure and dividend payout policy can have positive or negative relationship. The relationship of ownership structure and dividend can be explained by the use of agency theory, where the ownership of the institution will be able to help solve the agency problem through oversight of management (Shleifer and Vishny, 1986). Institution is the professional decision maker who knows how to measure the performance of the company and how to supervise the management. Institutional ownership will have an impact on agency costs and consequently have an impact on dividend payout policy. When dividends serve as a way for managers to provide a marker of management commitment on value creation in the future, and then do not pay dividends in large numbers, where commitment to shareholder value would be guaranteed through the existence of

proprietary institutions. Laporta et.al (1999) describes this as an argument substitution. Based on the argument substitution, dividend payments can have an impact on reducing agency costs by forcing companies to act in accordance with the discipline of capital markets. Institutional ownership will effectively oversee the management, so companies with high institutional ownership will reduce the emphasis on the agency conflict, and will reduce the function of the dividend as a marker to pay less dividends (Han, Lee and Suk, 1999Increased institutional ownership, on the other hand enables cooperation between management and block holder, to perform actions that could harm minority shareholders. This is known as type II agency conflict. To eliminate the fear, the minority shareholders will demand high dividend payments as a marker that terror does not need to exist in the companies that have high institutional ownership. Laporta et al (2000) describe this as a model outcome of dividend policy, whereby companies pay dividends because of pressure from shareholders.

Empirical research conducted Han, Lee and Suk (1999) examined the relationship between institutional ownership with a dividend payment policy, using a sample of 303 companies obtained the presence of a positive relationship between institutional ownership with a dividend payment policy. Another study by Short, Zhang and Keasey (2002) showed overall there is a positive relationship between dividend policy and ownership of institutions. Meanwhile, Grinstein and Michaely (2003) found: 1) institutions prefer firms that pay dividends; 2) the institution did not show any preference to companies that pay high dividends or in other words there is no evidence to support that high dividend payments will encourage a high institutional ownership, 3) an institution more like the companies who are buyback their shares; and 4) institutional ownership and ownership concentration does not cause the company increased its dividend payment. Thomsen (2004) by using the generalized method of moments analysis of the results obtained there is a negative relationship between institutional ownership with a dividend payout ratio. These

findings indicate that high-ownership institutions encourage the increase in retained earnings, thus lowering the value for minority shareholders.

Policy is made by the management company which is a representative of shareholders in carrying out operational activities of the company. Ownership of the company by the institutions will encourage more effective oversight, because the institution is a professional who has the ability in evaluating company performance. High institutional ownership will encourage substitution for a dividend payment policy is a signal for investors. With high institutional ownership, then the dividend function as a marker on the condition of the company becomes less relevant, so the company does not require a high dividend payment. On the other hand, high institutional ownership to encourage collaboration between institutions that is the majority shareholder with management in order to take advantage of the company for the group with an impact on loss for minority shareholders. This forced the minority shareholders to demand high dividend payments. Besides that, with the rules of protection of minority shareholder interests, the high institutional ownership will have an impact on a high dividend payout policy as well. Ownership structure can influence positively or negatively to the dividend payout policy. Based on these thoughts, then no directional alternative hypothesis is developed as follows:

## H<sub>6</sub>: Ownership structure affect the dividend policy

Megginson (1997) states that companies that are in mature industries tend to pay more dividends than the young company. Senchak and Lee (1980) developed a hypothetical model that links between life cycle stages of companies with dividend payment policies and financing strategies. Senchak and Lee use the approach of life cycle theory by considering three main stages in the life cycle of the company when the company experienced rapid growth, low growth and eventually negative growth. As a result, when experiencing rapid growth (growth stage), the company will be optimal when it adopted the position with full financing does not pay dividends at all. At low growth stage (mature stage), the company continues to use a zero dividend

