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Abstract

Purpose – The purpose of this paper is to analyze the variables that significantly affect dividend policy.
Design/methodology/approach – This research uses a type of comparative causal research (causal-comparative research), where the fact or event is identified as an influenced variable (dependent variable) and the variables that influence (independent variable) are investigated. In this study, the authors want to examine the effect of collateralizable assets, growth in net assets, liquidity, leverage and profitability of dividend policy by using quantitative approach. The data used are secondary data obtained from Indonesia Stock Exchange website with website address: www.idx.co.id.
Findings – The results showed that collateralizable assets have a negative, but not significant, effect on dividend policy. This shows that the high collateralizable assets do not affect the policy of the dividend of manufacturing companies. The second variable, growth in net assets, has a negative and significant effect on dividend policy. This shows that the higher growth in net assets will lower the dividend policy of manufacturing companies. Furthermore, the results show that liquidity has a negative and significant effect on dividend policy. This indicates that higher liquidity will lower the dividend policy of manufacturing companies. Furthermore, result that leverage has a negative and significant effect on dividend policy is obtained. This suggests that the higher leverage will lower the dividend policy of the manufacturing company. And lastly, profitability has a negative, but not significant, effect on dividend policy. This shows that high profitability does not affect dividend policy of manufacturing companies.
Originality/value – The authors contribute to prior research by providing the empirical evidence on the impact of collateralizable assets, growth in net assets, liquidity, leverage and profitability on dividend policy in Indonesia market as an emerging market.

Keywords Profitability, Leverage, Liquidity, Collateralizable asset, Growth in net asset, Dividend policy
Paper type Research paper

1. Introduction

The capital market is the market for various long-term financial instruments in the form of equity and debt that have a maturity of more than one year. In capital market activity, investors have expectations of the investments they make, namely, in the form of dividends and capital gains. According to Gordon and Lintner (Meissner and Brigham, 2001, p. 67), the investors are much more appreciative of the expected income of dividends than the expected income from capital gains. In addition, the component of the dividend yield is less than the capital gain component in the expected total revenue equation. In addition, dividends are a fixed income element in the current year, whereas capital gains are uncertain.

The company seeks to increase the value of the company through the payment of dividends and keeps the owner's equity growth by retaining the profit available to the shareholders into retained earnings. The company seeks an optimal dividend policy that maximizes the corporate value. According to Meissner and Brigham (2001), the optimal dividend policy is a dividend policy that can create a balance between current dividends and future growth that can maximize the company's stock price.

The dividend policy is the company's management policy to determine the profit available to shareholders, which is paid to shareholders in the form of dividends or is held in order to finance future investments. If management decides to pay dividends, then the amount of profit being held is reduced, so that the source of internal funding will also be

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reduced. However, if management decides not to pay dividends, it will increase funding from internal funding sources.

In practice, firms tend to pay dividends with relatively stable amounts or they increase the amount regularly. This is because investors tend to prefer stable dividends and see dividend increases as a good sign that firms have good prospects and vice versa. This makes the company happier to take the safe way that does not lower the dividend payout.

The increasing dividend (bigger) by the company will be considered as a positive signal for investors to the future development of the company and vice versa, whereas if the dividend is decreased or even terminated, it is considered a negative signal for investors to the future development of the company. "The fact that the market capital punishes dividend cuts with large stock price reductions" (Jensen, 1986, p. 3).

Based on the background description of the problem, this study aims to analyze the variables that significantly affect dividend policy. The variables to be tested for influence on dividend policy include the following: collateralizable assets, growth in net assets, liquidity, leverage and profitability.

2. Literature review

Dividends are the share of profits earned by the company to shareholders that are proportional to the number of shares held. Dividends can be either cash or stock. Stice *et al.* (2005) in Suharli (2007) defined dividends as profit sharing with company shareholders in proportion to the number of shares held by their respective owners. Dividends distributed to shareholders may be expressed as a percentage of the value of the shares or amount of money per share owned.

The dividend policy is a decision to reinvest profits from the operating results of the company or to distribute them to shareholders (investors). According to Sadalia (2010), the payment of cash dividends to shareholders is decided by the board of commissioners. The board of commissioners generally holds a meeting to determine the amount of dividends to be paid, evaluating the financial position of the past period and the position to come.

The dividend policy is the policy or the decision whether the profits earned by the company are distributed to shareholders as dividends or retained by the form of retained earnings for future investment financing (Weston and Thomas, 1992 in Dewi, 2008a, b). This policy will involve two parties with different interests: the first party is the shareholders and the second party is the management of the company itself.

