

Effect of Managerial Ownership, Financial Leverage, Profitability, Firm Size, and Investment Opportunity on Dividend Policy and Firm Value

Dwita Ayu Rizqia* Siti Aisjah Sumiati

Postgraduate Program, Faculty of Economics and Business, Brawijaya University, Jalan MT. Haryono 165 Malang, East Java, Indonesia 65145 Tel. +62341-562154

* E-mail of the corresponding author: ryzqia@gmail.com

Abstract

This study aim was to examine and analyzing effect of managerial ownership, financial leverage, profitability, firm size, and investment opportunity on dividend policy, and effect of all that variables on firm value. Populations were all manufacturing companies that go-public and listed at Indonesian Stock Exchange during 2006-2011 periods and a sample was decided by census method. Research results showed that managerial ownership and investment opportunity affect on dividend policy, while financial leverage, profitability, and firm size has no effect on dividend policy. These results further explained that research variables, namely managerial ownership, financial leverage, profitability, firm size, investment opportunity, and dividend policy affect firm value.

Keywords: : Dividend policy, Firm value, Firm characteristics, Indonesia Stock Exchange

1. Introduction

Manufacturing industry was one of most develop industries and providing largest contribution to Gross Domestic Product (GDP) of Indonesia compared to some other industries. However, manufacturing sector growth declined slowly during 2006-2009 (Anonymous, 2011). Phenomenon a contribution decline on GDP during 2006-2009 will hinder goal to increase firm value. This was proved from lower firm value during 2006-2009. In these conditions, firms need to make informed decisions related to various corporate policies, one of them was dividend policy. Dividend policy was a policy relating to firm's decision to share income available in form of dividends to shareholders or hold it as retained earnings for future investment (Weston and Copeland, 1992). From manufacturing industry, there were 15 companies committed to distribute dividends for 5 consecutive years during 2007-2011. Most of 15 companies decided large percentage of retained earnings. This shows management decisions making influenced by distribution and growth of company profitable investment opportunities.

Investors invest their funds in firm's stock to make a profit. Expected profit by investors and prospective investors were future shares results namely dividends and capital gains (Wild, Subramanyam, and Halsey, 2004). Firm's commitment to pay dividend should enhance shareholder value. This shows company believes that information within dividend can provide a positive signal to investors.

Research on dividend policy shows different result among researchers (Gordon, 1959; Miller and Modigliani, 1961; Litzenberger and Ramaswamy, 1979) and then ultimately increases the long series of dividend puzzle (Black, 1976). Firm's efforts to enhance firm value were directly or through dividend policy. It requires firm to review factors that reflecting firm characteristics and firm performance as consideration for investors and prospective investors to invest in stocks.

Theoretically, several factors of firm characteristics can affect corporate dividend policy and firm value, both directly and indirectly. They were managerial ownership, financial leverage, profitability, firm size, and investment opportunity (Weston and Copeland, 1992; Chen and Steiner, 1999, 2000; Iturriaga and Sanz, 2001; Brigham and Houston, 2004; Al-Najjar, 2009; Al-Shubiri, 2011). This study purpose was to examine and analyzing effect of managerial ownership, financial leverage, profitability, firm size, and investment opportunity on dividend policy, also to test and analyzing effect of five variables and dividend policy on firm's value listed on Indonesian Stock Exchange.



2. Theory Review, Hypothesis, and Conceptual Model

2.1 Relationship of Managerial Ownership, Dividend Policy, and Firm Value

Managerial ownership was result of firm's efforts realization to reduce agency problem. It will reduces manager chance to act adversely and detrimental to shareholders interests. According to Keown et al. (2005), dividends payment was not direct result of monitoring process that closer to investment management. Rozeff (1982) found high dividends payment reduce conflicts between managers and shareholders. Thus, the higher managerial ownership, the lower corporate dividend policy (Allie et al., 1993; Mollah, 2011).

H1a: Managerial ownership negatively affect on dividend policy of manufacturing companies at Indonesia Stock Exchange

Firm's efforts to reduce agency problems by monitoring mechanisms through managerial ownership and dividend policies can indirectly increase firm value. That was because managerial ownership creates alignment between managers and shareholders interests. Manager will seek to increase firm value that reflected firm's stock price (Jensen and Meckling, 1976). Thus, the managerial ownership can increase firm value (McConnell and Servaes, 1990; Chen et al., 2003).

