

## CHAPTER II

### THEORETICAL BACKGROUND AND THE HYPOTHESIS

#### DEVELOPMENT

##### 2.1 Agency Theory

According to Jensen and Meckling (1976) agency relationship is a contract between principal and the agent to work on their behalf. The principal then gives the agent a responsibility and an authority to make a decision. Thus, agency theory is a theory that explains the conflict of interest between the management as the agent and shareholders as the principal.

Jensen and Meckling (1976) explains that the general problem of agency arises with the separation of ownership and control. Eisenhardt (1989) states that the agency problem arises because (a) the principal and the agent have different goals and (b) the principal cannot determine if the agent has behaved appropriately. This is based on the assumption of human behaviour that are likely to prioritize their own interest. This behavior then lead to conflict of interest between shareholders as the owner and managers because both parties want to mazimize their utility.

Agency theory assumed that both managers and owners have different goals and motivate by their own interest and thus lead to a conflict of interest between agent and principal. Agent (management) is concerned with their personal wealth, job security, and fringe benefits. Agent also tend to maximize the amount of resources over which they have control and lead to overemphasis on firm size or growth of the firm. Principal (shareholders) is motivated to

maximize their wealth with the profit of the firm that increases every year. However, agents are more likely to be reluctant or unwilling to take more risk that might jeopardize their jobs or reduce their personal wealth. Thus, it may lead to a less-than-maximum return and a potential loss of wealth of the principal.

To minimize agency problems and contribute to the maximization of shareholder's wealth incur agency costs. Agency costs is the cost to monitor management behaviour, ensuring against dishonest acts of management, and giving managers the financial incentive to maximize share price (Gitman, 2003). According to Ross et al. (2003), agency costs refers to the costs of the conflict of interest between shareholders and management. Agency costs can be indirect or direct. An indirect agency cost is a lost opportunity. Direct agency costs come in two forms. The first type is an expenses that benefit only the management but is a cost to the shareholders. The second type is an expenses that is needed to monitor management actions. According to agency theory, conflict between agent and principal can be reduced if management goals aligned with shareholders goals.

## **2.2 Free Cash Flow**

According to Richardson (2006), free cash flow is defined as cash flow beyond what is necessary to maintain firm resources and to finance new investments. Habib (2011) defined free cash flow as the difference between operating cash flows and capital expenditure. Brigham and Houston (2004) defined free cash flow as the available cash for all investors (shareholders and

debtholders) after the firm made all the investments in fixed assets, new products, and working capital to maintain its business. The value of the firm's operating depends on all the future expected free cash flows, which calculated as after-tax operating profit minus the amount of capital expenditure necessary to sustain the business. Thus, free cash flow represents the cash that is actually available for distribution to investors. Increasing free cash flow is one way for manager to make the firm more valuable.

A positive free cash flow indicates that the firms is profitable because the firms make more money from its operating activities. However, a negative free cash flow can be good or bad depending on why the free cash flow is negative. If free cash flow is negative because operating cash flow is negative, this is bad, because the firm is probably experiencing operating problems. If free cash flow is negative because of the high capital expenditure due to investment in operating assets needed to support growth, it might be a good sign. A startup firms, or firms with rapid growth are sometimes have a negative free cash flow in order to support the business.

### **2.2.1 The Use of Free Cash Flow**

Free cash flow is the amount of cash available for distribution to both shareholders and debtholders. There are five good uses for free cash flow according to Brigham and Daves (2004): (1) pay interest to debtholders, (2) repay debtholders, (3) pay dividends to shareholders, (3) repurchase stock from shareholders, and (5) buy marketable securities or other non-operating

assets. A firm does not have to use free cash flow to acquire operating assets since by definition, free cash flow is calculated by subtracting the necessary expenditure including investment in fixed assets.

