# CHAPTER II

# THEORETICAL FRAMEWORK FORMULATION AND HYPOTHESIS

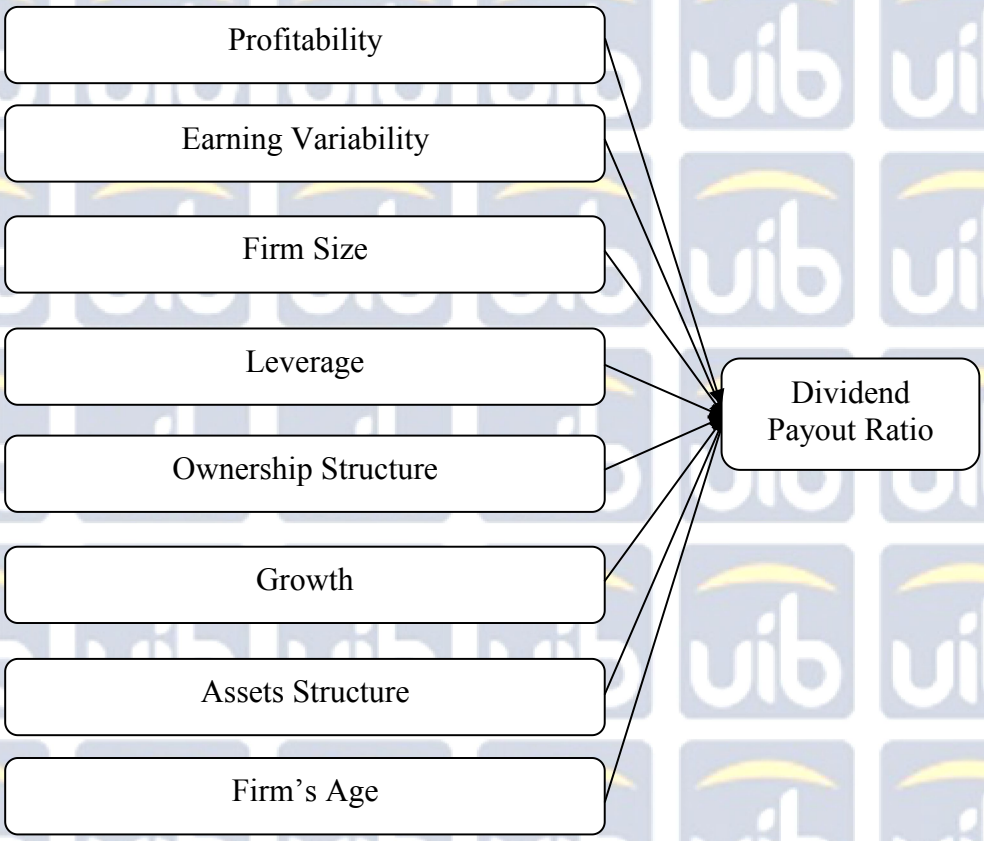
## 2.1 Previous Research

Non-executive directors (outside directors) or investors who seek high current income and limited capital growth would prefer companies with high dividend payout ratio. However, investors seek capital growth may prefer lower payout ratio because capital gains are taxed at a lower rate. Therefore, the number of non-executive directors on the board of directors has close relationship to dividend payout ratio. Both of them were substitutes and complements mechanisms to control agency conflicts of interest with the firm. (Bathala and Rao,1995). It could be done in two reasons. Firstly, dividend payout may reduce the amount of free cash flow (FCF), which might be spent by insiders on projects for their own benefits at shareholder expense (DeAngelo et al., 2006). Secondly, dividends expose firms to more frequent inspections by the capital markets as dividend payout increase the likelihood of new common stock issue (Easterbrook, 1984).

There are numerous studies on dividend payout in determining outside directorships. Al-Malkawi, Twairesh, and Harery (2013) examined the determinants of the likelihood to pay dividends of firms listed on the Saudi Stock Exchange between the period of 2005 and 2011 with 483 firm-year observations. Those factors consisted of specific models (Profitability, Earning Variability (Risk), Firm Size, Leverage, Growth, Asset Structure and Firm's Age) and Ownership (Ownership Structure). The related figure can be found as below:

**Figure 2.1**

Factors affecting Profitability, Earning Variability (Risk), Firm Size, Leverage, Ownership Structure, Growth, Asset Structure and Firm's Age to Dividend Payout Ratio