H2a: Managerial ownership has a positive effect on firm value of manufacturing companies at Indonesia Stock Exchange

2.2 Relationship of Financial Leverage, Dividend Policy, and Firm Value

Firm's efforts to reduce agency conflicts between managers and shareholders by dividends payment can create conflict between shareholders or managers with lender. That was because by increasing dividend payout, the higher company chances to use external funding (Chrutchley and Hansen, 1989). Relationship between financial leverage with dividends policy arises from restrictive debt covenants (including restrictions of dividends payment) of creditor to protect its interests. (Taranto, 2002). Thus, the higher company's financial leverage, the lower companies dividend policy (Jensen et al., 1992).

H1b: Financial leverage negatively affect on dividend policy of manufacturing companies at Indonesia Stock Exchange

Financial leverage can be used as firm monitoring tool to lower agency problems. This can increase firm value because agency problems can become a barrier to increase its firm value (Jensen, 1986; Rao, 1995:35). In addition to monitoring mechanism, financial leverage can increase firm value through tax deductible (Modigliani and Miller, 1963) and also signaling (Fama and French, 1998). Thus, increasing financial leverage at an optimal point it will increase firm value (Davies et al., 2005; Mak and Kusnadi, 2005).

H2b: Financial leverage has a positive effect on firm value of manufacturing companies at Indonesia Stock Exchange

2.3 Relationship of Profitability, Dividend Policy, and Firm Value

Dividends were part of company net income that distributed to shareholders. The higher profitability, the higher firm cash flow, and firm were expected to pay higher dividends (Jensen et al., 1992, Chang, 2009; Abor and Bokpin, 2010).

H1c: Profitability has a positive effect on dividend policy of manufacturing companies at Indonesia Stock Exchange

Optimal dividend payments can be seen as a profitability signal in future (Bhattacharya, 1979; Miller and Rock, 1985). Firms that able to generate stable and increasing profits can be seen as a positive signal by investors related to firm performance, so that a positive response will increase firm value. Thus, higher profitability can increase firm value (Chen and Steiner, 2000; Iturriaga and Sanz, 2001).

H2c: Profitability has a positive effect on firm value of manufacturing companies at Indonesia Stock Exchange

2.4 Relationship of Firm Size, Dividend Policy, and Firm Value

Firm size affects on corporate dividend policy. Firm size will determine achievement of profitability and stability, easier access to capital markets, and smaller transaction costs when compared to small and new companies (Weston and Copeland, 1992). Large companies tend to rate higher dividends than smaller and new companies.



Lloyd et al. (1985) shows that firm size plays a role to explain dividend payout ratio of company. Easy access to various external funding, profitability and stability were records that owned by large corporations. Positive response from investors can increase firm value (Suranta and Midiastuty, 2003).

H1d: Firm size has a positive effect on dividend policy of manufacturing companies at Indonesia Stock Exchange

H2d: Firm size has a positive effect on firm value of manufacturing companies at Indonesia Stock Exchange

2.5 Relationship of Investment Opportunity, Dividend Policy, and Firm Value

Investment opportunities were an investment decision from combination of assets in place and options on future investment in projects that provide a positive net present value, and may affect firm value (Myers, 1977). Related to dividend policy, a firm that has a lot of profitable investment opportunities tends to decide low dividend payout ratio target, and vice versa (Myers and Majluf, 1984; Langsen, 1988; Brigham and Houston, 2004).

H1e: Investment opportunity has a negative effect on dividend policy of manufacturing companies at Indonesia Stock Exchange

According to Fama (1978), firm value solely influenced by investment opportunities. Myers (1977) describes investment opportunities to firm goals achievement. Firms with large investment opportunities shows that firm has a bright future prospect. They will have positive influence on firm's stock price. Thus, the higher investment opportunities, the higher firm value (Iturriaga and Sanz, 2001; Davies et al., 2005).

H2e: Investment opportunity has a positive effect on firm value of manufacturing companies at Indonesia Stock Exchange

2.6 Relationship of Dividend Policy and Firm Value

Most companies that committed to distribute dividends to shareholders will believe that dividend policy can affect value of firm's stock price. That was because dividend reflects firm's prospects to get profit in future. Dividend policy was expected to gives a positive signal regarding to firm condition. Thus, dividend policy can increase firm value (Baker et al., 1985; Baker and Powell, 1999; Suranta and Machfoedz, 2003; Omran and Pointon, 2004; Dasilas et al., 2009, Mai, 2010).

H3: Dividend policy has a positive effect on firm value of manufacturing companies at Indonesia Stock Exchange

Based description above, conceptual model of study can be described as follows.

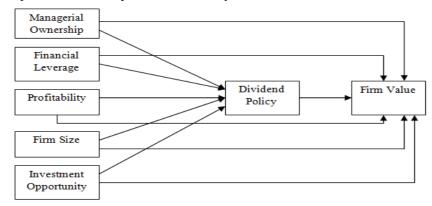


Figure 1: Research Model

3. Research Methodology

3.1 Data

This research was explanatory with quantitative approach. It uses secondary data from manufacturing company that go-public at Indonesia Stock Exchange (IDX) and Indonesian Capital Market Directory (ICMD). Secondary data used were annual financial statements issued by company from 2006-2011 periods.



