

## **Chapter 2**

### **Theoretical Foundation**

#### **2.1 Theoretical Foundation**

In the second chapter, this paper explores the fundamental theories that serve as a basic for this study. For the first section would cover the definition of dividends from various perspectives. Then, the classification of dividends would be unfolded within the next subsequent subchapter. This paper also would intricate the determinants of dividend payments from the basis of supporting and contrasting up-to-date theories and literatures within each determinants. Furthermore, there will a discussion about several existing dividend policy theories. Various evidences from developed capital markets can be found and will be explained below.

##### **2.1.1 Definition of Dividend**

In general, dividend refers to a partial portion of company's profit that is distributed to shareholders. This dividend was given as an incentive to shareholders for investment made by the shareholders.

Stice and Stice (Intermediate Accounting, 2010) stated that dividend is a distribution of profit for shareholders compatible with the total number of shares held.

Stephen A. Ross (Fundamentals of Corporate Finance, 2008) as the one of the author Fundamentals of Corporate Finance stating that “Payments to owners of the company will be taken from company’s profit either in the forms of cash or stock.

### **2.1.2 Dividend Policy and Variables**

Deciding the amount of profit distributed as dividend after considering investing and financing activities refers to dividend policy (Gill et al., 2010). There are two widely quantitative measurements to represent dividend policy; they are Dividend Payout Ratio (DPR) and Dividend Yield. DPR measures the proportion of distributed dividend (cash dividend) from total Net Income. Firms who favor the higher dividend policy will have higher DPR (Berk et al., 2011). The coordination among dividend decision and financing and investment decision has to be made to ensure the maximization value of the firm that could be reflected in the share price (Ross et al., 2010).

## **DIVIDEND PAYOUT RATIO**

Dividend Payout Ratio (DPR) measures the proportion of Net Income that will be distributed by the firm as cash dividend after consider the sufficiency of cash. (Murekefu, et al., N/A). Therefore, DPR is the oppose of retention ratio, and higher DPR would reflect higher dividend policy that followed by the firm. Thus this ratio can be used as one indicator of dividend policy. From previous researchers, Amott and Asness did the recent study in 2003. In their study, dividend payout ratio considered plays an important role in forecasting future earnings growth. Contrary to conventional wisdom, the results shows that the higher the dividend payout ratio, the greatest the growth of real earnings and the slowest of the growth when low distributions are made.

## **DIVIDEND YIELD**

Dividend Yield measures how much cash dividend per share that will be obtained by shareholders, compared with the initial purchasing price of that shares (Black, et al., 2012). By that definition, dividend yield has a role as one component of rate of return on stock investment, beside capital gain. The higher of this yield indicates the higher dividend policy that is followed by the firm, thus this ratio can be used as an indicator of dividend policy measurement.

**BETA**

Since additional return always requires additional risk, it is inarguably to assume that firms cannot entirely eliminate all existing risk, and there is a certain portion of risk that is considered as unavoidable. The unavoidable portion of risk is sometimes called as systematic risk or market risk, and generally this risk affects firms externally and beyond the ability of firms to be controlled, for instance: inflation rate, market interest rate, political conditions, rumours, social riot and foreign exchange rate.

The magnitude of unsystematic risk can be quantified to make the risk assessment process easier by translate the risk level into specific variable called beta. This variable is supposed to inform the unsystematic risk level and correlate the return from specific firm into overall market returns. The higher of this variable represents the higher of individual stock return toward the market. Thus, the greater performance of the market will induce the greater performance of individual firm with higher beta, and vice versa. One firm that has beta 2.0 can perform two times better than the market index if the market showed positive return. However, the same firm will endure higher loss by two times if the market index declined or showed negative signal.

Due to the unavoidable effect of market risk, the author decided to include the systematic risk or beta as another independent variable in this

thesis. The author obtained the beta information through the credible public financial sites, such as bloomberg and reuters. This information will be correlated with the share price and will be included in the equation that relates the share price as dependent variable into DPR, DY and Beta as independent variables. Thus, DPR and DY would take a role as return determinant and Beta would represent the unavoidable risk factor.

