

CHAPTER II LITERATURE REVIEW

2.1. Dividend

2.1.1. Dividend Definition

Dividend is a fraction of a company's earnings that is distributed to the shareholder. The remaining fraction, called retained earnings, is reinvested into the company in the form of equity. Dividend may take a form of cash dividend and stock dividend, or more indirectly—share buyback.

In terms of the time of payment, there's two kind of dividend. The dividend distributed after the end of a fiscal year, which sourced from the profit of the fiscal year, is called final dividend. A company may also distribute interim dividend which is taken from the current fiscal year's profit.

The stock exchange has some procedures regarding dividend payment dates. These dates are taken from U.S. Security and Exchange Commission (2010):

- Declaration date: the date at which the amount of dividend and other dates are announced. This is usually the following or the same day as company's general meeting.
- Cum-dividend date: an investor holding the stock from before to beyond this date will receive dividend payment. Also known as in-dividend date.

- Ex-dividend date: the date following cum-dividend indicating at a point where investors who purchase the share will not receive dividend.
- Recording date: shareholder must register their ownership on or before this date to be able to receive the dividend. Usually in two business days after ex-dividend date.
- Payment date: the dividend payment actually takes place on this date.

2.1.2.Dividend Policy

As stated by Baker (2009, p3), dividend policy determines dividend decision: will the firm pay dividend, and how much of the earnings (payout ratio)? Dividend decision is defined as a type of financing decision which affects the amount of earnings of a firm of which goes to dividend payment versus the amount it retains as reinvestment. In the idealized world using Miller and Modigliani (1961) assumptions, dividend policy proved to be irrelevant. However in practical corporate finance, it's arguably very important to balance dividend payout and retained earnings. If too much is paid as dividend the company may need to raise fund from financial institutions which may have attached covenants, incur interest expense, and underwriting fee. Thus, according to Black (1976) retained earnings are the lowest cost source of fund.

2.1.3.Theories and Empirical Evidence

Miller and Modigliani (1961) came up with their dividend irrelevance theories. This theory said that dividend policy is irrelevant under perfect market. Perfect market as defined by Keown, Martin, Petty and Scott (1999): (1) no transaction cost, investors can purchase or sell stocks without any fees and companies can issue debt/equity without any cost; (2) no information asymmetry between the outsider and insider of the firm; (3) no financial distress and bankruptcy cost; (4) no taxes; and (5) no conflict of interest between shareholder and managers/agency cost. Thus the value of a firm is independent from any dividend policy made by the management. However, the limitation to this theory is that, market imperfection exists. Currently most countries have taxes regarding dividend and capital gain, transaction cost also exists, and information asymmetry does exist between insider and outsider of the firm.

In their study with data from NYSE, AMEX, and NASDAQ firms, Fama and French (2001) conclude that firm size and profitability positively influences dividend payments while market to book ratio negatively influences dividend payment. In another study, DeAngelo, DeAngelo, and Stulz (2006) found that ratio of Retained Earning to Shareholder's Equity (RE/TE) positively influence the propensity to pay dividend. The RE/TE variable is used to measure a firm's maturity, which higher Retained Earnings in the equity is an indicator of higher firm maturity.

Wurgler and Baker (2004) proposed another theory which uses market characteristic to describe dividend payment. The theory is called Catering Theory of

Dividends, stating that dividend policies are based on the investor's demand. When investors are valuing dividend-paying firms higher than non-dividend-paying, the managers will initiate dividend payment, and vice versa. Further studies by Wurgler and Baker (2004) also found an interesting fact that the propensity to pay dividend decrease when there's growth stock booming (in times of new technology ages, for example). The propensity to pay dividends also increases after the bust of those stocks (when the market values mature firms more than growth), thus confirming their theory. This research did provide answer to several questions laid out by Black (1976) regarding how the companies can be certain on what the shareholders want.