policy, but the mix used to finance debt and retained earnings. At the stage of negative growth (decline phase), the company will make liquidating dividend policy and debt payment policy. Meanwhile, empirical research conducted Fama and French (2001) divides into two stages of the life cycle of the strong growth (growth stage) and low growth (mature stage). Using 750 samples from 1963 to 1998 period, found relationship between life cycle stages with dividend payment policy, which the company at this stage tend to maintain its profit growth. This differs from the company at mature stage, marked by the trends in dividend payment. This study also shows that companies that distribute cash dividends fell from 66.5% in 1978 to 20.8% in 1999. Other empirical research conducted by Grullon, Michaely and Swaminathan (2002). Grullon et al states that when the company entered the mature stage of life cycle, then the investment opportunity will be reduced, where it will impact on the profitability in the future. At the time the company reached mature stage, then company will be a decline in systematic risk. This reduction in risk is due to the current assets decreased risk and the company faces the opportunity to grow the increasingly small. Decrease in investment opportunities will be encouraged to increase free cash flow, so that ultimately impact on increasing the dividend payment. De Angelo, De Angelo and Stulz (2006) states that dividends paid by companies that tend to be in mature stage where the opportunity for growth is low and the level of benefits is already high. While companies that are in growth stages with high investment opportunities tend to retain their earnings rather than pay dividends. This research used contributed earned capital mix approach in explaining the life cycle stages, with the measurement variables retained earnings / total equity (RETE) and retained earnings / total assets (RETA). A company with high RETA or RETE tends to pay dividends. Contributed earned capital mix approach is a logical proxy for life cycle stages of the company because the company at the stage of growth has high business opportunities so that tends to maintain its profit (retained earnings). Retained earnings will accumulate. In the mature stage, when the business opportunity is no longer a lot and have high retained earnings, the company will

make dividend payments. Companies with low RETA or RETE tend to be on the stage of a capital infusion or stage of growth, while in companies with high RETA or RETE tend to mature stage.

The company will face a life cycle, where policies and strategies that the company will be tailored to the life cycle stages in which the company is located. Characteristics of Companies that are experiencing high growth, you will need a great source in order to finance its activities. This has resulted in companies with high growth rates; tend to not hold its earnings to finance the development of corporate activity. While the characteristics of companies that have reached the mature stage, with low growth opportunities, tend to distribute profits in the form of dividends. Based on these thoughts, then no directional hypothesis was developed as follows

# H<sub>7</sub>: Corporate life cycle stages influence the dividend policy

Megginson (1997) states that in America the average dividend payout ratio of an industry is positively related to the availability of the investment opportunity set. Meanwhile, Allen and Michaely (2002) states that the decline in investment opportunities will result in an increase in free cash flow, where it will lead to increased dividend payments. This reflects that the investment opportunity set has a negative relationship with dividend payout policy. Meanwhile, empirical studies about the effect of the investment opportunity set against company policy conducted by Smith and Watts (1992). The investment opportunity set measured by the ratio of book value of assets to company value. The book value of assets is a proxy of the existing asset. Smith and Watts stated that the higher the ratio of book values of assets to the value of the firm, the lower the ratio of investment opportunities on company value. In particular, the findings of Smith and Watts noted that firms with greater growth opportunities have a low rate of dividends, low leverage, and executive compensation at high. Another study conducted by Gaver and Gaver (1993) who conducted the study continued to Smith and Watts findings on the

relationship of the investment opportunity set and the policy made by the company. The results showed that there was a negative relationship between investment opportunities with the level of the dividend. Gul (1999a) conducted a study to see the impact of ownership by the government and the investment opportunity set of decision-making in enterprises in China. The results show that the investment opportunity set has a negative relationship with dividend payout policy determination. Gul (1999b) conducted a study to investigate the relationship between the investment opportunity set, capital structure, and dividend payout policy in Japan. The results showed that companies that have greater investment opportunities are likely to have debt to equity ratio is low and the low rate of dividends as well. This study supports the findings of Smith and Watts as well as Gaver and Gaver. Research Gugler (2003) show that companies with low investment opportunities will be few invest in R & D investment, and tend to pay dividends in large numbers. Where this indicates the presence of a negative relationship between the investment opportunity set with the dividend payout policy.

Companies that have a high investment opportunity will use it to develop the company to increase prosperity for our shareholders. Investment opportunity requires that one source of funds derived from retained earnings. This has resulted in high investment opportunities, encouraging companies to increase retained earnings. The increase in retained earnings is inversely related to the payment of dividends. Based on these thoughts, and then developed the following hypothesis:

H<sub>8</sub>: Investment opportunity set negative effect on dividend payout policy

Megginson (1997) states that in addition to the investment opportunity set in America, the average dividend payout ratio of an industry is positively related to the existing regulations in the industry. Smith and Watts (1992) conduct empirical research on the effect of the investment opportunity set against company policy. This study uses dummy variables to represent the regulatory. The results showed that the presence or absence of regulation in industry also have an impact on policy made by

the company especially in regard to dividend payout policy. The results showed that firms in an increasingly regulated industry will have a dividend rate of return is higher, leverage is higher and on executive compensation is lower. Meanwhile, Baker and Wurgler (2002) stated that the government's call also provides an important influence in determining the dividend payout policy. This is exemplified by an appeal by President Nixon who opposed the increase in dividend payments have influence in the period 1971-1974 a decline in dividend payments.