The dividend policy has an influence on shareholders and companies paying dividends. Shareholders generally want a relatively stable dividend distribution, because it reduces the uncertainty of expected returns from their investments and also increases shareholder confidence in the company so that share value can also increase.

The dividend policy is reflected in its dividend payout ratio (DPR), which is the percentage of profit distributed in the form of cash dividends. Retained earnings (retained earnings) are one of the most important sources of funds to finance corporate growth. If a company executes a policy to share cash dividends, less funds are used to make an investment. This causes the company's growth rate in the future to be low, thus affecting the stock price. To avoid it, the company needs to establish an optimal dividend policy to create a balance between the dividends at this time and future growth so as to maximize the stock price.

Collateralizable assets are assets that can be pledged to creditors to guarantee corporate loans. One of the factors affecting long-term financial decisions is the availability of collateral assets. Weston and Brigham (2001, p. 309) stated that in general long term, secured debt will be cheaper than unsecured debt. In addition, annual financing decisions will be influenced by the amount of newly acquired assets available to be collateral for new bonds.

The high assurance of assets owned by the company will reduce the conflict of interest between shareholders and creditors so that the company can pay dividends in large amounts. Conversely, the lower assurance of the company's assets will increase the conflict of interest between shareholders and creditors so that creditors will prevent companies from financing large dividends to shareholders, fearing their receivables will not be paid (Latiefasari, 2011).

High corporate growth will reduce the share of dividends distributed to shareholders. This is because the company will use most of its profits to finance its growth, so that the remaining profit to be distributed as dividends will be even smaller. Increased corporate asset growth requires substantial funds in the future, so managers prefer to withhold profits into internal funds and use those funds to invest in profitable projects rather than sharing them as dividends to shareholders.

The faster the growth rate of a company, the greater is the need for future funding to finance its growth. The company will usually be more eager to withhold its opinion than to be paid as a dividend by considering its cost limits. The higher the retained earnings for the company's growth, the smaller are the dividends to be paid. The company growth proxy used in this research is growth in net assets.

The company's liquidity is the company's ability to meet its short-term obligations on time. The liquidity ratio represents the company's ability to meet its obligations in the short term and to meet sudden cash needs (Weygandt *et al.*, 2011, p. 668). Weston and Thomas (1992) stated that retained earnings are not usually stored in cash but are invested in factories, equipment, inventories and other assets, so the company may not pay cash dividends because it requires substantial funds to finance its investment.

The dividend for the firm is cash out, the stronger the cash position and the overall liquidity of the company, the greater is the company's ability to pay dividends (Riyanto, 2001 in Marlina and Danica, 2009, p. 11). According to Suharli (2007, p. 12), only companies that have good liquidity will distribute profits to their shareholders in cash. Instead, the company's management will use that potential to pay off its short-term debt or to finance its operations.

Dividend distribution is influenced by the debt policy (Wahidahwati, 2002). In the case of high debt, the payment of fixed expenses will be in the form of interest expense, resulting in decrease of the level of DPR. In other words, when the company has a high rate of debt use, then the company tends to pay low dividends. If the company has limited retained earnings, then the company will tend to utilize debt for financing or investment. The study was also supported by Nurfauziah (2007) and Nuringsih (2005a, b).

Profitability is the ability of a company to earn profit, so it has an influence on dividend policy. If the company has a high level of profitability, then it will get a high profit too, and ultimately the profits available to be distributed to shareholders will be even greater. The availability of more profits to shareholders will result in even greater dividend payout to the shareholders or the allocation for retained earnings. Research conducted by Hanafi (2004, p. 378) explained that profitability is one of the factors affecting dividend policy. This is because dividends are the net profit earned by the company; therefore, dividends will be distributed if the company makes a profit. The profit that is worth sharing to shareholders is profit after interest and taxes. The greater the profit earned, the greater is the company's ability to pay dividends.

Payment of dividends to shareholders depends on the policies of each company management. In determining the size of the dividends paid, the management should take into account the interests of shareholders and the interests of the company. In addition to observing the interests of shareholders and the interests of the company, management must also consider the factors that affect the determination of the size of the payment of dividends.