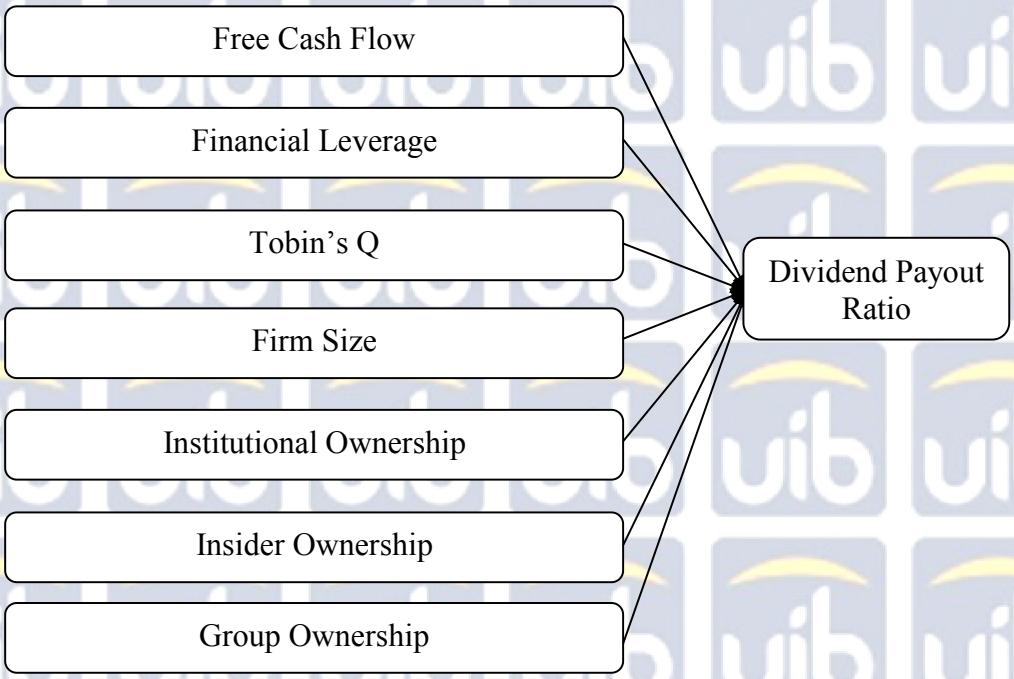



**Resource:** Al-Malkawi, Twairesh, and Harery (2013)

This study made an attempt to ensure institutional ownership and dividend per share by using 42 samples firm from the year of 2001 to 2006. A number of ownership and firm characteristics variables were found to significantly influence the dividend decision, namely Free Cash Flow, Financial Leverage, Tobin's Q, Firm Size, Institutional, Insider and Group of Ownership. This model is shown in Figure 2.2.

**Figure 2.2**

Models affecting Free Cash Flow, Financial Leverage, Tobin's Q, Firm Size, Institutional Ownership, Insider Ownership and Group Ownership to Dividend Payout Ratio

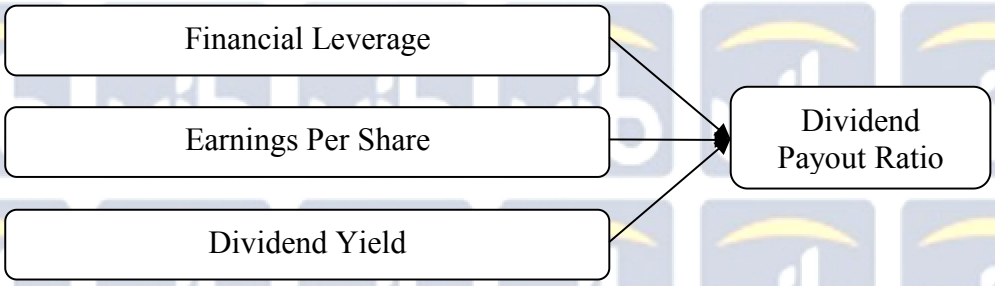



**Resource:** Saif, Rehman, Khan, and Ali (2013)

Financial systems were indeed found to be strongly affected towards dividend policy. Thus, another researcher, Javed (2012), also investigated the consequences of financial leverage on the dividend policy of the Pakistan firms which was conducted on the Karachi stock exchange companies during the year of 2005 to 2010. These financial systems, variables were contained, namely financial leverage, earning per share and dividend yield to dividend policy. These models are exhibited in Figure 2.3.

**Figure 2.3**

Models affecting Financial Leverage, Earning per share and Dividend Yield to Dividend Payout Ratio

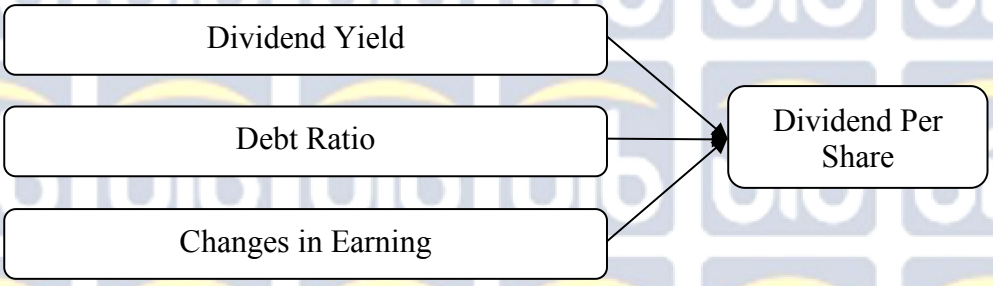



**Resource:** Javed (2012)

Another study was found to be similarly with the previous research, Asif, Rasool and Kamal (2012), it had been examined by researchers for further discussion. It stated the relationship between dividend policy and financial leverage of 403 companies, which was listed in Karachi Stock Exchange over 6 years period, starting from the period of 2002 to 2008. These variable factors were financial leverage, earning per share and dividend yield, which has been demonstrated in Figure 2.4.

**Figure 2.4**

Models affecting Financial Leverage, Earning per share and Dividend Yield to Dividend Payout Ratio