### **2.1.3 Dividend Theory and Share Price**

The study that investigated the correlation of Dividend Policy toward Firms Value had been conducted five decades ago. However, up to this moment, the answer regarding the effect of dividend policy on share price is still debatable due to different assumptions, different sample size and different time frame will produce different conclusion. (Hashemijoo et al., 2012). The two major theories that underlying this research will be presented below:

#### **a. Dividend Irrelevance theory (Modigliani & Miller)**

According to Modigliani and Miller's opinion, dividend policy will have no impact on the market price of the common shares of company in a world without tax, no transactions costs and in a perfect market conditions.

Modigliani and Miller were using the following assumptions:

1. Market is perfect where all investors are participated in market transactions.
2. There are no transactions cost occurs and also issuance costs. Consequently, those Marketable Securities can be purchased by investor no matter how many securities are, thus this may affect the share price on that particular securities.
3. No tax so that there is no difference on dividend and tax on capital gains
4. Investors have a degree of certainty over the investment made by the company and profits earned in the future. So, investors can predict share price and cash dividend in the future.
5. Investment policy of a company lead to new withdrawals beyond assumed retained earnings would not change the company's business risk, thus, will not change the company's required rate of return.

Some of the criticism that is premised on the theory of Modigliani and Miller among others:

1. Dividends as information for future prospects.
2. In real world, the dividend declared by the company is a form of important information for the future prospects of the company. Company's management can be determined based on the bright

future from the company; hence, the financial managers can make up decision to distribute higher dividend, while the smaller dividend payout ratio can mean as a sign of uncertainty that has engulfed company.

3. Uncertainty and volatility in share price

In certain market conditions such where the stock price is uncertain and fluctuate will not satisfy investors' needs if the company hold the earned profits and used the profit to invest in the company to increase capital gains or vice versa.

4. The sale of new shares at a price below the market price

The underlying assumptions within Modigliani and Miller (M.M) theory are whether company is able to sell the additional new shares according to the current market price. While, in real world, usually the additional new shares issued by company will lower than the current market price.

5. The imperfect market

Accordance in Modigliani and Miller theory declared the market is perfect, however, in realty, market is imperfect. The factors that caused as follows:

a. Floatation cost

In theory, MM assumes Rp 1 dividend can be replaced with Rp 1 ordinary shares. Although, in practice, there is floatation cost on the expense of common stock or new preferred stock or other costs.

b. Transaction cost

Modigliani and Miller theory figured there are no transaction costs in buying and selling shares on the stock, until Rp 1 dividend equals to Rp 1 capital gains. While in market place, there are transactions cost occurred in buying and selling of shares resulting in the difference between the value of the transaction that will receive or paid.

c. Tax Rate Differential

Theory of Modigliani and Miller supposes no tax or the rate of tax imposed on dividend and capital gains are assumed. In real world, the tax rate on dividends and capital gains is different.

6. Limitations in investing

Modigliani and Miller theory announced that investment policy completely could be separated from corporate spending policies, while in presence, investment policy is strongly influenced by the restrictions come from both within the company as well as those affected by the condition of sales of the company's market.



**b. Bird-in-hand theory (Dividend Relevance Theory)**

Bird-in-hand Theory or known more as Dividend Relevance Theory was first announced by Gordon (1959) and Litner (1962) suggested that investor would favor of current dividends instead of expected capital gains. It because current distributed dividend contains certainty while the expected capital gains contains higher risk and still uncertain.

In Myron Gordon concept, the theory is based on the following assumptions:

1. Rate of return from fixed corporate investment
2. No tax
3. Funding solely from retained earnings
4. The growth rate of company is the result of the multiplication of retention ratio to rate of return from particular company.
5. Company have an infinite lifetime
6. Cost of capital of the company remain the same and assumed greater than the growth rate.

According to Myron Gordon, if  $r = k$ , hence in practice, dividend policy will still influence company's share price. This opinion was based on these two assumptions:

1. Investors are risk averter.
2. Investor will be given a definite premium on results and discount or less value on uncertain outcomes.