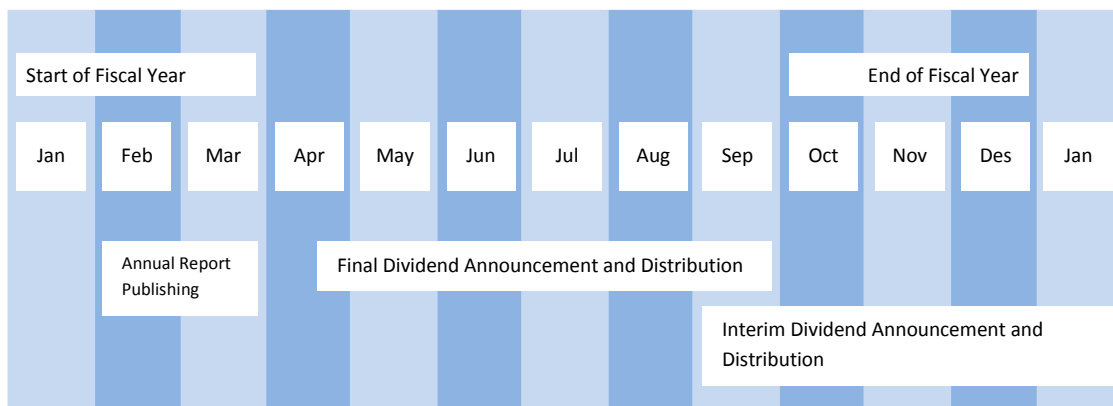
In 1972, Mueller proposed firm life cycle theory. According to Mueller, a firm was created to exploit the 'Schumpeterian innovation' involving new products, process, marketing or organizational techniques. If the innovation proves to be viable, the firm will expand. The idea would get proven and uncertainty around it would start to diminish. During this growth period, shareholders would want all capitals and also probably all the profits are reinvested to take advantage of the new idea. It may also need to raise more capital from outside to capitalize the idea to wider market. Competition will start and flourish; as it does, the company will begin to improve and new innovation to the product adopted. The market will eventually saturate and profit opportunity begins to decline. In this period the shareholders would not advantage from reinvestment because profit opportunities declines. A stockholder maximizing manager would pay more dividends rather than reinvest it. The life cycle theory suggests that the more mature the firm, the more it pays dividend. As the theory suggests, higher proportion of the retained earnings will indicate a more mature firm.

The firm started to accumulate retained earnings from the early and growth stage. At the maturity stage, the firm may have a large portion of retained earnings in the equity.

2.1.4. Typical Date and Type of Payment

In Indonesian Stock Exchange, there's typical dividend date of payment as shown in **Figure 2.1**. A firm can pay more than one dividend during a fiscal year. However, the most common found practice in Indonesia is dividends paid in once per fiscal year. Exceptions are with some established companies like PT. Astra International, Tbk and its subsidiaries which usually pay dividend twice a year, interim and final dividend. Interim dividends are usually paid during the end of second quarter to early of first quarter of the next fiscal year. Final dividend is usually paid during a month after the announcement of last year's earning to the end of third quarter. The announcement of dividend payment is usually done after Stockholder's Annual General Meeting which takes place after the publishing of annual report.

Figure 2.1 Typical Dividend Date of Payment



2.2. Financial Ratios and Dividend

2.2.1. Return on Asset (ROA)

Return on asset is described as how much currency unit a company earns by operating on every currency unit the company owns in its asset. It's given by the formula:

Return on Asset is an indicator of profitability of the business (DeAngelo et al, 2006). Their research on empirical data also concludes that higher firm profitability has influence on the dividend payment. According to Lintner (1956), profitability (along with the previous year payment) affects the dividend payout of the firm. He conducted the study on 28 U.S. firms and found that the two factors did positively influence the dividend payout ratio of the firms.

There're few things to be of concern if using ROA. The most obvious concern is that ROA may contain non-operating incomes such as sale of assets, currency profit/loss, and other posts that may be permitted to be recorded as income by accounting standards. Thus it can be argued that ROA does not reflect the company's operating profitability. However, ROA does represent the company's profitability as a whole (operation and non-operation-related incomes). Even more, positive

operating income does not mean the company is making profit because it does not considering any loss (if any) from non-operating side.