3.2 Population and Sample

These study populations were manufacturing company listed on Indonesia Stock Exchange (IDX) during 2006-2011 periods. This was census research or saturated sampling. All members of population become sampled because population was relatively small. Amount saturated samples obtained were 15 manufacturing companies.

3.3 Research Variables and Measurement

This research use endogenous and exogenous variables. Endogenous variable were dividend policy variables (Y1) and firm value (Y2). Meanwhile, five exogenous variables were managerial ownership (X1), financial leverage (X2), profitability (X3), firm size (X4), and investment opportunity (X5). Here was operational definition of each variable used in the study.

3.3.1 Endogenous Variables

a. Firm Value

Firm value was value of a business entity to generate profits in future that reflected at market value. Firm value as measured by Tobin's q can be formulated as follows (Chung and Pruitt, 1994; Rose, 2005; Benson and Davidson III, 2009):

Tobin's Q = (Market value of equity + Book value of equity): Book value of assets

b. Dividend policy

Dividend policy was a policy-making related to net income allocation that derived from company operating activities to be distributed in form of dividends to shareholders or were held as retained earnings. Dividend policy as measured by dividend payout ratio (DPR) can be formulated as follows (Al-Najjar, 2009).

DPR_{it} = Dividend per share it: Earning per share it

3.3.2 Exogenous Variables

a. Managerial ownership

Managerial ownership describes shares ownership by company's management. Managerial ownership (Mown) can be formulated as follows (Chrutchley and Hansen, 1989; Handoko, 2002):

Mown = Number of shares owned by commissioners and directors: Total common shares outstanding

b. Financial leverage

Financial leverage was firm's ability to use fixed financial obligations in order to maximize profit changes on per share income of common stock. Financial leverage measured by debt to total assets ratio, i.e. ratio that measures the extent assets company has been financed by debt. Debt to total assets ratio can be formulated as follows (Aivazian et al., 2003; Al-Najjar, 2009; Al-Shubiri, 2011):

DAR = Total debt: Total assets

c. Profitability

Profitability was a management effectiveness measurement based on returns from sales and investment. Profitability was measured by return on assets which reflects firm's ability to use assets resources to generate profits. Return on assets can be formulated as follows (Chen and Steiner, 1999; Abor and Bokpin, 2010; Mehta, 2012):

ROA = Net income: Total assets

d. Firm size

Firm size was a level to shows a firm development within business. Firm size can be formulated as follows (Al-Najjar, 2009; Al-Shubiri, 2011):

Firm size = Ln total assets

e. Investment opportunity

Investment opportunity was an investment decision in form of a combination of assets in place and future investment options in a profitable project. Investment opportunity was measured by capital expenditure to total assets (CAPX / A) that can be formulated as follows (Allie et al., 1993; Iturriaga and Sanz, 2001; Saputro, 2003; Chang, 2009):

 $CAPX / A = (book value of fixed assets_t + book value of fixed assets_{t-1})$: Total assets



3.4 Data Analysis Method

Based on research objectives, conceptual framework and research hypotheses, it appears that relationship between whole variables of this research suggests a causal and recursive relationship. Therefore, analytical technique used was path analysis. Data were analyzed by SPSS (Statistical Package for Social Sciences).

Research problems that analyzed by path analysis can be a structural model with two step function equations that can be formulated as follows:

Model 1

Dividen $_{it} = \rho 1$ Managerial $_{it} + \rho 3$ Leverage $_{it} + \rho 5$ Profitability $_{it} + \rho 7$ Size $_{it} + \rho 9$ Investment $_{it} + \epsilon 1$ Model 2

Firm value $_{it} = \rho 2$ Managerial $_{it} + \rho 4$ Leverage $_{it} + \rho 6$ Profitability $_{it} + \rho 8$ Size $_{it} + \rho 10$ Investment $_{it} + \rho$ 11 Dividen $_{it} + \epsilon 2$

Description: ρ_{it} = Standardized coefficient or path coefficients

4. Result and Discussion

4.1 Hypothesis Testing

• Hypothesis Testing for First Model

Based on hypothesis testing for first equation model, path coefficient analysis was follows:

Dividen = -0,244 Managerial - 0,092 Leverage + 0,200 Profitability + 0,125 Size - 0,223 Investment

• Hypothesis Testing for Second Model

Based on hypothesis testing for second equation model, path coefficient analysis was follows:

Firm Value = 0,130 Managerial + 0,124 Leverage + 0,854 Profitability + 0,161 Size + 0,174 Investment + 0,133 Dividen

Table 1 presented result summary the hypothesis testing of direct relationships.