With these two assumptions, investors are trying hard to minimize risk and continue contribute positive response in the form of premium towards profit or distributed dividend. Profits are distributed in order to eliminate risks compared to if profits are being held back for company in hoping that able to deliver results that the amount of dividends will be greater in future.

Expected dividend on future is something that is uncertain, hence, according to Myron Gordon, retained earnings is a risky promise to get results and or dividend in the future. Therefore, investors will tend to rate higher on shares that provide dividend income in the current year compared to company's share which postponed dividend payments towards company's investors.

### **c. Signaling Theory**

Signaling theory was developed to account the fact that insider in general has better information and more concerned with the last condition of the company and prospects of company compared to investors from outside (Deshmukh, 2005). The appearance of

asymmetric information will complicate investors in assessing objectively related to the quality of the company.

One of the solutions that can be used by managers who have really good information about the company is to give a signal to investors to come out with a policy that cannot be imitated by other company who do not have good information like the other company. According to the finance literature, signal is an act that would cost the company who gave signal. Deadweight costs will impress the outsiders who are lack of information will be sure of what is conveyed by the company. Signal will be credible if the other company does not have good performance like the signaler to replicate the signal.

This theory is based on the assumption that the increase in dividend payments is often followed by the rise in the share price and the decrease in dividend payments will also followed by the decrease in share price.

#### **d. Agency Cost and Free Cash Flow**

Agency cost occurred between managers and outside investors. This problem arises from managers' incentives to consume private benefits, e.g., building their empires by investing free cash flows in negative net present value projects or spending cash on perquisites.

Thus, dividends alleviate this problem by reducing free cash flows available to managers. (Jensen,1986)

**e. Clientele Effects of Dividends**

This theory claimed that a certain dividend policy attracts a particular “clientele”, a particular type of investors, according to Modigliani and Miller. There are investors that prefer current income under the form of dividends, and there are investors that prefer profits to be reinvested in profitable projects that will be afterwards reflected in increased stock prices (capital gains are future income).

The shareholders who are in shortage of cash will like higher DPR however the other shareholders who are not in cash deficiency will be delighted if the company hold most of the company’s operating profit to be invested again inside the company.

The difference of tax on dividend and capital gains will affect particular shareholders in different way based on their preference. For group of shareholders who are charged with high tax towards dividend will be enchanted if the company distribute as small dividend as possible, likewise vice versa, if the tax rate imposed on the dividend is relatively low, investor prefer higher dividend payments.

#### **f. Stewardship Theory**

In this stewardship theory assumed managers act as responsible steward that have the same objectives with organization and choose to carry out the action that maximize shareholders' wealth first, rather than shareholder's interests. The implications to dividend measurement (dividend payout ratio and dividend yield): if potential shareholders view the managers as responsible steward that would maximize their wealth, dividend decision becomes less relevant since that would be indifference whether the current profit is distributed now as dividend or retained earnings for future investment as shareholders believe that managers would do their best to manage the retained fund in order to produce maximize return in the future at certain risk.

### **2.2 Empirical evidence**

Some researchers had performed empirical evidence in different location for different time period, to measure the impact of dividend policy toward share price. The contemporary research in south east region was conducted in Malaysia by Hashemijoo, Ardekani, and Younesi (2012). They took 84 samples from consumer product companies that listed in Malaysian Stock Market from 2005 to 2010. Based on that samples, the regression analysis was applied to measure the impact of dividend policy to share price. This empirical research showed the negative relationship between share price and two indicators of dividend policy (Dividend Yield and Dividend Payout Ratio). It implied that higher dividend

policy would give less influence toward share price than lower dividend policy. Since high dividend yield indicates near-term cash flow, thus high yield would be less responsive to fluctuation in discount rate, and cause the stability of share price. This study also found that dividend yield is one factor that has most impact on share price, compared with another independent variables.