There are several gaps in the previous research that serve as a foundation to conduct this research and become the focus of this research. Especially, there is still a variation of findings toward dividend policy. The variation of this finding inspires researchers to develop result variation of this research by investigating the impact of the asset used, clean asset development, liquidity, leverage and profitability of dividend policy in Indonesia market as an appeared target. First, some of the previous studies have partially found that collateralizable asset has a positive and significant influence on the dividend policy, for example the research studies by Carvajal, C.G. (2015), Henrekson, M. and Stenkula, M. (2017), Sanusi, N.A.B.T. (2014). However, other studies have found that collateralizable asset has no influence on the dividend policy, that is Mollah, S. (2011), Abor, J. *et al.*, (2009), Baker, H.K. and Powell, G.E. (2012). This object becomes the first gap research. Second, a number of studies carried out by Hussainey, K. *et al.* (2011), Pourheydari, O. (2009), Baker, H.K. and Powell, G.E. (2012), Hal-Twaijry, A.A. (2007) have found that growth in net assets has a significant and positive influence on the dividend policy, but other studies done by Abor, J. and Fiador, V. (2013), Al-Malkawi, A.N. (2007) have found the opposite: the growth in net asset has a significant and negative influence on the dividend policy. This object becomes the second gap research. However, some of the relationships between variables are liquidity to dividend (by Baker, H.K. and Powell, G.E., 2012; Al-Najjar, B. and Hussainey, K., 2009; Al-Deehani, T.M., 2003; Shamsabadi, H.A., *et al.*, 2016; Arko, A.C. *et al.*, 2014; Michiels, A. *et al.*, 2017), leverage to dividend policy (by Al-Twaijry, A.A., 2007; Arko, A.C. *et al.*, 2014; Atmaja, L.S., 2010; Baker, H.K. and Powell, G.E., 2012; Lee, M.L. *et al.*, 2012; Pourheydari, O., 2009) and the influence of profitability on dividend policy (by Pourheydari, O., 2009; Al-Malkawi, H.A.N., 2007; Al-Ajmi, J. and Hussain, H.A., 2011; Shamsabadi, H.A. *et al.*, 2016; Arko, A.C. *et al.*, 2014; Abor, J. and Bokpin, G.A., 2010), which do not show a research gap because all research results above show a significant and positive relationship. Actually, there is not a study that comprehensively observes the influence of collateralizable assets, growth in net assets, liquidity, leverage and profitability of dividend policy, especially in manufacturing company in Indonesia Stock Exchange (ISE).

3. Development of empirical hypothesis

The relationship of collateralizable assets to the dividend policy

Titman and Wessels (1988) argued that firms with more collateral assets have a smaller agency problem between creditors and shareholders because assets can serve as collateral for debt. Considering that collateralizable assets function to minimize agency problem, it is expected that the amount of collateralizable assets owned by the company will affect the dividend policy. Wahyudi and Baidori (2008) in their study found that collateralizable assets have a positive influence on the company's dividend payout policy.

The high collateralizable assets will reduce the conflict of interest between shareholders and creditors so that the company can pay dividends in large amounts. The higher the collateralizable assets the higher the level of protection the creditor accepts their payments. This will reduce the agency cost between shareholders and creditors. This is inversely proportional to Pujiastuti (2008) which found no significant effect between collateralizable assets and the dividend policy.

The relationship of growth in net assets to the dividend policy

Wahyudi and Baidori (2008) stated that growth in total assets will lower dividend payout to shareholders because company managers take advantage of the company's profit for internal funding activity of investment opportunities, so the greater growth in total assets will result in lower dividend payout.

Company growth is the company's ability to develop the company from time to time or maintain its company position. Company growth can be seen from the total assets of the company: the greater the assets owned by the company, the greater will be operating results and profits. The growth of the company has a positive relationship with profit because the profit can be used as a measuring tool to see whether a company is experiencing good growth or it is experiencing a setback. The growth of the company has a negative effect on the dividend policy because a firm with a good growth rate tends to use its earnings for investment funding, which means that the proportion of profit used for dividend payments is lower.

Wahyudi and Baidori (2008) revealed that company growth has a negative and significant effect on the dividend policy. However, different results are proposed by Sulistyowati (2010), Gugler (2003) and Latiefasari (2011), stating that company growth has no significant effect on the dividend policy.