Table 1. Hypothesis Testing Results

Description	Coeff.	Sig.	Description
Managerial ownership (X1) → Dividend policy (Y1)	-0,244*)	0,046	Hypothesis (H1a) accepted
Financial leverage (X2) → Dividend policy (Y1)	-0,092	0,403	Hypothesis (H1b) rejected
Profitability (X3) \rightarrow Dividend policy (Y1)	0,200	0,082	Hypothesis (H1c) rejected
Firm size $(X4) \rightarrow Dividend policy (Y1)$	0,125	0,292	Hypothesis (H1d) rejected
Investment opportunity $(X5) \rightarrow Dividend policy (Y1)$	-0,223*)	0,048	Hypothesis (H1e) accepted
Managerial ownership $(X1) \rightarrow Firm value (Y2)$	0,130*)	0,011	Hypothesis (H2a) accepted
Financial leverage (X2) \rightarrow Firm value (Y2)	0,124*)	0,007	Hypothesis (H2b) accepted
Profitability (X3) \rightarrow Firm value (Y2)	0,854*)	0,000	Hypothesis (H2c) accepted
Firm size $(X4) \rightarrow$ Firm value $(Y2)$	0,161*)	0,001	Hypothesis (H2d) accepted
Investment opportunity $(X5) \rightarrow Firm value (Y2)$	0,174*)	0,000	Hypothesis (H2e) accepted
Dividend policy $(Y1) \rightarrow Firm value (Y2)$	0,133*)	0,008	Hypothesis (H3) accepted

Description: *) Significant at alpha 5%

4.2 Discussion

Table 1 shows significance of results that obtained for each variable relationships or hypotheses. These results can be described as follows.

- 4.2.1 Effect of Managerial Ownership on Dividend Policy and Firm Value
- H1a: Managerial ownership has a negative effect on dividend policy

Table 1 shows significance of managerial ownership on dividend policy was 0,046 or less than 0.05, and coefficient of -0.244. These results show that managerial ownership has negative effect on dividend policy, therefore, hypothesis 1a was accepted.

The higher managerial ownership, management will distribute greater profits as dividends to shareholders. This was because value of retained earnings and dividend payout related to executive compensation. Bhattacharyya et al. (2008) stated that retained earnings were positively related to executive compensation, while dividend payout was negatively related to executive compensation. This results support Jensen et al. (1992), Allie et al. (1993), Chen and Steiner (1999), and Mollah (2011) which states that higher managerial ownership will decrease agency



problems, and also lowering firm's dependence to dividend as monitoring mechanism.

• H2a: Managerial ownership has a positive effect on firm value

Table 1 shows the managerial ownership significance on firm value was 0.011 or less than 0.05, and coefficient of 0.130. These results show that managerial ownership has a positive effect on firm value, therefore, hypothesis 2a was accepted.

Agency theory underlies relationship between managerial ownership and firm value, where agency problem will inhibit firm to achieve goal to maximize firm value (Rao, 1995). These results showed that managerial ownership has a positive effect on firm value. This supports the role of management stock ownership to align interests between management and shareholders (Jensen and Meckling, 1976).

This study result support McConnell and Servaes (1990), Chen and Steiner (1999), Chen et al. (2003) that managerial ownership has a positive effect on firm value. In addition, this results also were consistent with Morck et al. (1988), Chen and Steiner (2000), Iturriaga and Sanz (2001), Davies et al. (2005), and Hamin (2005) which suggested a non-monotonic relationship between managerial ownership and firm value, where at a certain level of management ownership, managerial ownership can increase firm value and also lowers firm value . Based on data from 2006-2010, managerial ownership was under 5%, and manufacturing company managed to increase its value.

- 4.2.2 Effect of Financial Leverage on Dividend Policy and Firm Value
- H1b: Financial leverage has a negative effect on dividend policy

Table 1 shows financial leverage significance on policy dividend was 0.403 or more than 0.05, and coefficient of -0.092. This results show that financial leverage has no effect on dividend policy, therefore, hypothesis 1b was rejected.

Financial leverage relationships with dividend policy was based on agency theory, where firm's efforts to minimize agency problems can be done with a bonding mechanism that increasing debt amount or increasing dividends (Jensen and Meckling, 1976). However, financial leverage has no effect on dividend policy. It suggests that firm does not use bonding mechanism to reduce agency problem. Financial constraints did not affect corporate dividend decisions. That was because firm can continues to distribute dividends if future dividends was paid from profits that earned after signing of loan agreement, and net working capital was not under a predetermined amount (Weston and Copeland, 1992). This finding does not support agency theory underlying relationships in financial leverage and dividend policies (Jensen et al., 1992, Al-Najjar, 2009, and Al-Shubiri, 2011). Adversely, these results were consistent with Aivazian et al. (2003) which states that financial leverage does not affect dividend policy of firm.