Company in connection with the external environment will face the rules or regulations set by government. There are many regulations on industry, but there is also a less regulated industry. Companies that are in regulated industries tend to have management and oversight that is more stringent. Companies in strict industry regulations will face limitations in doing business development. The existence of these restrictions tends to make the management to distribute profits in the form of dividends. Based on these thoughts, and then developed the following hypothesis:

H<sub>9</sub>: Companies in the industry that strict regulation will have positive influence on dividend payout policy

Megginson (1997) states that companies have free cash flow will have an impact on increasing the dividend payment. Company that has a lot of free cash flow would have the potential to increase dividend payments. This statement is also supported by Allen and Michaely (2002) states that the decline in investment opportunities will result in an increase in free cash flow, where an increase in free cash flow will be encouraged to increase dividend payments. On the other hand, management will conduct decrease dividend payments if the free cash flow a company has fallen. This means there is a positive relationship between free cash flows with dividend payout policy.

Kallapur (1994) has conducted testing the relationship free cash flow and dividend payout ratio. This study shows that free cash flow is positively associated with dividend payment ratio. Meanwhile, Adaoglu (2000) conducts research on dividend policy in developing countries by taking the object of research in Turkey.

The results showed fluctuations in the availability of cash are positively related with dividend payout policy.

Free cash flow is the output of investment policy, financing, and operational activities conducted by the company. Companies can use free cash flow for business development purposes or distributed in the form of dividends. Companies with high free cash flow and limited growth opportunities, expected to pay a high dividend. This is intended to reduce conflicts of interest between shareholders and management. Based on these thoughts, then developed the following hypothesis:

H<sub>10</sub>: Free cash flow has a positive influence on dividend policy

#### 3. Research Methodology

The populations in this study are all companies listed on the Jakarta Stock Exchange with the observation period 1995-2005. Sampling was done by using purposive sampling with sample criteria used are as follows: 1) All private companies that distribute cash dividends during the period 1995-2005 and the data contained in ISMD (*Indonesian Securities Market Database*), 2Companies that have a complete financial statement data over the period 1995-2005, 3) Companies that have complete data about the movement of stock during the estimation window and event window in the period 1996-2006 ISMD, and 4) Companies that do not have a total value of negative equity or retained earnings. Companies that have retained earnings or total negative equity would become meaningless in the ratio analysis

Endogenous variables in this research are the stock price and dividend. While the exogenous variables consist of the investment opportunity set, free cash flow, life cycle stage, institutional ownership, and regulation. Control variables used in this research is to control the size of the company's dividend policy, and debt to control the stock price.

The analysis technique used is to use equation estimation techniques simultaneous with path analysis (Hair et al, 2006). Based on the techniques that have been selected then the empirical model was developed following research:

 $CAR = a\tilde{\varphi} + \beta\tilde{\varphi}_{1}.DY + \beta\tilde{\varphi}_{2}.MKTBKASS + \beta\tilde{\varphi}_{3}.AKB + \beta\tilde{\varphi}_{4}.IO + ?\tilde{\varphi}_{5}.RETE + \beta\tilde{\varphi}_{6}.DR + e\tilde{\varphi}_{..}(1)$ 

 $DY = a_1 + \beta_{11}$ .  $IO + \beta_{12}$ .  $RETE + \beta_{13}$ .  $MKTBKASS + \beta_{14}$ .  $Reg + \beta_{15}$ .  $AKB + \beta_{16}$ .  $LS + e_1$ ...(2)

where:

a, β = coefficient parameter

eá = residual

CAR = cumulative abnormal return as a proxy of the stock price.

DY = dividend yield as a proxy for dividend policy

MKTBKASS = ratio of market value equity to book value of assets as a proxy for investment opportunity set

AKB = The normalized free cash flow

RETE = ratio of retained earnings to total equity as a proxy for firm life cycle stage

IO = institutional ownership

Reg = regulation dummy (1 = relatively more stringent; 2 = relatively less stringent)

DR = ratio of debt to total assets as a proxy of debt

LS = Logarithm base ten of the level of sales as a proxy for company size

## 4. Result and Discussion

Descriptive statistics of each variable shown in table 1.