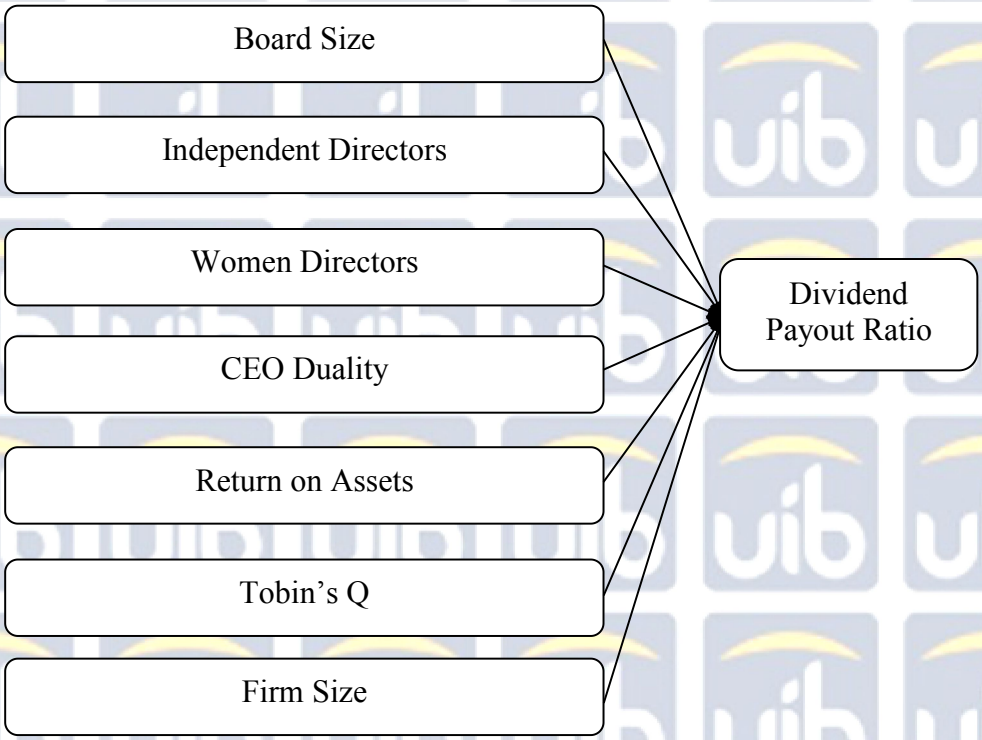



**Resource:** Asif, Rasool and Kamal (2012)

Wellalage, Fauzi and Gaoxiang (2012) developed a preliminary study to explore the determinants of dividend payout of Senzhen Stock Exhange (SZSE)-listed companies. The study contained the effect of corporate governance and firm characteristic on dividend payout policy. Variables of corporate governance used, were Board Size, the percentage of CEO Duality, Independent Directors, and Women Directors. Other factors were included, such as Return On Assets, Tobin's Q and Firm Size. These models are exhibited in Figure 2.5.

**Figure 2.5**

Models affecting Board size, independent directors, woman director, CEO Duality, Return on Assets, Tobin's Q and Firm size to Dividend Payout Ratio

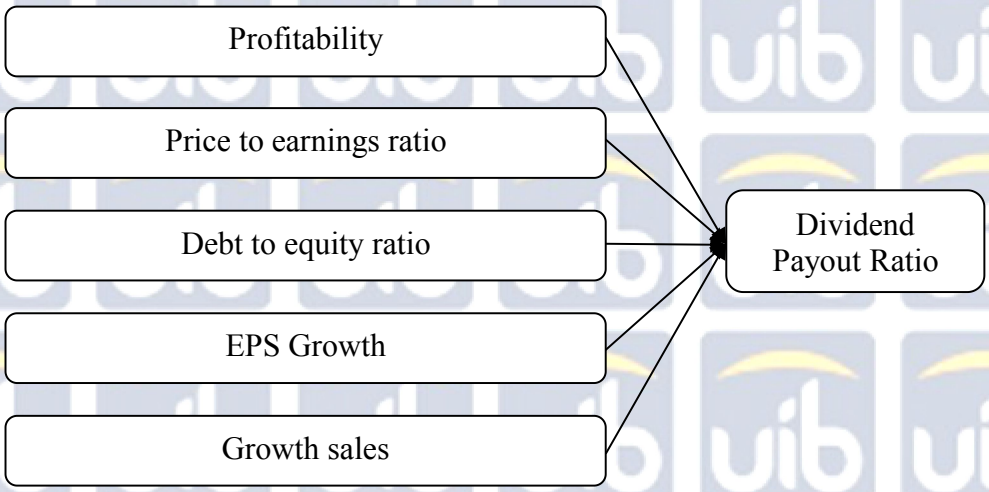



**Resource:** Wellalage, Fauzi, dan Gaoxiang (2012)

Meanwhile, according to this study, Islam, Aamir, Ahmad and Saeed (2012), firm characteristic was more concerned, therefore an investigation the effects of dividends on shareholders wealth among the cement industries. Their samples comprised 661 companies registered with the web of Karachi Stock Exchange according to the year of 2004 to 2009. Twenty one among those registered companies belong to the cement industries. These factors were Profitability, Price to earnings ratio, Debt to equity ratio, EPS Growth and Growth sales, which are shown in Figure 2.6.

**Figure 2.6**

Factors affecting Profitability, Price to earnings ratio, Debt to equity ratio, EPS Growth and Growth sales towards Dividend Payout Ratio