• H2b: Financial leverage has a positive effect on firm value

Table 1 shows financial leverage significance on firm value was 0.007 or less than 0.05, and coefficient of 0.124. This results show that financial leverage has a positive effect on firm value, therefore, hypothesis 2b was accepted.

Financial leverage can become external monitoring tool in effort to achieve firm's goal to maximize firm value by reducing managers opportunity to act contrary to shareholders interests (Jensen, 1986). Besides as a monitoring tool, financial leverage may also provide a signal about firm's performance (Myers, 1977; Ross, 1977) and a tax deductible (Miller and Modigliani, 1963). During period of high investment growth, in addition to use internal funding, firm also use external funding in form of debt. This was done to improve monitoring activities to prevent managers use excess cash of firm (free cash flow) on activities that do not add value to firm or to invest excess cash in less profitable investment. These findings support Mak and Kusnadi (2005) and Davies et al. (2005) who stated financial leverage (debt to total assets) may be used to increase firm's value

- 4.2.3 Effect of Profitability on Dividend Policy and Firm Value
- H1c: Profitability has a positive effect on dividend policy

Table 1 shows profitability significance on dividend policy was 0,082 or bigger than 0.05, and coefficient of 0.200. These results show that profitability does not affect dividend policy, therefore, hypothesis 1c was rejected.

Profitability level using return on assets (ROA) measurements shows firm's ability to utilize its assets sources efficiently to generate profits. Based on signaling theory, firms that obtain high profitability will tend to distribute a greater share of profits in form of dividends to shareholders (Al-Najjar, 2009; Al-Shubiri, 2011). However, profitability level did not affect on dividend policy during 2006-2010 due value retained earnings of



manufacturing companies tend to increase every year. These conditions show that firms prefer to keep most of profits rather than increasing its dividend when firm has higher profit.

Higher retained earnings show that firm prioritizes funding needs from internal financing through retained earnings. These findings support the pecking order theory (Myers and Majluf, 1984). This finding supports Chen and Steiner (1999) and Mehta (2012), which states the level of profitability does not affect dividend policy. These results do not support the signaling theory underlying the relationship of profitability and dividend policy.

• H2c: Profitability has a positive effect on firm value

Table 1 shows profitability significance on firm value was 0.000 or less than 0.05, and coefficient of 0.854. This results show that profitability has a positive effect on firm value, therefore, hypothesis 2c was accepted.

Relationship between profitability and firm value was based on signaling theory, if firm can generate stable and higher profits, then it was seen as a positive signal by investors related to firm performance. These results showed a positive effect of profitability on firm value. This finding supports Chen and Steiner (2000) and Iturriaga and Sanz (2001) which states higher profitability (return on assets) can increase firm value. This results support the signaling theory underlying relationship between profitability and firm value.

- 4.2.4 Effect of Firm Size on Dividend Policy and Firm Value
- H1d: Firm size has a positive effect on dividend policy

Table 1 shows firm size significance on dividend policy was 0.292 or bigger than 0.05, and coefficient of 0.125. This results show that firm size does not affect on dividend policy, therefore, hypothesis 1d was rejected.

Relationship between firm size and dividend policy was based on transactional cost theory. Transactional costs arise as a result of firm's efforts to reduce agency problem through dividend policy. Agency cost can be reduced, but firm's efforts to minimize agency cost can increase flotation costs (Rozeff, 1982; Lloyd et al., 1985). The trade-off between agency cost and flotation cost eventually became basis of relationship between firm size and dividend policy. However, quite a high level of debt makes firm to have easy access to external financing but may not necessarily increase dividend policy to shareholders, so firm's size does not affect dividend policy. Most of manufacturing firms have debt levels above 30 percent, which makes firm more cautious in making decisions related to external funding. This shows that firm has with high debt level will be more susceptible to financial distress. Even if a firm has easy access to external financing, firm can not take risk. It supports research of Allie et al. (1993) which states that firm's size does not affect dividend policy. Thus, transaction cost theory that underlies relationship between firm size and dividend policy has not been proven.

• H2D: Firm size has a positive effect on firm value

Table 1 shows firm size significance on firm value was 0.001 or less than 0.05, and coefficient of 0.161. This results show that firm size has a positive effect on firm value, therefore, hypothesis 2d was accepted.