Table 1. Statistics Descriptive

Variables	N	Minimum	Maximum	Average	Standard
					Deviation
DY	1052	0,01	86,21	5,0758	5,8917
MKTBKASS	1052	0,00	10,84	0,7175	0,8930
AKB	1052	-459,90	127,87	-1,2078	24,7997
Ю	1052	13,07	98,59	69,9033	14,3665
RETE	1052	0,01	4,31	0,4106	0,2573
Reg	1052	0	1	0,1500	0,3580
LS	1052	12,74	31,74	26,4019	1,7577
DR	1052	0,03	14,03	0,5019	0,4735
CAR	1052	-3,8	4,56	0,0092	0,9530

Table 1. Variable rate of dividends (DY) period 1995-2005 had an average of 5% which means that the average level of the dividend is relatively small compared to the stock price. On the investment opportunity set variables can be seen that the average is 0.7175 MKTBKASS. This trend shows that on average the company's

investment opportunities in the period 1995-2005 is not good that is below 1. On the free cash flow variable (AKB), the average free cash flow firm's is -1.2078. This shows that the results of cash flow from operating activities less than the added investment. In the ownership structure variables, the average institutional ownership (IO) is about 70%. This shows the dominance of institutional ownership in the Indonesian capital market. At the company's life cycle stage variables (rete) shows the average 0.4106, this indicates that the companies listed on the JSE tendency at the stage of growth (below 0.5).

When viewed descriptive relationship between the distribution of dividends, free cash flow, ownership structure, the tight regulation and corporate life cycle stages can be drawn a red line that the majority of companies listed on the JSE is located on the growth stages of the life cycle, with negative free cash flow trends and owned by institutions. This has resulted in a tendency to decrease the percentage of firms that pay dividends. Companies that are developing require funding support large investments in order to develop his company so that its free cash flow tends to decrease. Free cash flow is reduced to impact the shrinking of funds for dividend payments. Meanwhile, ownership of institutions that tend to be high will have an impact on increasing surveillance capabilities, thereby reducing the function of the dividend as a signal about the financial condition. From table 1 also can be seen that the tendency of regulation (Reg) is less stringent regulations, where the average value close to zero. Companies can develop a business with more flexibility in the industry that are less stringent regulations. Companies that can develop freely will encourage the company to reduce its dividend payments. For the price of shares (CAR) in table 1 can be seen that the average CAR is relatively small ie 0.0092. The tendency of a relatively small dividend payment also affects the relatively low CAR.

Table 2. Statistical Test Result

Exogenous Variables	Coefficients	t-statistics		
Endogenous Variables: Stock price (CAR)				
aá	0,417	2,693*		
Dividend (DY)	0,015	3,077*		

0,046	1,356				
-0,002	-1,722**				
-0,005	-2,291*				
-0,489	-4,235*				
0,016	0,257				
0,036					
6,526*					
1052					
Endogenous Variables: Dividend (DY)					
16,818	5,858*				
0,01	0,839				
3,316	4,549*				
-1,095	-5,489*				
2,127	4,315*				
0,002	0,220				
-0,506	-4,803*				
0,086					
16,349*					
1052					
	-0,002 -0,005 -0,489 0,016 0,0 6,52 10: 16,818 0,01 3,316 -1,095 2,127 0,002 -0,506 0,0 16,3				

#### where:

Results of hypothesis testing in this study can be seen in table 2 which shows that factors that influence in determining the dividend policy (DY) is the company's life cycle stages (rete), investment opportunity set (MKTBKASS), regulation (DR) and control variables of firm size (LS). While the factors that influence the stock price (CAR) is the free cash flow (IMR), dividend (DY), the structure of ownership (IO) and firm life cycle stages (RETE). Effect of direct, indirect and total impact on stock prices is presented in table 3.

Table 3.
Coefficient of Direct Effect, Indirect and Total of exogenous variables on Stock Price

Exogenous Variables	Direct	Indirect	Total Effect
	Influence	Influence	Coefficients
	Coefficients*	Coefficients **	
Investment Opportunity set (MKTBKASS)	-	-0,016	-0,016
Free cash flow (AKB)	-0,002	-	-0,002
Regulation (Reg)	-	0,032	0,032
Ownership structure (IO)	-0,005	_	-0,005

<sup>\*</sup> Significant at a 
\$\delta\$ 5%

<sup>\*\*</sup> Significant at a1 10%

Where:

The direct effect of the investment opportunity set to the stock price (CAR) was not significant. This means the presence or absence of investment opportunities that are owned by the company had no direct effect on stock price changes. This result is contrary to research findings from Kaestner and Liu (1998) and Chen et al. (2000). This can be explained that detailed information about the investment opportunity set is usually owned by management. If investors have the information, it is not easy for investors to interpret where the investment opportunity set that can increase the wealth of the company or the investment opportunity set only enlarge the scale of any company. This finding is consistent with the results of research from Yudianti (2005) in which one of the results shows that the investment opportunity set variables influence on shareholder value is not significant. But in this study showed that the investment opportunity set has indirect influence on share prices through dividend, where its influence is at  $= -1.095 \times 0.015 = -0.016$ . The coefficient of the total effect of the investment opportunity set to the stock price is -0.016. This can be explained that a large investment opportunity set will affect the reduction in dividends that were distributed so the impact on share price decline. Companies that have high investment opportunities will limit its dividend payment. Restrictions on dividend payments are likely to impact on share price decline. These findings support the signaling theory, in which the decrease in dividend payments will be influential in the decline in stock prices. The findings of this study also indicate the condition of capital markets in Indonesia are public investors (which is a minority shareholder) is more like dividends, so the increase (decrease) in dividends will respond to the public in the form of increase (decrease) in the company's stock price.

The direct effect of free cash flow to share price is -0.002. This means that an increase in free cash flow in the company would have an impact on share price decline. The findings of this study reject the theory of Myers and Majluf (1984) and

<sup>\*</sup> Direct impact on the endogenous variable stock price

<sup>\*\*</sup> Indirect effect through the variable dividend

support the theory of Jensen (1986) which states that firms with large free cash flow will tend to enlarge the company by taking a variety of projects, although giving a negative NPV, so this might impact the decline in shareholder wealth or stock price declines. This finding also supports the findings of research conducted Lang et al. (1991) and McCabe and Yook (1997). Indirect effect of free cash flow to share price through the dividend is not significant. So the total effect coefficient of free cash flow to share price is -0.002.

Regulations have no direct influence on stock prices, through the influence of dividends by the coefficient of =  $2.127 \times 0.015 = 0.032$ . This means that firms in industries that tend to be stricter regulation will face many constraints in developing a business. This will affect the trend of companies paid dividends in greater numbers and will affect the share price increase.

Ownership structure directly influence the share price of -0.005. This means that high institutional ownership will have an impact on share price decline. These findings do not support the convergence argument of Jensen and Meckling (1976) which states that high institutional ownership will have an impact on improving the surveillance capabilities that will reduce the agency problem between managers and shareholders. Instead, these findings support the entrenchment argument put forward by Morck et al. (1988) which states that high institutional ownership will affect the voting power that can be detrimental to the interests of minority shareholders so the impact on share price decline. In the Indonesian capital market conditions, the majority shareholder is an institution, while minority shareholders are public. The majority shareholder will be the controlling company at the same time to make decisions contrary to the interests of minority shareholders, so this response by the public in the form of stock price declines. The findings of this study are consistent with research findings from Sudarma (2004). While the indirect effect of ownership structure on share prices through dividend coefficient is not significant so the total effect of ownership structure on stock prices -0.005.

Stages of life cycle the company has a direct impact on stock prices at -0.489, and have an indirect influence on share prices through dividend amounting to = 3.316 x 0.015 = 0.05. Total effect of firm life cycle stage to the stock price is = -0.489 + 0.05 = -0.439. Direct effect or the total of the companies represented there rete stock price represented the CAR, in this study obtained significant results are negative. This means that the higher the rete (the company is in the mature life cycle stage) it will have an impact on share price decline. While on stage growth companies actually showed an increase in stock prices. This can be explained that companies that are in mature stages of the life cycle tend to no longer develop. In theory, companies that are at the mature stage if not done rejuvenation or renovation will go on the stage of decline. This will impact on investor expectations in the future. At companies that are in high growth stages, will be faced with high market potential with a starting tight competition. If the company is able to exist then the next company will enter the mature stage, so this will affect investors' expectations about the future of the company.

In general it can be concluded that a significant factor in determining the dividend policy is the company's life cycle stages, the investment opportunity set, regulation and control variables of firm size. While the factors that have direct and significant impact on stock prices as represented by the CAR is free cash flow, dividends and corporate ownership structure. While indirect are a set of investment opportunities, regulations and company.

The study also found that the control variables of firm size does not directly affect the stock price through a dividend, where the coefficient of influence of the size of dividends is -0.506, and the indirect influence of the size of the stock price is  $= -0.506 \times 0.015 = -0.0076$ , where the coefficient is also the total effect of the size of the stock price. Meanwhile, debt control variables to the stock price did not have a significant effect. Absence of influence of the debt is consistent with research Naccur and Goaied (1999). In general it can be deduced that the most dominant influence on stock prices in sequence when viewed from the total effect is the company's life cycle

stages, regulation, investment opportunity set, size, ownership structure and free cash flow.