The relationship of liquidity to the dividend policy

The ratio of liquidity is one of the ratios that shows how the company is able to meet its current liabilities with its current assets. A high level of liquidity can illustrate good company performance because with a good liquidity level, it will be easier for the company to fulfill the obligation of dividend payment (Sartono, 2001, p. 114). The higher the level of liquidity, the greater will be the ability of firms to pay dividends to shareholders. The result of research from Trisna Dewi and Panji Sedana (2013) and Adnyana and Bajra (2013) stated similar thing from above explanation where liquidity level have a positive influence on dividend payout: the greater the level of liquidity, the greater will be the company's ability to pay dividends.

Martin *et al.* (1993), Sartono (2000), Riyanto (2001), Sutrisno (2002), Banerjee *et al.* (2004), Hanafi (2004) and Nurnajamuddin (2004) stated that the liquidity of a company is an important factor that must be considered before the company makes a decision to determine the amount of dividends to be paid to shareholders.

The relationship of leverage to the dividend policy

Leverage is the company's ability to meet its financial obligations, both short and long term (Wiagustini, 2010, p. 76). The higher leverage ratio indicates that the obligation to be fulfilled by the company is greater, and the lower leverage ratio indicates that the company is able to meet the funding needs of the company with its own capital. The high liabilities to be paid will reduce the profit earned by the company, which, of course, will affect the dividend payout. The higher the debt, the lower the dividend rate will be. In line with research conducted by Dewi (2008a, b), Lopolusi (2013), Fira (2009), Franklin (2010), Sunarya (2013), Suharli (2006) and Attina (2011) stated that debt has a negative effect on dividend policy: the high level of debt owned by the company will reduce the dividend distribution.

In contrast, Setyaningrum (2009) argued that debt policy has no significant effect on DPR. Debt-to-equity ratio (DER) is the ratio used to measure the level of leverage (debt use) to total shareholders' equity owned by the company. This ratio shows the amount of capital used to pay the debt. The greater this ratio, the greater will be the company's liabilities. The lower this ratio, the higher will be the company's ability to fulfill its obligations.

The relationship of profitability to the dividend policy

The profitability ratio measures the income or success of a company's operations over a period of time (Weygandt *et al.*, 2011, p. 671). The dividends paid by the company come from a portion of the net profit earned by the company; therefore, dividends will be distributed when the company makes a profit (Sudarsi, 2002, p. 77). The ability of firms to earn a profit is a key indicator of the company's ability to pay dividends; therefore, profitability is the most decisive factor in dividend distribution (Litner, 1956 in Sunarto and Andi, 2003, p. 2).

Dividend policy cannot be separated from profitability because dividend distribution is highly dependent on the company's profit. The dividend distribution is derived from the profits earned by the company after fulfilling its obligations, either in the form of interest or tax. The higher the net profit earned by the company, the greater will be the dividend to be paid. According to Linther in Smoothing Theory, the dividend policy depends on current profits and dividends of the previous year. This is in line with research conducted by Sunarya (2013), Fira (2009), Suharli (2006), Attina (2011), Amidu (2006) and Wicaksana (2012), stating that profitability variables have a significant positive effect on the dividend policy.

Hypothesis

Based on the abovementioned theoretical studies, the following hypotheses are proposed:

H1. Collateralizable assets have a positive effect on the dividend policy (firms with higher collateralizable assets will have higher dividend payouts).

H2. The growth in net assets negatively affects the dividend policy (firms with lower growth in net assets will have higher dividend payouts).

H3. Liquidity has a positive effect on the dividend policy (firms with higher liquidity will have higher dividend payouts).

H4. Leverage has a negative effect on the dividend policy (firms with lower leverage will have higher dividend payouts).

H5. Profitability has a positive effect on the dividend policy (firms with higher profitability will have higher dividend payouts).

4. Research method

This research uses a type of comparative causal research (causal-comparative research), where the fact or event is identified as an influenced variable (dependent variable) and the variables that influence (independent variable) are investigated (Indriantoro, 2012). In this study, the authors want to examine the effect of collateralizable assets, growth in net assets, liquidity, leverage and profitability of dividend policy by using quantitative approach.

The data used are secondary data obtained from ISE website with website address: www.idx.co.id. In this study, the object of research used is all manufacturing companies listed on the ISE period 2011–2015. The data used meet the following criteria:

(1) the relevant company published audited public financial reports and was listed on the BEI from 2011 to 2015;

(2) the relevant company obtained consecutive earnings in 2011–2015; and

(3) the relevant company distributed consecutive dividends in 2011–2015.

Based on the purposive sampling method, 90 manufacturing companies listed on ISE fulfill these three criteria, thereby becoming a research sample.