According to Ross et al. (2008), firms has several ways to spend free cash flow, including: (1) pay dividends; (2) buy back its own shares; (3) acquire shares in another firm. Brealey et al. (2008) stated that firms can pay out excess cash to shareholders in two ways. Firms can pay dividends or buy back some of the outstanding shares. However, dividends remain the principal way that firms return cash to its shareholders.

Unfortunately, there is evidence to suggest that some firms with high free cash flow tend to make unnecessary investments that do not add value, such as paying too much to acquire other firms (Brigham and Daves, 2004). High free cash flow can cause managers to waste the cash in order to get more power over the cash and thus fail to act in the best interest of shareholders.

### **2.3 Dividend Policy**

According to Ross et al. (2008), dividend refers to cash paid out of earnings. A firm's dividend policy is an established guide to determine the amount of cash it will pay out as dividends. A firm that does not pay dividends, keep the cash as retained earnings for the firm. Because retained earnings is the cash that is not distributed to the shareholders, it is act as a form of internal financing, and thus dividend policy can have an impact on the firm's external

financing. There are four characteristics of firms dividend policy (Emery et al., 2009). Publicly traded firms prefer to (1) pay at least some minimum level of dividends on a regular basis, (2) maintain a stable payout ratio and dividend rate, (3) make orderly changes in the dividend rate, and (4) avoid cutting an established dividend rate.

### **2.3.1 Theory of Dividend Policy**

Brigham and Houston (2004) stated that it is important to have an optimal dividend policy. This means that the firm's dividend policy strikes a balance between current dividends and future growth while maximizing the firm's stock price. Brigham and Houston (2004) stated three theories of investor preference: (1) the dividend irrelevance theory assumed that dividend has no effect on either the price of the firm's stock or its cost of capital. Any shareholder's dividend policy just as good as other shareholder's policy; (2) Bird-in-the-Hand Theory is a theory that assumed high dividend payout ratio will maximize firm's value rather than capital gain. Investors value dividend payments more highly than capital gains. This is because the dividend yield component is less risky than the component in the total expected return; (3) Tax Preference Theory is a theory that assumed that investors are more likely to receive a low payout ratio. There are two main reasons why investors might prefer a low dividend payout: (a) long-term capital gains are generally taxed at a rate lower than dividend income tax. Therefore, investors who own most of the stock in a

firm might prefer the firm to retained its earnings rather than receive dividend; (b) the taxes from capital gains are not paid until a stock is sold. Because of these tax advantages, investors may prefer to invest in a firm that retain most of its earnings and have a low dividend payout.

There are some other theories that could affect dividend policy: (4) Information Content (Signaling) Hypothesis that assumed that the increase in the dividend is a signal of good future earnings and thus the price of the stock will increase. Conversely, if the firm decrease the dividend, it indicates a poor earnings in the future, and thus the price of the stock will be decrease; (5) Clientele Effect assumed that different groups of stockholders have a different preference of dividend policy. A changes in a dividend policy might cause the change in the stock price.

### **2.3.2 Types of Dividend Policy**

According to Gitman (2003), the firm's dividend policy must be formulated with two objectives: (1) provide sufficient financing; (2) maximize the shareholder's wealth. There are three most commonly used dividend policy:

#### **a. Constant-Payout-Ratio Dividend Policy**

This policy is based on the payment of a certain percentage of earnings. The constant-payout-ratio dividend policy move up and down with earnings and will give a high dividend if the firm's earning

is high but when the earnings drop or if a loss is occurs in a given period, the dividends may be low or even nonexistent.

b. Regular Dividend Policy

The regular dividend policy means that the dividend is based on the payment of a fixed amount in each period. A constant amount of dividend is maintained for some period and will be increase to further maintain if a proven increase in earnings has occurred.

c. Low-Regular-and-Extra Dividend Policy

This policy based on a payment of low regular dividend and will give extra dividend if the earnings are higher than normal in a certain amount. Extra dividend is an additional dividend optionally paid by the firm. The low dividend that is paid, give a stable income for shareholders and avoids giving shareholders a false hopes. Firm using this policy must increase the amount of dividend once proven in earnings is occurred. The extra dividend should not be a regular payment because otherwise it will become meaningless.