2.2.2. Firm Size

Firm size can be represented by Total Asset of the firm. However, due to its large number, a proxy variable can be used to represent firm size. One of the proxy variables is natural logarithm of the firm size. This way, the firm size is represented by magnitude (Ahmed and Javid, 2009). Thus Firm Size can be described by this formula:

According to Parua and Gupta (2009) companies with larger asset base pay more dividend. The firm life cycle theory also suggests that larger firm pays higher dividend payout ratio. When the firm is at maturity stage, the firm is said to require less capital for expansion. At this stage, shareholder has no advantage to have the earnings reinvested.

DeAngelo et al. (2006) studies concluded that firm with larger size are typical dividend payer. Smith and Watts (1992) had linked the firm size and dividend payout ratio and found out interesting evidence: larger firm size does pay higher payout ratio.

2.2.3. Cash Balance

Cash balance can be measured by the proxy of (DeAngelo et al., 2006):

This proxy does explicitly say that cash balance of the company is the portion of cash and equivalents of its total assets. The more cash the firm's currently holding, the more it can pay as dividend.

According to Parua & Gupta (2009), availability of cash is found to be strong determinant of dividend policy.

It should be noted that balance sheet is a 'snapshot' of the firm's financial at a point of time. In rare occasion may the proxy inflated as a cause of the firm still holding cash from recent debt/equity issuance.

2.2.4. Debt to Equity Ratio

Debt to Equity Ratio can describe the indebtedness or leveraging of the firm. Its function is given as:

Corporate finance deals with two source of fund, either in equity or debt. Capital from retained earnings and stock offerings goes into equity. Bond issuance and bank loan goes into debt. According to Black (1976), creditors will require the company to limit the dividend the company can pay if there's debt outstanding. The

more money is paid out as dividend, the less money available for the creditors should any trouble arises.

Research by Smith and Watts (1992) on the relation between leverage and payout ratio concludes that the higher leverage of the firm, the lower its dividend payout ratio.

This research would expect to find a negative relationship between dividend payout ratio and DER. When DER is high, creditors put pressure on the company to limit its dividend payment, and when DER is low, the company can pay dividend as much it want.

2.2.5. Retained Earnings /Book value of Equity

According to DeAngelo et al (2006) Retained Earnings /Book value of Equity (RE/TE) can be used to represent the maturity of a firm because longer running firms tend to accumulate more retained earnings than newly established firms, although in rare occasion, it's not the case. The formula is:

According to the firm life cycle theory, companies in growth state are expected to pay less dividend so that the retained earnings is used as a lower cost source of fund. When it pays less dividend, the retained earnings post starts to build up. This pattern continues until the firm is self-financing or relying on external source of capital. Overall, higher RE/TE means a mature company, while lower RE/TE indicates that the company's still growing.

2.2.6.Dividend Payout Ratio

Dividend Payout Ratio is a measure of how much percentage of the earning of a particular fiscal year to be distributed to shareholder. The formula is given:

The more earnings are paid out as dividend, the less the retained earnings. The retention of earning is not without cost because, as DeAngelo et al. (2006) coined, ‘agency cost of free cash flow’ does exist. Shareholders would want the earnings to be distributed when the firm reached maturity, while at the same time, managers want to pursue more growth (which led to over-investment). Research by Mueller (1972) did conclude this conflict of interest between manager and shareholder.

2.2.7.Subsequent Earning Growth

According to Black (1976), managers are less likely to cut dividend payouts. Black argued that managers only raise the dividend payout when the prospect of supporting higher dividend payout in the future is good enough. This way, dividend policy conveys information on whether there’ll be higher subsequent earnings growth.

Subsequent earnings growth can be formulated as:

where E_{t+1} represents subsequent year's earnings, and E_t this year's earnings.

It was first theoretically proposed by Arnott and Asness (2003) that higher dividend payout ratio does signal high subsequent earning growth. Using the data from U.S. dividend payment records, they found out that relationship between payout ratios and future earnings growth has strong positive statistical relationship. Their research also concluded Black's argument about the reluctance of the manager to raise payout when they're not optimistic (because they possess private information about the firm).