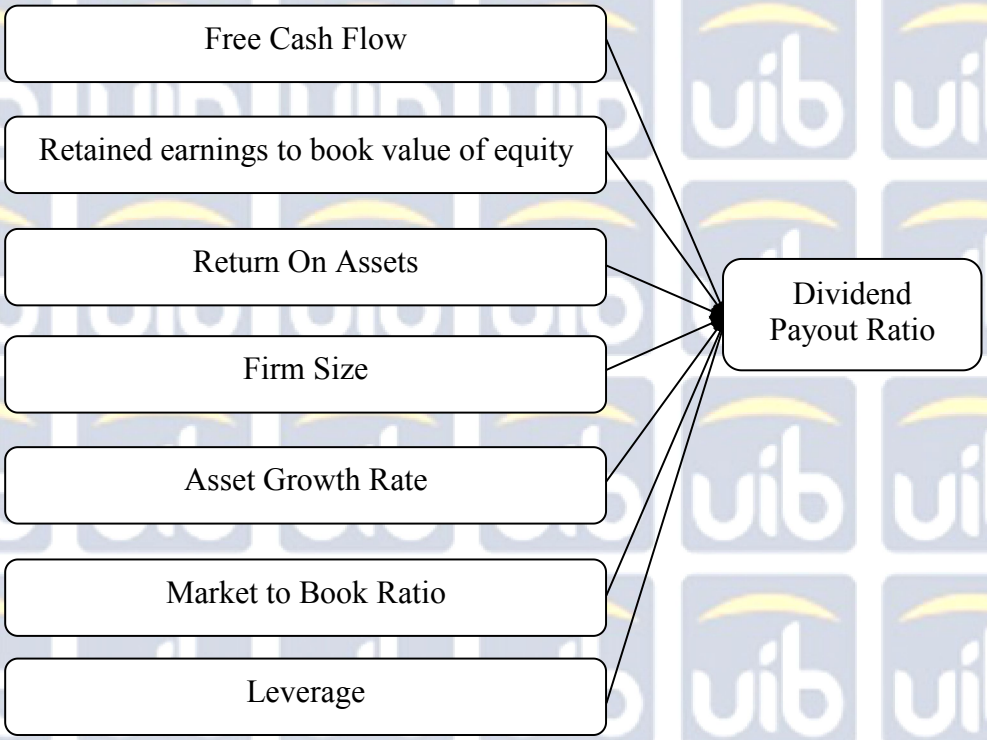

**Resource:** Islam, Aamir, Ahmad and Saeed (2012).

According to another research, Thanatawee (2011) examined the dividend policy of Thai listed companies over 6 years period, between 2002 and 2008. This study provided the essential relationship between financial systems and dividend

itself. Larger and more profitable firms with higher free cash flows and retained earnings to equity tend to pay higher dividends. Free cash flow, Retained earnings, Return on assets, Firm size, Asset growth rate, Market to book ratio and Leverage were the essential factors that affect the dividend payout from the period of 2002 to 2008, which are provided in Figure 2.7.

**Figure 2.7**

Factors affecting Free cash flow, Retained earnings, Return on assets, Firm size, Asset growth rate, Market to book ratio and Leverage to Dividend Payout Ratio



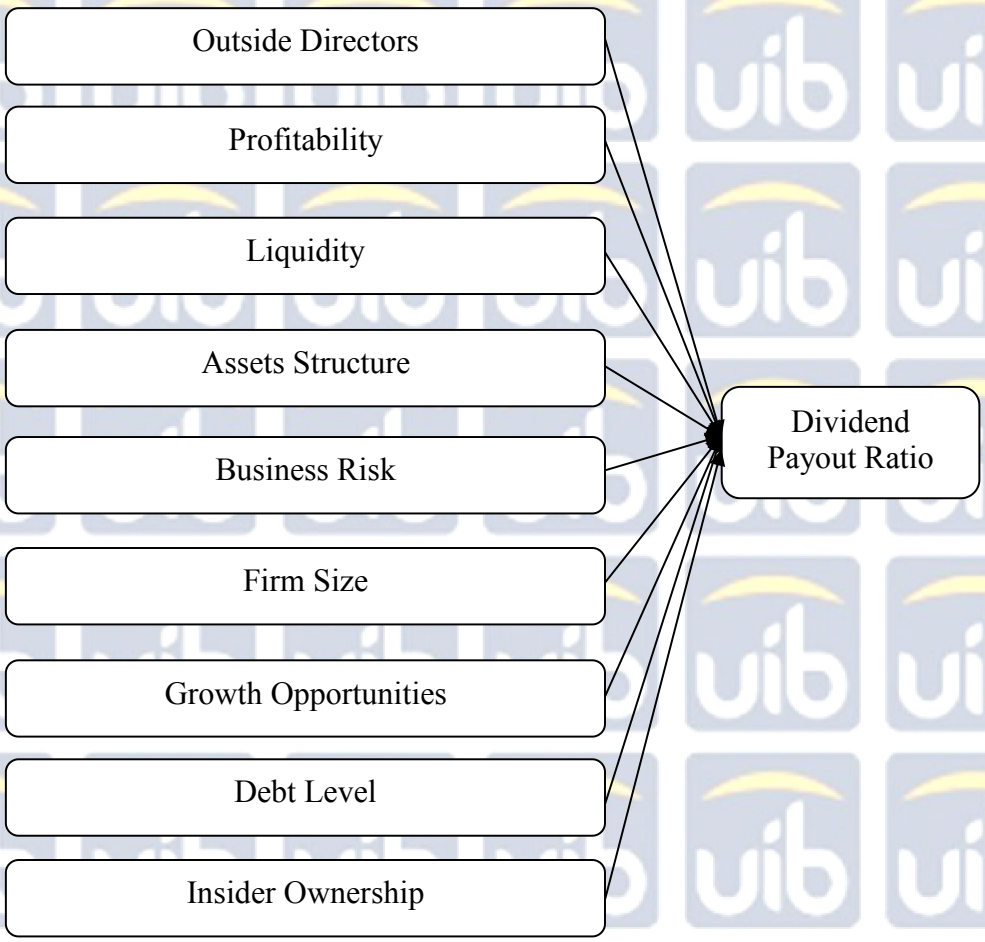

**Resource:** Thanatawee (2011).

Al-Najjar and Hussainey (2010) examined the potential factors that affecting a firm decision to pay or not to pay dividend in UK with a particular year. It also investigated the association between corporate dividend policy and

levels of future-oriented information. The factors comprised of specific characteristics (such as leverage, business risk, profitability, asset structure, liquidity, firm size and growth opportunity) and corporate governance characteristics (such as insider ownership and outside directorships), which are stated in Figure 2.8.