#### 5. Conclusion

Overall conclusions of this study were (1) The findings showed support for signaling theory, in which dividend policy has positive influence on stock prices, (2) Investment opportunity set in this study had no direct influence on stock prices, (3) free cash flow has a negative effect on stock prices, because of the availability of high free cash flow allows the occurrence of moral hazard on the part of management, (4) Ownership structure, represented by institutional ownership has a negative effect, whereby a high institutional ownership would allow the exploitation by the majority shareholders to minority shareholders, (5) Corporate life cycle stages influence the stock price, which the company in the mature stage (Rete high) will have a low stock price movements, (6) The ownership structure does not affect the determination of dividend policy, (7) Corporate life cycle stages influence the dividend, which the company in a growth phase tend not to distribute dividends, (8) The investment opportunities set have a negative impact on dividend policy, whereby the higher the investment opportunities of the company, the lower dividend paid, (9) Regulation positive effect on stock prices, which more stringent regulation in the industry, the companies have restrictions for business development that tend to share relatively large dividends than firms in industries that are less stringent regulations, and (10) free cash flow does not affect the determination dividend policy.

This study has several limitations. Limitations of this study may open opportunities for advanced research in the future. The limitations and suggestions are as follows: 1) In this study the characteristics of companies with the approach of life cycle stages using Earned approach Contributed capital mix, where this approach only describe the condition of any company's life cycle stage. Industry life cycle stages in this study do not control, so if there are companies that are in mature stages, but the industry is experiencing growth so it cannot be analyzed with this research

model. Proxy for the industry life cycle stages in this research has not been included as control variables because of the unavailability of sufficient data. For further research is expected to develop proxies that can reflect the stage of industry life cycle. 2). this research is an event study with event used is the date of publication or date of submission of annual financial statements of the period 1995-2005. This study did not use the dividend announcement date as an event, because other variables can only be obtained in the financial statements. It's good to show the effect of dividends on stock prices, then in the event that further research can use the dividend announcement date, while other variables can be used for quarterly reports closest to the dividend announcement date. While this can lead to periods of study shorter time, given the quarterly financial report on Indonesia is available only in the last few years alone. 3). Proxy variable used for the ownership structure is only based on the above five percent institutional ownership. In this study, no measurement of internal institutional ownership, because the magnitude of internal institutional ownership is certainly not reported in financial statements. Ttheoretically more possible to make exploitation of the company and minority shareholders are internal institutional ownership. 4) This research used purposive sampling technique sampling included in the category no probability sampling, where this technique is intended to obtain samples that can provide information that is privileged, but this technique has limitations in the research findings generalize (Neuman, 2003). For that in reading the results of these findings, should look at the context in this study. And 5) coefficient of determination of the total in this study, both for the main model and sensitivity test is relatively low The low determination showed that there are other factors (firm specific factor) that may not have been included in this study. For that further research is recommended to seek and incorporate other factors specific firm.

# References

Adaoglu, C., 2000, Instability in Dividend Policy of the Istanbul Stock Exchange Corporation: Evidence from Emerging Market, *Emerging Market Review*, Vol. 1: 252-270.