The larger firm, the higher firm value. Theoretically, it was based on ease access of large firms to get external funding. Transaction costs incurred will be less when compared to small firms (Al-Malkawi, 2008; Al-Najjar, 2009; Mollah, 2011). Moreover, large firms tend to attract attention and spotlight. Firms will be encouraged to apply good structures and mechanisms in firm management. Based on research results, firm size has a positive effect on firm value. This results support Suranta and Midiastuty (2003) which showed a positive relationship between firm size and firm value.

- 4.2.5 Effect of Investment Opportunity on Dividend Policy and Firm Value
- H1e: Investment opportunity negatively affect on dividend policy

Table 1 shows investment opportunity significance to dividend policy was 0.048 or less than 0.05, and coefficient of -0.223. These results show that investment opportunity negatively affect dividend policy, therefore, hypothesis 1e was accepted.

Pecking order theory underlies relationship investment opportunity and dividend policy. High investments opportunities make firms prefer to withhold income or reduce the distribution of dividends to shareholders (Adelegan, 2002). This shows external financing more expensive than internal financing (Myers and Majluf, 1984). This results show that compared with external financing usage, company prefers to fund its investment activities largely with internal funding. This study results support Allie et al. (1993) and Chang (2009) which states that high profitable investment opportunity makes firms choose not to pay dividends or decrease dividends that distributed to shareholders. Thus, the pecking order theory underlying the relationship between investment opportunity and dividend policy was proven.



• H2e: Investment opportunity positively affects on firm value

Table 1 shows investment opportunity significance on firm value was 0.000 or less than 0.05, and coefficient of 0.174. These results show that investment opportunity has a positive effect on firm value, therefore, hypothesis 2e was accepted.

Investment opportunities were one indication a firm still exists in competition between firms within the industry. Investment was a very important decision for firm because it was directly related to firm objectives achievement to maximize firm value (Myers, 1977; Fama, 1978) . Results show investment opportunity (capital expenditure to total assets) has a positive effect on firm value. This shows consideration of investment opportunity quality in capital expenditure decisions making could determine stock price reactions (Chung et al, 1998). This finding supports Iturriaga and Sanz (2001) and Davies et al. (2005) that higher investment opportunity enhances shareholder value. Thus, signaling theory that underlying relationship between investment opportunity and firm value was proven.

- 4.2.6 Effect of Dividend Policy on Firm Value
- H3: Dividend policy has a positive effect on firm value

Table 1 shows dividend policy significance on firm's value of 0.008 or less than 0.05, and coefficient of 0.133. These results showed that of dividend policy has positive effect on firm value.

A relationship between dividend policy and firm value was based on information asymmetry. Investor does not have all information that owned by management. Any policy that made may reflect information about condition and company performance (Miller and Rock, 1985). The study's findings show signal of cash flows and future earnings prospects was contained in dividend policy information that causes firm value increases. This study result support Baker and Powell (1999), Suranta and Machfoedz (2003), Omran and Pointon (2004) that dividend policy has a positive effect on firm value. Thus, signaling theory arising from existence of information asymmetry between investors and management related to dividend policy was proved.

5. Conclusion

This study considers several factors that could influence decision making of dividend policy and affecting firm's efforts to maximize firm value in manufacturing companies listed on Indonesia Stock Exchange. These factors were managerial ownership, financial leverage, profitability, firm size, and investment opportunity.

Managerial ownership and investment opportunity negatively affect on dividend policy. Meanwhile, financial leverage, profitability, and firm size did not affect on dividend policy. This shows that manufacturing companies listed on Indonesia Stock Exchange use internal funding as a major funding to finance operations and investment activities. In addition, firm makes efforts to minimize agency problems, this result showed that manufacturing companies listed on Indonesia Stock Exchange was more like internal monitoring mechanism through compensation provision of stock ownership by management rather than bonding mechanism or by increasing company's debt.

Managerial ownership, financial leverage, profitability, firm size, investment opportunity, and dividend policy has a positive effect on firm value. This shows that increase or decrease in value of managerial ownership, financial leverage, profitability, firm size, investment opportunity, and dividend policy can changes firm value of manufacturing companies listed on Indonesia Stock Exchange.

This study result provides implications and contributions to business practice, including manufacturing companies listed on Indonesia Stock Exchange. They committed to payout dividend policy, to consider stability of its dividend payment policy. Corporate dividend policy brings information about firm's prospects for profit growth in future. Such information may invite a response from investors, so that will affect firm value. In addition, investors and prospective investors, when investing in a company, especially a company that was committed in dividends, consider rightly information regarding share ownership by management (managerial ownership), debt policy, profitability, firm size, and investment opportunities, because these all factors determine whether firm value increases or not. Further research can be done on a wider industrial sector so that research results can be generalized, and be done on latest research period. In addition, insignificant research results can be revisited, because there were inconsistent results among researchers.