**Figure 2.8**

Factors affecting outside directors, Profitability, Liquidity, Assets structure, Business Risk, Firm size, Growth opportunities, Debt level and Insider ownership to Dividend Payout Ratio

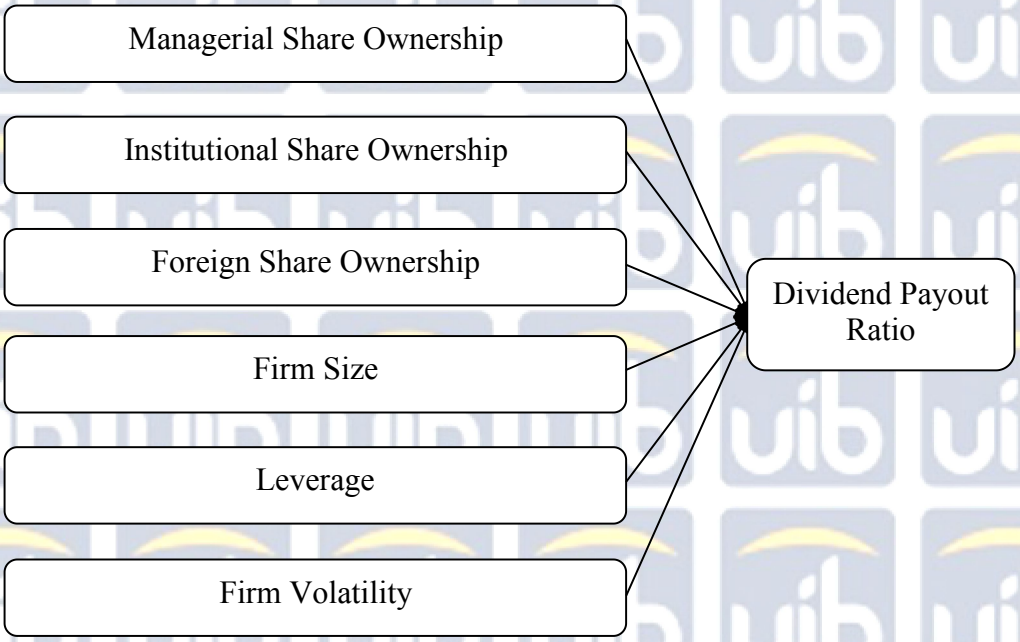



**Resource:** Al-Najjar and Hussainey (2010)

Ali Shah, Ullah, and Hasnain (2011) examined the impact of ownership structure on dividend payout behavior of firms between the period 2002 and 2006. There were numerous variables in affecting dividend payout, such as managerial share, institutional share, foreign share ownership, firm size, leverage, and firm volatility which are shown in Figure 2.9.

**Figure 2.9**

Factors affecting Managerial Share Ownership, Institutional Share Ownership, Foreign Share Ownership, Firm Size, Leverage, Firm Volatility to Dividend Payout Ratio



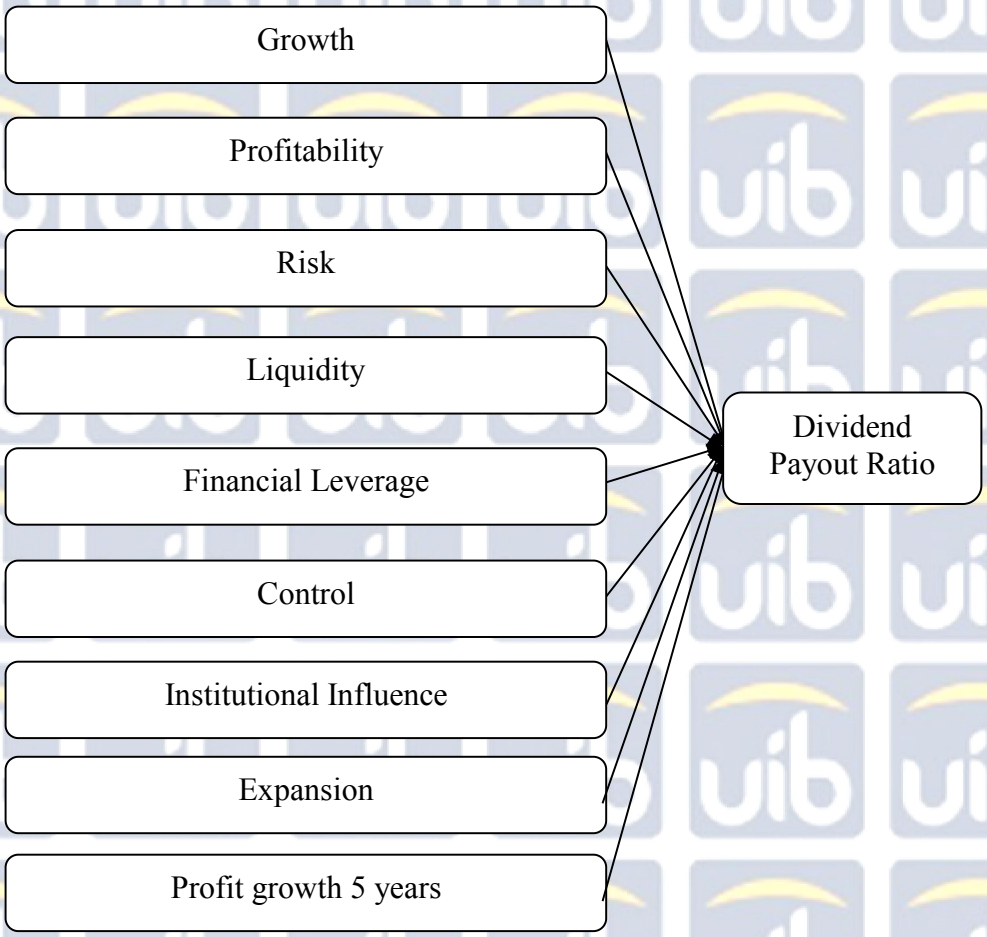

**Resource:** Ali Shah, Ullah, and Hasnain (2011)

Frank W (2005), this study attempted to identify the impact of certain financial variables on the dividend policy of a corporation by analyzing the financial data of over 10,000 publicly traded firms using Ordinary Least Squares (OLS) Regression. The study tested the effects of financial variables (Growth,

Profitability, Risk, Liquidity, Control, Institutional Influence, Expansion and Profit Growth 5years) on dividend policy (as measured by the firm's payout ratio) for a sample of firms screened from the Multexinvestor.com database. These Models are shown in Figure 2.10.