- Aharony, J., H. Falk, and N. Yehuda, 2003, Corporate Life Cycle and the Value Relevance of Cash Flow versus Accrual Financial Information, *Working Paper*, Tel Aviv University.
- Aharony, J., and I. Swary, 1980, Quarterly Dividend and Earning Announcements and Stockholders Returns: An Empirical Analysis, *Journal of Finance*, Vol. 35, [1]: 1-12.
- Allen, F., and R. Michaely, 2002, Payout Policy, *Working Paper*, Code: 01-21 B, The Wharton Financial Institution Center.
- Amihud, Y., and K. Li, 2002, The Declining Information Content of Dividend Announcement and the Effect of Institutional Holding, *Working Paper*, Stern School of Business, New York University.
- Anthony, J. H., and K. Ramesh, 1992, Association between Accounting Performance Measure and Stock Prices: a Test of the Life Cycle Hypothesis, *Journal of Accounting and Economics*, Vol. 15: 203-227.
- Asiedu, S., 2005, Essay in Dividends Canadian Experience, *Working Paper*, Eric Sprott School of Business, Carleton University.
- Bajaj, M., and A.M. Vijh, 1990, Dividend Clienteles and the Information Content of Dividend Change, *Journal of Financial Economics*, Vol. 26:193-219.
- Baker, M.P., and J. Wurgler, 2002, Why are Dividend Disappearing? An Empirical Analysis, *Working Paper*, Code Harvard NOM research paper no. 03-12, Harvard Business School.
- Black, F., 1976, The Dividend Puzzle, Journal of Portfolio Management, Winter, Vol. 2: 72-77.
- 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: 483-527.
- Brickley, James A., 1983, Shareholder Wealth, Information Signaling and The Specially Designated Dividend, *Journal of Financial Economics*, Vol. 12: 187-209.
- Chen, S.S., K.W. Ho, C.F. Lee and G.H.H. Yeo, 2000, Investment Opportunity, Free Cash Flow and Market Reaction to International Joint Venture, *Journal of Banking and Finance*, Vol. 24: 1747-1765.
- Clay, D.G., 2002, Institutional Ownership and Firm Value, *Working Paper*, Marshall School of Business, University of Southern California.
- DeAngelo, H., L. DeAngelo and D.J. Skinner, 2002, Are Dividend Disappearing? Dividend Concentration and the Consolidation of Earning, *Working Paper*, Code No. 02-9, USC Finance and Business Economics, USC Marshall School of Business.
- DeAngelo, H., L. DeAngelo 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: 227-254.
- Easterbrook, F.H., 1984, Two Agency Cost Explanation of Dividends, *American Economic Review*, Vol.74, [4]: 650-659.
- Fama, E.F., and H. Babiak, 1968, Dividend Policy: An Empirical Analysis, *Journal of The American Statistical Association*, Vol. 63, [324]: 1132-1161.
- Fama, E.F., and K.R. French, 2001, Disappearing Dividend: Changing Firm Characteristics or Lower Propensity to Pay?, *Journal of Financial Economics*, Vol.60: 3-43.
- Gaver, J.J., and K.M. Gaver, 1993, Additional Evidence on the Association between the Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policies, *Journal of Accounting and Economics*, Vol.16: 125-160.
- Grinstein, Y., and R. Michaely, 2003, Institutional Holding and Payout Policy, *Working Paper*, Cornell University.
- Grullon, G., R. Michaely, and B. Swaminathan, 2002, Are Dividend Changes a sign of firm maturity?, *Journal of Business*, Vol. 75: 387-424.

- Gugler, K., 2003, Corporate Governance, Dividend Payout Policy, and the Interrelation between Dividend, R&D, and Capital Investment, *Journal of Banking and Finance*, Vol. 27: 1297-1321.
- Gul, F.A., 1999a, Government Share Ownership, Investment Opportunity Set and Corporate Policy Choices in China, *Pacific Basin Finance Journal*, Vol. 7: 157-172.
- Gul, F.A., 1999b, Growth Opportunities, Capital Structure and Dividend Policies in Japan, *Journal of Corporate Finance*, Vol. 5: 141-168.
- Hair, et. al., 2006, Multivariate Data Analysis, Sixth Edition, Pearson Prentice Hall.
- Han, K.C., S.H. Lee, and D.Y. Suk, 1999, Institutional Shareholders and Dividends, *Journal of Financial and Strategic Decision*, Spring, Vol. 12: 53-62.
- Ho, S.S.M., K.C.K. Lam, and H. Sami, 2004, The Investment Opportunity Set, Director Ownership, and Corporate Policy: Evidence from Emerging Market, *Journal of Corporate Finance*, Vol. 10: 383-408.
- Howe, K. M., J. He and G.W. Kao, 1992, One Time Cash Flow Announcement and Free Cash Flow Theory: Share Repurchase and Special Dividends, *Journal of Finance*, Vol. 47: 1963-1975.
- Jennings, W.W., 2002, Further Evidence on Institutional Ownership and Corporate Value, *Working Paper*, JEL Classification G32 G34 G2, US Air Force Academy.
- Jensen, M.C., 1986, Agency cost of free cash flow, corporate finance and takeover, *American Economic Review*, Vol. 76: 323-329.
- Jensen, M.C., and C. W. Smith, 1984, The Modern Theory of Corporate Finance, McGraw Hill.
- Jensen, M.C., and W. H. Meckling, 1976, Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure, *Journal of Financial Economics*, Vol. 3: 305-360.
- Kaestner, R., and F. Y. Liu, 1998, New Evidence on The Information Content of Dividend Announcement, *The Quarterly Review of Economics and Finance*, Vol. 38, [2]: 251-274.
- Kallapur, S., 1993, Dividend Payout Ratios as Determinants of Earning Response Coefficient, *Journal of Accounting and Economics*, Vol. 17: 359-375.
- Lang, L. H. P., and R. H. Litzenberger, 1989, Dividend Announcement: Cash Flow Signalling VS Free Cash Flow Hypothesis, *Journal of Financial Economics*, Vol. 24: 181-191.
- Lang, L. H. P., and R.M. Stulz, and R.A. Walkling, 1991, A Test of Free Cash Flow Hypothesis: The Case of Bidder Return, *Journal of Financial Economics*, Vol. 29: 315-335.
- Laporta, R., F. Lopez de Silanes, A. Shleifer and R.W. Vishny, 1999, Agency Problemsand Dividends Policies around the World, *Working Paper*, Harvard University.
- Linn, S.C., and D. Park, 2005, Outside Director Compensation Policy and the Investment Opportunity Set, *Journal of Corporate Finance*, Vol. 11: 680-715.
- Lintner, J., 1956, Distribution of Incomes of Corporation among Dividends, Retained Earnings, and Taxes, *The American Economic Review*, Vol. 46, [2]: 97-113.
- McCabe, G.M., and K.C.Yook, 1997, Jensen, Myers-Majluf, Free Cash Flow and The Return to Bidder, *The Quarterly Review of Economics and Finance*, Vol. 37, [3,fall]: 697-707.
- Megginson, W.L., 1997, Corporate Finance Theory, Addison Wesley.
- Michaely, R., and M.R. Roberts, 2006, Free Cash Flow, Signaling, and Smoothing: Lesson from Dividend Policy of Public and Private Firms, *Working Paper*, Cornell University.
- Miller, M.H., and F. Modigliani, 1961, Dividend Policy, Growth and the Valuation of Share, *Journal of Business*, Vol.34: 411-433.
- Morck, R., A. Shleifer and R.W. Vishny, 1988, Management Ownership and Market Valuation: an Empirical Analysis, *Journal of Financial Economics*, Vol. 20: 293-315.