## 2.4 Dividend Payout Ratio

Payout ratio is the ratio of dividends paid to earnings. According to Gitman (2003), dividend payout ratio indicates the percentage of earnings earned that is distributed to the shareholders in the form of cash. A firm's payout ratio typically varies over time. Emery et al. (2004) stated that a small and rapidly growing firm may retain all its earnings for some years to finance its growth.

As firm matures, typically it begins to pay dividends, and over time increase its proportion of earnings paid out as dividends.

## 2.5 Previous Research

Previous research found the relationship between free cash flow and dividend payout ratio.

No.	Author(s)	Variable	Research Period	Result
1.	Darman (2008)	-Insider ownership (INSIDE) -Institutional ownership (INST) -Free cash flow (FCF) -Collateralizable assets (COLLASS) -Dispersion of ownership (DOWNER) -Dividend policy (DPR)	2000 – 2005	Variable INSIDE, INST, FCF, and DOWNER do not have significantly influence DPR. Variable COLLASS significantly influence DPR.
2.	Kangarlouei et al. (2013)	-Life-cycle theory (RETE) -Free cash flow (FCF) -Profitability (ROA)	2006 – 2010	Variable ROA, LEV, SIZE have a significant positive relationship with DP



		<ul style="list-style-type: none"> <li>-Firm size (SIZE)</li> <li>-Asset growth ratio (AG)</li> <li>-Investment opportunities (MTB)</li> <li>-Firm leverage (LEV)</li> <li>-Dividend policy (DP)</li> </ul>		<p>while MTB and RETE have significant negative relationship with DP. FCF has not an impact on DP.</p>
3.	Mardiyati et al. (2014)	<ul style="list-style-type: none"> <li>-Free cash flow (FCF)</li> <li>-Return on assets (ROA)</li> <li>-Total assets turnover (TATO)</li> <li>-Sales growth (SALESGROWTH)</li> <li>-Dividend payout ratio (DPR)</li> </ul>	2008 – 2012	<p>ROA have positive and significant effect towards DPR. FCF, TATO have negative and significant effect on DPR. SALESGROWTH have negative and not significant effect on DPR.</p>
4.	Hejavi and Moshtaghin (2014)	<ul style="list-style-type: none"> <li>-Free cash flow (FCF)</li> <li>-Dividend (DIV)</li> <li>-Size (SIZE)</li> <li>-Profitability (PRFT)</li> <li>-Growth opportunity (GROWTH)</li> </ul>	2007 – 2012	<p>Variable FCF have positive effect on DPR and LEV. Variable SIZE and PRFT has positive effect on DPR.</p>

		<ul style="list-style-type: none"> <li>-Risk (RISK)</li> <li>-Financial leverage (LEV)</li> </ul>		Variable GROWTH and RISK has negative effect on DPR but RISK is not statistically significant.
5.	Noorozani and Kheradmand (2014)	<ul style="list-style-type: none"> <li>-Profitability (ROE)</li> <li>-Free cash flow (FCF)</li> <li>-Firm growth (GROWTH)</li> <li>-Firm size (SIZE)</li> <li>-Financial leverage (LEV)</li> <li>-Firm's risk (RISK)</li> <li>-Dividend payment ratio (DPR)</li> </ul>	2006 – 2011	Variable ROE, FCF, GROWTH, LEV and SIZE are factors that influence DPR. Variable RISK has no significant influence on DPR.
6.	Labhane and Das (2015)	<ul style="list-style-type: none"> <li>-Investment opportunities (MBR)</li> <li>-Financial leverage (DER)</li> <li>-Free cash flow (FCF)</li> <li>-Tangibility of Assets (TANG)</li> </ul>	1995 – 2013	Variable FCF, MCAP, ROA, AGE and DDT positively affect DPR while BR, DER, MBR affect negatively.