**Figure 2.10**

Factors affecting Growth, Profitability, Risk, Liquidity, Control, Institutional Influence, Expansion and Profit Growth 5years to Dividend Payout Ratio




**Resource:** Kania and Bacon (2005)

## 2.2 Dividend Payout Ratio

Islam, Aamir, Ahmad and Saeed (2012) pointed out that dividend policy studies examining the determinants of "dividend payout ratio" are a function of fluctuation in earning of the firm. In other words, it can be defined as the fraction of earning a firm has to pay to its stockholders in dividends.

In addition, RJ (2001) suggested that the dividend payout ratio is the percentage of income that will be paid to shareholders as cash dividends. Based on Downes and Goodman (2001) discussion, the dividend payout ratio is the percentage of profit that paid out in cash. Generally applicable, the higher of the payout ratio examines that the more mature the companies are.

Amidu and Chic (2006) and Amidu and Abor (2006) stated that the dividend payout ratio is the ratio of dividends per share by earnings per share. Dividend payout reflects the dividend policy of management regarding the amount of dividends to be distributed to those shareholders. Saeed et al (2014) also summarized the definition of dividends as the earnings of the shareholders and used to minimize the conflicts or the agency problem among the management and shareholders.

## 2.3 The relationship among variables

### 2.3.1 The relationship between profitability and dividend payout ratio

Profitability of a firm is the key determinant in making dividend policy decision. It is expected that higher profitable firms are more able and likely to pay dividends compared to non-profitable firms, as firms with less profit will not find it optimal to pay more dividends. Thus, there was a positive correlation between profitability and dividend payouts. (Al-Malkawi, Twairesh and Harery, 2013).

Al-Najjar and Hussainey (2010) also supported Al-Malkawi (2013) explanation that profitability plays a positive crucially impact on dividend payout. It states that profitable firms are willing to pay higher amounts of dividends.

Prior studies also found that there was a positive relationship between profitability and dividend payout. Profitable firms pay dividends to convey their good financial performance. Thus, profitable firms will find it necessary to pay dividends rather than retained the earnings. (Afza and Mirza, 2011).

On the other hand, according to Islam, Aamir, Ahmad and Saeed (2012) discussion, it stated that profitability was considered negatively related to dividend payout ratio, indicating that firms with huge profits are more likely to pay low dividend payouts in order to hedge any unexpected risks.

Kania and Bacon (2005) also concluded that profitability has a negative correlation with the size of the dividend payout, as companies tend to pay low dividend for hedging any unexpected risks.

### 2.3.2 The relationship between earnings variability (risk) and dividend payout ratio

Dividend policy was inversely related to business risk of 483 firms listed in Saudi Arabia. Thus, it exhibited a negative relationship between business risk

and dividend payouts. In other words, firms with higher business risk should pay less dividends in order to maintain their entire performance. (Al-Malkawi, Twairesh and Harery, 2013).

A study by Hellstrom and Inagambaev in 2012 also supported the negative association between business risk and dividend policy stating that when the earnings are unstable, it is unlikely that the firm would pay more dividends.

Furthermore, another empirical study has reported negative association between business risk and dividend policy. The higher the business risk, the higher the chance of bankruptcy. Hence, the possibility for firms to pay dividends is lower. (Al-Najjar and Hussainey, 2010).

Factors that affect dividend policy by analyzing the financial data of over 10,000 publicly traded firms displayed that there was negative correlation between business risk and dividend payout. Firms with higher business risk are more likely to reduce dividend payout in order to hedge any bankruptcy. (Kania and Bacon, 2005).

### 2.3.3 The relationship between firm size and dividend payout ratio

Dividend policy is strongly influenced by the size of a company. Firm size can be measured using total assets, total sales, or market value. Dividend policy in this study was conversely related to business risk of 483 firms listed in Saudi Arabia. It means that larger firms have less reliance on the internally generated funds and therefore are more capable to pay higher dividends. One of the reason is larger companies normally have more assets and greater profits. (Al-Malkawi, Twairesh and Harery, 2013).

In another statement by Al-Nawaiseh (2013), large corporations are more probable to pay dividend to their shareholders so it was concluded as a positive relationship between firm size and dividend policy. Beside of that, Al-Najjar and Hussainey (2010) also supported Mahmoud statement, a positive relationship was expected between firm size and dividend policy among 400 non – financial firms listed in London companies. Large firms may be able to pay higher dividend.

Thanatawee (2011) and Bae, Young and Eun (2010) also supported Al-Najjar and Hussainey argument for the positive correlation between firm size and dividend payouts. This indicates that smaller firms need to maintain their internal cash flow and expand their entire performance by paying lower dividend.

Similarly, Al Shabibi, Ramesh (2011) and Afzal and Sehrish (2010) also exhibited that there were positive and significant relationship between the size of the company and dividend policy. The results of these studies are reinforced to the arguments made by the Al-Malkawi, Twairesh and Harery (2013).

Researchers such as Kania and Bacon (2005) and many others have stated that large companies generally pay greater dividends than the small one. That is because large companies generally have more assets and greater profits, along with more information when compared to small companies so there was positive association between firm size and dividend policy.