- Myers, S.C., and N.S. Majluf, 1984, Corporate Financing and Investment Decision when Firms have Information that Investor Do Not Have, *Journal of Financial Economics*, Vol. 13: 187-221.
- Myers, S.C, 1977, Determinant of Corporate Borrowing, *Journal of Financial economicsi*, Vol. 5: 147-175.
- Naccur, Sammy Ben, and Mohamed Goaied, 1999, The Value Creation Process in the Tunisian Stock Exchange, *Proceeding API/WPS 9903*, Universite de Tunis IH, Faculte des Sciences Economiques et de Gestion, Tunisia
- Neuman, W.L., 2003, Social Research Methods: Qualitative and Quantitative Approaches, Fifth Edition, Allyn and Bacon.
- Ovtcharova, G., 2003, Institutional Ownership and Long Term Stock Returns, *Working Paper*, JEL Classification Code: G120 G140, The University of Chicago.
- Pettit, R. Richardson, 1972, Dividend Announcement, Security Performance and Capital Market Efficiency, *Journal of Finance*, 27 (5): 993-1007.
- Senchack, A.J., and W.Y. Lee, 1980, Comparative Dynamics in a Life Cycle Theory of the Firm, *Journal of Business Research*, Vol.\_: 159-185.
- Shleifer, A., and R.W. Vishny, 1986, Large Shareholder and Corporate Control, *Journal of Financial Research*, Vol.5, [fall]: 249-259.
- Short, H., H. Zhang and K. Keasey, 2002, The Link between Dividend Policy and Institutional Ownership, *Journal of Corporate Finance*, Vol. 8: 105-122.
- Skinner, D.J., 2004, What do Dividends Tell Us About Earning Quality?, *Working Paper*, University of Chicago Graduate School of Business.
- Smith, C.W., and R.L. Watts, 1992, The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies, *Journal of Financial Economics*, Vol. 32: 263-292.
- Sudarma, M., 2004, Pengaruh Struktur Kepemilikan Saham, Faktor Intern and Faktor Esktern terhadap Struktur Modal and Nilai Perusahaan [Studi pada Industri yang Go-Public di Bursa Efek Jakarta], *Disertasi*, Universitas Brawijaya.
- Thomsen, S., 2004, Blockholder Ownership, Dividend and Firm Value on Continental Europe, *Working Paper*, Andish Social Science Research Council.
- Yudianti, F.N., 2005, Analisis Pengaruh Set Kesempatan Investasi, Manajemen Laba, Leverage and Dividen terhadap Hubungan antara Aliran Kas Bebas and Nilai Pemegang Saham, *Disertasi*, Universitas Gadjah Mada.