References

- Abor, J. & Bokpin, G.A.. (2010). Investment opportunities, corporate finance, and dividend payout policy: evidence from emerging markets. *Studies in Economics and Finance*, **27**(3),180-194.
- Adelegan, O. (2002). The pecking order hypothesis and corporate dividend pay out: nigerian evidence. African *Review of Money Finance and Banking*, 75-94.
- Aivazian, V., Booth, L., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from u.s. firms?. *The Journal of Financial Research*, **26**(3): 371-387.
- Allie, K.L., Khan, A.Q. & Ramirez, G.G. (1993). Determinants of corporate dividend policy: a factorial analysis. *The Financial Review*, **28**(4): 523-547.
- Al-Malkawi, H.A.N. (2008). Factors influencing corporate dividend decision: evidence from jordanian panel data. *International Journal of Business*, **13**(2): 178-195.
- Al-Najjar, B. (2009). Dividend behaviour and smoothing new evidence from jordanian panel data. *Studies in Economics and Finance*, **26**(3): 182-197.
- Al-Shubiri, F.N. (2011). Determinants of change, dividend behavior policy: evidence from the amman stock exchange. Far East Journal of Psychology and Business, 4(2): 1-15.
- Anynomous. (2011). Laporan analisis makro ekonomi triwulan III. [Online] Available: http://www.google.com (October 26, 2012).
- Baker, H.K. & Powell, G.E. (1999). How corporate managers view dividend policy. Quarterly Journal of Business and Economics, 38(2): 17-35.
- Baker, H.K., Farrely, G.E., & Edelman, R.B. (1985). A survey of management views on dividend policy. Financial Management, 14(3): 78-84.
- Benson, B.W. & Davidson III, W.N. (2009). Reexamining the managerial ownership effect on firm value. Journal of Corporate Finance, 15: 573-586.
- Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. Bell Journal of Economics, 10: 259-270.
- Bhattacharyya, N., Mawani, A. & Morrill, C.K.J. (2008). Dividend payout and executive compensation: theory and canadian evidence. Managerial Finance, 34(8): 585-601.
- Black, F. (1996). The dividend puzzle. The Journal of Portfolio Management: 8-12.
- Brigham, E.F. & Houston, J.F. (2004). Essensials of financial management, (11th ed). Cengage Learning Asia Pte
- Chang, C.L. (2009). Dividend payout ratio, investment opportunities, and the pecking order theory: evidence from taiwan. The Business Review, 13(1): 304-312.
- Chen, C.R. & Steiner, T.L. (1999). Managerial ownership and agency conflict: a non linear simultaneous equation analysis of managerial ownership, risk taking, debt policy, and dividend policy. The Financial Review, 34: 119-136.
- Chen, C.R. & Steiner, T. L. (2000). Tobin's q, managerial ownership, and analyst coverage : a non linear simultaneous equations model. Journal of Economics and Business, 52: 365-382.
- Chen, C.R., Guo, W. & Mande, V. (2003). Managerial ownership and firm valuation: evidence from japanese firms. Pacific-Basin Finance Journal, 11: 267-283.
- Chung, K.H. & Pruit, S.W. (1994). A simple approximation of tobin's q. Financial Management, 23(3): 70-74.
- Chung, K.H., Wright, P., & Charoenwong, C. (1998). Investment opportunities and market reaction to capital expenditure decision. Journal of Banking and Finance, 22: 41-60.
- Crutchley, C. E. & Hansen, R.S. (1989). A test of the agency theory of managerial ownership, corporate leverage, and corporate dividends. Financial Management/Winter: 36-46.
- Dasilas, A., Lyroudi, K. & Ginoglou, D. (2009). The impact of dividend initiations on greek listed firms' wealth and volatility across information environtments. Managerial Finance, 35(6): 531-543.
- Davies, J.R., Hillier, D. & McColgan, P. (2005). Ownership structure, managerial behavior, and corporate value. Journal of Corporate Finance, 11: 645-660.