On the other hand, according to Saif, Rehman, Khan, and Ali (2013), it stated that larger companies paid less dividend than the small one, as they need plenty of funds to be used as their retained earning, so a negative relationship was created between firm size and dividend policy. More seriously, based on

Wellalage, Fauzi, dan Gaoxiang (2012) discussion, firm size is not statistically important determinants of dividend decision at all.

### 2.3.4 The relationship between leverage and dividend payout ratio

Leverage is a ratio which shows total debt as a percentage of shareholders' funds. The higher the debts cause higher companies' debt. Companies that are in high debt are always more cautious in determining the level of dividend payments, as the companies with high debts tend to fail in fulfilling debt payments. Managers prefer allocate funds to the company's debt payments rather than paying dividends. Therefore, a negative relationship was expected between dividend policy and capital structure. (Al-Malkawi, Twairesh and Harery, 2013).

Ardestani, Basiruddin and Rasid (2013) also found the same results with Al-Malkawi, Twairesh and Harery explanation. The risk associated with high degrees of financial leverage may therefore result in low dividend payments, as firms need to maintain their internal cash flow to pay their obligations rather than paying as dividend to shareholders.

All the companies having high cash flows are less likely to cut off their dividends, and on the other hand high leverage increase the chances to cut the dividends. Firms prefer allocate funds to the company's debt payments rather than paying dividends. Therefore, debt to equity was negatively associated with dividend policy. (Islam, Aamir, Ahmad and Saeed 2012).

Similarly, Afza and Mirza (2011) also found that a negative relationship between leverage and dividend policy. Firms with highly leveraged have to

maintain a reasonably good liquidity in order to pay regular interest and principal as well, therefore, cash dividend is not a good option for such companies, which was in line with the results reported by Ahmed and Attiya and Asif et al (2009).

On the other hand, there was another statement showing a positive association between leverage and dividend policy and it suggests that firms borrow cash to pay dividends. This helps in signaling good news information for investors about a firm's future prospects. (Thanantawee, 2011).

Similarly, Kania and Bacon (2005) stated that financial leverage has a positive relationship to the dividend policy. The study concludes that companies that were registered in Thailand tend to pay dividends by using debt.

### 2.3.5 The relationship between growth and dividend payout ratio

Generally, Firms with high growth and investment opportunities will require the internal funds to finance those investments resulting in the reluctance of tendency to pay dividend. Thus, it can be said that firm growth declines the likelihood to pay dividends, which indicated that the firm's growth opportunities to be negatively related to dividend payouts. (Al-Malkawi, Twairesh and Harery, 2013).

Hossain, Sheikh and Akterujjaman (2013) also found the same outcome with Al-Malkawi, Twairesh and Harery (2013) statement. A growing firm needs further investments and resolves to retain its earnings for funding the expansion programmes, thereby paying low dividend.

Another explanation by Afza and Mirza (2011) also affirmed companies with high growth opportunities tend to pay lower dividends as they need to use the

available funds to stabilize their investments. Hence, that there was a negative relationship between investment opportunities and dividend payouts.

Al-Najjar and Hussainey (2010) also regarded that the higher the firm's growth opportunities, the more tendency for funds to finance their expansion, and firms are more likely to retain earnings than paying them as dividends. Thus, there was a negative association between dividends and growth opportunities.

Researchers such as Al-Shabibi and Ramesh (2011), Bae, Young and Eun (2010), Al-Malkawi (2007) and many others, have found a dramatic negative relationship between dividends and firms' investment. These indicate that firms with greater size are unlikely to have investment opportunities so the company will be able to meet its operational needs and also have more funds to be distributed to the owners in the form of dividends.

It was further supported by Kania and Bacon (2005) discussion which state that firms with greater growth opportunities will absolutely need plenty of funds as their retained earnings, so companies will indeed find the less tendency of paying dividend.

In contrast, there were few studies showed that positively association between growth and dividend policy. These researchers are Islam, Ahmad and Aamir (2012), Imran (2011), Al- Shubiri (2011), Hellstrom, Inagambaev (2012) and many others. They suggested that firms with lower share turnover are more likely to pay the dividends and vice versa. External financing is greater needed by the highly growth firms as firms can increase their reputation by issuing the

dividends. Thus, most of the companies have established good reputation among the shareholders.

### 2.3.6 The relationship between ownership structure and dividend payout ratio

2.3.6.1 Government Shareholdings

Having the government as a firm's largest shareholder may influence its dividend policy. Several studies, such as Al-Malkawi (2007) and Al-Malkawi, Twairesh and Harery (2013) documents, state-controlled firms were more likely to pay higher dividends as the more payment of dividend may assist to alleviate agency problems indeed.

2.3.6.2 Institutional shareholdings

Institutional investors play an important role in monitoring corporate managers, therefore reducing agency costs. Numerous studies, Pornsit, Jang, Young (2010) and Al-Malkawi, Twairesh and Harery (2013), Saif, Rehman, Khan, and Ali (2013) have discussed that institutional investors tend to invest in dividend-paying stocks. Thus, a positive relationship between institutional ownership and dividend payouts was expected. In contrast, institutional shareholdings hold a high proportion of capital was generally less marketable and their investment would have a long term horizon. Thus, these investors are asking managers to focus on the performance of the company in the long term. Therefore, according to

Hadani et al. (2011) and Al-Abbas (2009) found that the monitoring by the largest institutional shareholder was negatively related to dividend payouts.

### 2.3.7 The relationship between assets structure and dividend payout ratio

In general, firm's assets are divided into short – term (current) long - term (fixed) assets. Factors that affect dividend policy of using a sample of 483 firms listed in Saudi Arabia companies predict that there was a negative association between assets structure and dividend payout ratio, as firms with high level of tangibility intend to incline debt capacity, which mean less reliance on retained earnings. Therefore, there will be more cash to be paid as dividend. (Al-Malkawi, Twairesh and Harery, 2013).