Another contemporary theory that encompasses sampling from larger area was performed by Hussain, Anwar (2011). The researcher investigate the effect of dividend policy on share return in South East Asia Countries, including India, Pakistan and Sri-lanka. The sample of forty companies with highest market capitalization had been chosen during the period of 2006 to 2010. This empirical study supports the Gordon Model and stated that corporate dividend policy is a key driver of market return changes in South Asia Countries. Thus, he concluded that dividend policy is helpful to increase the market return and sustaining share price for a sample of firms listed in South Asia Countries.

The research above gave parallel conclusion with the previous research conducted by Adesola and Okwong (2009). They took the longer range of time period from 1996 to 2006 with 27 Nigeria quoted companies as a sample. The result confirms that dividend is still an important determinant of share market prices means that higher share return would be achieved by increase the rate of dividend policy. There is sufficient empirical evidence to believe that a liberal

dividend policy will lead to a higher average market value of common stocks than will penurious dividend policies.

### 2.3 Theoretical Framework

This research examined the relationship that occurs between companies policies in distributing dividend with the company's share price. The author will conduct the test whether the amount of cash dividend has a significant effect towards the value of the stock. The relationship between three predictors (DPR, DY and BETA) with share price can be seen from the coefficient of correlation and multiple linear regression models.

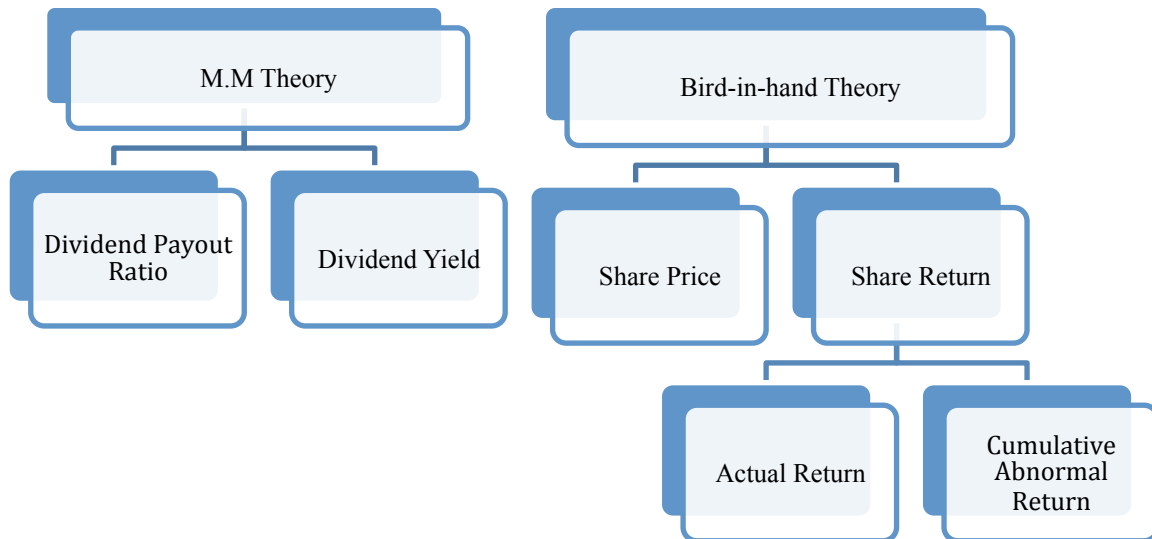


Figure 2.1 : Theoretical Framework

## 2.4 Conceptual Hypothesis Development

Based on the elucidation from the previous section, the author developed the notion regarding the effect of DPR, DY and BETA to share price for selected firms that listed in Kompas100 index during 2008-2011. The author has inferred that DPR, DY and Beta have significant effect to share price up to certain point. Thus, the three hypotheses had been developed:

Hypothesis I:

H<sub>a</sub>: Dividend payout ratio has significant effect to share price.

Hypothesis II:

H<sub>a</sub>: Dividend yield has significant effect to share price.

Hypothesis III:

H<sub>a</sub> : Beta has significant effect to share price.

The validity of both hypotheses will be test with statistical tools such as normality test, autocorrelation test and multiple linear regressions.