- Fama, E.F. (1978). The effects of a firm's investment and financing decisions on the welfare of its security holders. The American Economic Review, 68(3): 272-284.
- Fama, E.F. & French, K.R. (1998). Taxes, financing decision, and firm value. The Journal of Finance III: 819-843.
- Gordon, M.J. (1959). Dividends, earnings, and stock prices. The Review of Economics and Statistics, 41(2): 99-105
- Hamin, H. (2005). Tingkat kepemilikan manajerial dan nilai perusahaan: bukti empiris pada perusahaan publik di indonesia. Simposium Riset Ekonomi II: 1-16.
- Handoko, J. (2002). Pengaruh agency cost terhadap kebijakan dividen perusahaan-perusahaan go public di bursa efek jakarta. Jurnal Widya Manajemen dan Akuntansi, 2(3): 180-190.
- Iturriaga, F.J.L. & Sanz, J.A.R. (2001). Ownership structure, corporate value, and firm investment: a simultaneous equations analysis of spanish companies. Journal of Management and Governance, 5: 179-204.
- Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3(4): 305-360.
- Jensen, M.C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. The American Economic Review, 76(2): 323-329.
- Jensen, G.R., Solberg, D.P. & Zorn, T.S. (1992). Simultaneous determination of insider ownership, debt, dan dividend policies. Journal of Financial and Quantitative Analysis, 27(2): 247-263.
- Keown, A.J., Martin, J.D., Petty, J.W. & Scott, D.E. (2005). Financial Management:Principles and Applications, (10th ed). Pearson Education, Inc.
- Langsen, A.L. (1988). Dividend payout policy related to tobin's q-ratio. Financial Management, 17(4): 11-13.
- Litzenberger, R.H. & Ramaswamy, K. (1979). The effect of personal taxes and dividends on capital asset prices: theory and empirical evidence. Journal of Financial Economics,7: 163-195.
- Lloyd, W.P., Jahera, J.S. & Page, D.E. (1985). Agency cost and dividend payout ratios. Quarterly Journal of Business and Economics, 24(3): 19-29.
- Mak, Y.T. & Kusnadi, Y. (2005). Size really matters: further evidence on the negative relationship between board size and firm value. Pacific-Basin Finance Journal, 13: 301-318.
- McConnell, J.J. & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. Journal of Financial Economics, 27: 595-612.
- Mehta, A. (2012). An empirical analysis of determinants of dividend policy-evidence from the UAE companies. Global Review of Accounting and Finance, 3(1): 18-31.
- Miller, M.H. & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. The Journal of Business, 34(4): 411-433.
- Miller, M.H. & Rock, K. (1985). Dividend policy under asymetric information. The Journal of Finance, 40(4): 1031-1051.
- Modigliani, F. & Miller, M.H. (1963). Corporate income taxes and the cost of capital: a correction. The American Economic Review, 53(3): 433-443.
- Mollah, S. (2011). Do emerging market firms follow different dividend policies? Studies in Economics and Finance, 28(2): 118-136.
- Morck, R., Shleifer, A. & Vishny, R.W. (1988). Management ownership and market valuation: an empirical analysis. Journal of Financial Economics, 20: 293-315.
- Myers, S.C. (1977). Determinants of corporate borrowing. Journal of Financial Economics, 5: 147-175.
- Myers, S.C. & Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13: 187-221.
- Omran, M. & Pointon, J. (2004). Dividend policy, trading characteristics and share prices: empirical evidence from egyptian firms. International Journal of Theoretical and Applied Finance, 7(2): 121-133.
- Rao, R.K.S. (1995). Financial management concept and application, (3th ed). International Thomson Publishing.



- Rose, C. (2005). Managerial ownership and firm performance in listed danish firms: in search of missing link. European Management Journal, 23(5): 542-553.
- Ross, S.A. (1977). The determination of financial structure: the incentive-signalling approach. The Bell Journal of Economics, 8(1): 23-40.
- Rozeff, M.S. (1982). Growth, Beta, and agency costs as determinants of dividend payout ratios. The Journal of Financial Research, 5(3): 249-259.
- Saputro, J.A. (2003). Analisis hubungan antara gabungan proksi investment opportunities set dan real growth dengan menggunakan pendekatan confirmatory factor analysis. Jurnal Riset Akuntansi, 6(1): 69-92.
- Suranta, E. & Machfoedz, M. (2003). Analisis struktur kepemilikan, nilai perusahaan, investasi, dan ukuran dewan direksi. Simposium Nasional Akuntansi, 6: 214-226.
- Suranta, E. & Midiastuty, P.P. (2003). Analisis hubungan struktur kepemilikan managerial, nilai perusahaan, dan investasi dengan model persamaan linear simultan. Jurnal Riset Akuntansi Indonesia, 6(1): 54-68.
- Taranto, M.A. (2002). Capital structure and market reactions to dividend initiation. Journal of Financial Economics, 5: 187-192.
- Weston, J.F. & Copeland, T.E. (1992). Managerial finance, (9th ed). The Dryden Press.
- Wild, J.J., Subramanyam, K.R. & Halsey, R.F. (2004). Financial statement analysis, (8th ed). The McGraw-HillCompanies,Inc.