Aivazian *et al,* 2003 also regarded that there was a negative correlation between company's assets structure and dividend payout. The reason stated is when more tangible assets are provided then there will be fewer short – term assets that are available for banks to lend against. In addition, it is further supported by Al-Najjar and Hussainey (2010) statement which predict that a negative relationship between assets tangibility and dividend payouts. However, according to Al-Shabibi and Ramesh (2011), Al-Ajmi and Hussain (2011), Ahmed and Javid (2008) studies, showed that there were no directional predictions on the association between assets structure and dividend payout ratio. They should depend on debts, either it's short – term or long – term assets.

In contrast, another assertion suggested that tangibility and dividend payouts should be positively correlated, as firms with high level of tangibility intend to

have greater tax benefits without relying on debt, so it might be inclined in dividend payout. (Al-Shabibi and Ramesh, 2011).

Another discussion by Al-Najjar (2011) with positively association between asset structure and dividend policy, the more tangible the firm's assets are, the more these assets can be used as collateral so it would be inclined in dividend payout.

### 2.3.8 The relationship between firm's age and dividend payout ratio

Firm's age may be said as the maturity of companies. In general, mature companies are likely to be in low – growth phase with less investment. According to Al-Malkawi, Twairesh and Harery (2013), dividend payout should be positively related to the firm's age, as older companies do not have incentives to build up which cause lower growth and few capital expenditures, so they were unlikely to retain their earnings and would pay more dividends to its shareholders.

It is also reinforced by Afza (2011), mature companies are more profitable as as the investment opportunities of older companies normally begin to shrink and pace of its growth becomes slow, hence companies start generating larger amount of free cash flows. Ultimately it enters into maturity phase in which the return on investment is close to the cost of capital and its cash free cash flows are high. Thus, they would be more probable to pay more dividends to its shareholders.

However, according to Chiraz and Anis (2012) and Ahmad-Zaluki et al., (2011) argument, negative relationship were expected between company age and dividend payouts. One of the reason is firms with older age are generally

characterized by a low level of information asymmetry. Therefore it has less need and opportunity to engage in earnings management and results in lower dividend paid.

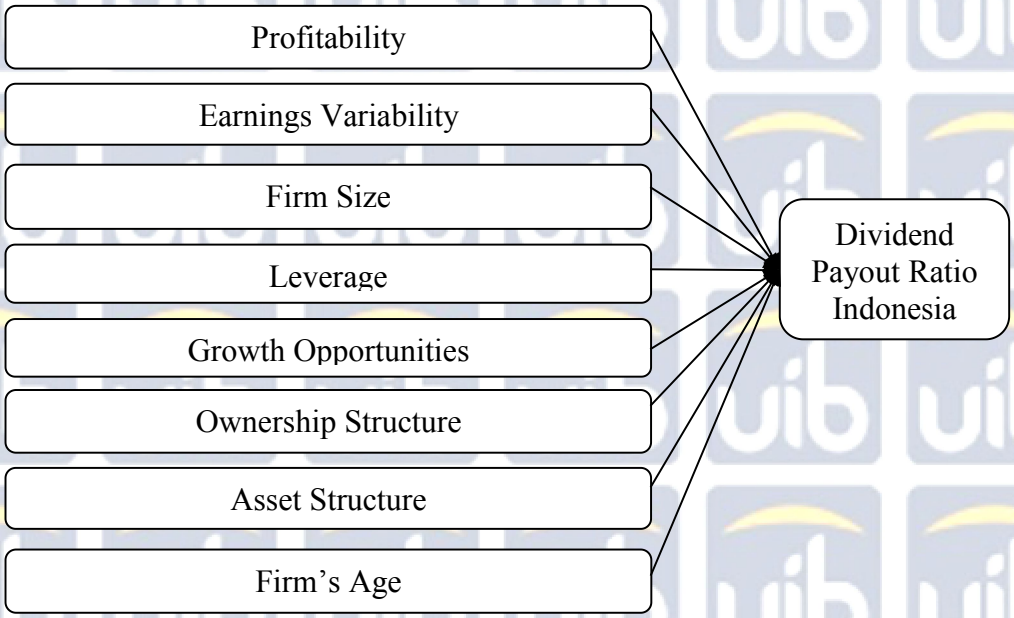
Other researchers, such as Adizes (2004) and Leonard-Barton (1992) also declared that old age may make knowledge, skills and expertise obsolete and induce company to decay. Therefore, a negative association is created between company age and dividend payout.

## 2.3 Model Research and Hypothesis Form

According to these researches, two kinds of variables are provided, Dependent and Independent Variable. Dependent Variable includes dividend payout ratio whereas Independent Variables includes Profitability, Earning Variability (Risk), Firm Size, Leverage, Growth, Asset Structure, Firm's Age and Ownership Structure. The difference between this study and previous studies is that in this study, the financial statements of the Indonesia Stock Exchange in effecting dividend policy are examined. That's why it is an essential part to have a further discuss. The research model is constructed by the researcher can be seen in the Figure below:

**Figure 2.11**

Factors influence Tangibility, Firm Size, Profitability, and Current Ratio to Leverage in Indonesia Companies




Based on the framework of the above model, the hypothesis for this study is:

$H_1$: Profitability has a positively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.

$H_2$: Earnings Variability has a negatively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.

$H_3$: Firm Size has a positively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.

$H_4$: Leverage has a negatively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.

$H_5$: Growth opportunity has a negatively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.

$H_6$: Ownership Structure has a positively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.

$H_7$: Asset Structure has a positively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.

$H_8$: Firm's Age has a positively significant effect towards dividend payout ratio in companies which listed in Indonesia Stock Exchange.