		<ul style="list-style-type: none"> <li>-Business Risk (BR)</li> <li>-Year of incorporation (AGE)</li> <li>-Size (MCAP)</li> <li>-Liquidity position (CR)</li> <li>-Profitability (ROA)</li> <li>-Dividend Tax (DDT)</li> <li>-Dividend payout ratio (DPR)</li> </ul>		
7.	Suci (2016)	<ul style="list-style-type: none"> <li>-Free cash flow (FCF)</li> <li>-Financing policies (DER)</li> <li>-Profitability (ROA)</li> <li>-Collateral assets (COL)</li> <li>-Dividend policy (DPR)</li> </ul>	2011 – 2014	Variable FCF and DER has positive influence whereas COL has negative influence. Variable ROA does not have any influence on the DPR.

## 2.6 Free Cash Flow and Dividend Payout Ratio

Free cash flow is the cash available for distribution to both shareholders and debtholders after the firm has made all the necessary investment in fixed assets, new products, and working capital to sustain the business (Brigham and

Houston, 2004). Positive free cash flow occurs when the firm operating cash flow is higher than the expenditure in fixed assets. Conversely, negative free cash flow occurs when the firm expenditure in fixed assets is more than the firm operating cash flow.

Positive free cash flow is a good indicator for investors because the firm has an excess cash for its investors. Negative free cash flow is bad because not only there is nothing for investors, but investors have to provide more money to keep the business going (Brigham and Houston, 2004). But a negative free cash flow is not always a bad news. If free cash flow is negative because operating cash flow is negative, this is bad, because the firm is probably experiencing operating problem. If free cash flow is negative because the firm incurring significant expenses to launch a product line, or due to investment in operating assets needed to support its growth, it may be a good indicator. There is nothing wrong with profitable growth, even if it caused a negative free cash flow in a short term (Brigham and Houston, 2004).

One of the use of free cash flow is to pay dividends. A firm decision to pay dividends is depend on the availability of the cash. Brealey et al. (2008) stated that dividends remain the principal way to return cash for the shareholders. A firm may generate profit but without sufficient cash, it can't distribute dividends. Exceptions for a rapid growing firm, it may not distribute dividends for years and retained all its earnings to help finance its growth.

According to Jensen (1986), firm with high free cash flow can lead to agency problem because management and shareholders has a different interest.

Shareholders want to maximize their return and received dividends while management are often overemphasis on firm size or growth of the firm. Agency costs occur when such problem arise. According to Gitman (2003), agency costs is the cost to monitor management behaviour. Thus, free cash flow can lead to the increasing of agency costs.

A firm with high free cash flow can increase dividends to reduce the control over the use of the cash and thus lowering the agency costs. If firms pay dividend to reduce agency cost of free cash flow, there would be a positive relationship between free cash flow and dividend payout ratio.

Dividend is distributed based on the previous year performance. When a firm has a high free cash flow in a current period, the dividend payout that will be distributed in the next period will be higher. This is because the total dividend distributed by the firm is higher and thus increase the dividend per share. Since dividend per share increase, the dividend payout ratio of the firm is also increase. This is because dividend payout ratio is calculated by divided dividend per share with earning per share of the firm.

Noorozani and Kheradmand (2014) conduct a research to find the factors affecting the dividend policy in Tehran Stock Exchange and found that free cash flow is one of the factors affecting dividend payout ratio. Hejavi and Moshtaghin (2014) concluded that the increase of free cash flow will result in the increase of dividends paid to shareholders. Labhane and Das (2015) found that that firms with high free cash flows, larger firm, more profitable and mature firms pay more dividends. Suci (2016) found that free cash flow has a

positive impact to dividend policy of the firm. Thus, the researcher conclude the hypothesis as follows:

*H1: There is positive impact between free cash flow and dividend payout ratio*