Variables and operational definition

In this study, the dependent variable is dividend policy, which uses DPR proxy, and the independent variables are collateralizable asset, growth in net assets, liquidity, leverage and profitability:

(1) Dividend policy is a plan of action to be followed in making dividend decisions on manufacturing companies listed on the ISE during the period 2011–2015.

The dividend policy in this study is proxied using DPR. DPR is the ratio between dividends paid with net income of the company:

$$\text{DPR} = \frac{Dividend\_per\_share\_(DPS)}{Earning\_per\_share\_(EPS)}.$$

(2) Collateralizable assets (COLLAS) are the amount of assets that can be guaranteed by the company to the creditors. The higher collateralizable assets will reduce the conflict of interest between shareholders and creditors. Collateralizable assets can be calculated by the following formula (Showalter, 1999):

$$Collateralizable\ assets = \frac{Total\_Aset\_Tetap}{Total\_Aset}.$$

(3) The growth in net assets shows asset growth where assets are used for the company's operational activities. The growth in Net Assets can be calculated by the following formula:

$$Growth\ In\ Net\ Assets = \frac{Total\_Assets - Total\_Assets_{t-1}}{Total\_Assets_{t-1}}.$$

(4) The liquidity ratio is the ability of the company to meet its short-term liabilities through a certain amount of cash owned by the company. Liquidity in this study is proxied by using current assets:

$$Current\ Ratio = \frac{Current\_Assets}{Current\_Liabilites}.$$

(5) According to Riyanto (1997), one of the ratios included in the solvency or leverage ratio is the DER. Leverage in this research is proxied by using DER. This ratio is the ratio of total debt to total equity (its own capital), which shows the ability of the company's equity to pay off all its debts. DER can be calculated by the following formula:

$$DER = \frac{Total\_Hu\ \tan\ g}{Total\_Ekuitas}.$$

(6) Profitability is something the company acquires at expenses incurred, which can mean the difference between the company's revenue and the costs incurred in one accounting period. Profitability in this study is proxied using return on assets (ROA). ROA can be measured using the following formula:

$$ROA = \frac{Net\_Income}{Total\_Assets}.$$

Empirical model

Models to be analyzed in research are as follows:

$$DPR = \beta_0 + \beta_1 COLLAS + \beta_2 Growth + \beta_3 CR + \beta_4 DER + \beta_5 ROA + \varepsilon,$$

where DPR is the dividend payout ratio; β_0 is the constant term; $\beta_i; i = 1, \ldots, k$ is the regression coefficient; COLLAS is the collateralizable assets; Growth is the growth in net assets; CR is the current ratio; DER is the debt-to-equity ratio; ROA is the return on assets; and e is the error term.

5. Results and discussion

Model assumption tests statistical analysis utilization, which means multiple regression analysis needs the fulfillment of several assumptions, that is residual normality, non-heteroscedasticity of residual variant, non-multicollinearity and linearity. Tests all of these assumptions are presented in Table I. First, normality test with Kolmogorov–Smirnov test with a significance value of $0.2 > 0.05$ shows that residual normality assumption is fulfilled. Second, the test of non-heteroscedasticity of residual variant uses Breuch–Pagan test with significance value of $0.001 < 0.05$, which shows that non-heteroscedasticity assumption is not fulfilled, meaning that there is a problem within residual variant heteroscedasticity. Therefore, it needs parameter estimation techniques except for ordinary least square (OLS), that is weighted least square (WLS). Advanced testing result uses WLS with significance value (Breuch–Pagan test) of $0.311 > 0.05$, which shows that non-heteroscedasticity assumption of residual variance is fulfilled. Third, non-multicollinearity testing uses the variance inflation factor (VIF) test with all VIF values < 5, which shows that non-multicollinearity assumption is fulfilled. Lastly, linearity assumption testing uses Ramsey RESET test with significance value > 0.05, indicating that the linearity assumption is fulfilled. Therefore, all assumption fulfilled indicates multiple regression can be utilized, with parameter estimation option is WLS, given the use of OLS shows non-heteroscedasticity assumption is not fulfilled.

The research data were processed using multiple linear regression analysis with WLS estimate. The results of multiple linear regression calculations are shown in Table II. All independent variables have negative regression coefficients that indicate the negative influence of each independent variable (dividend policy, collateralizable assets, growth in net assets, liquidity, leverage and profitability) on the dividend policy.

The simultaneous test through F test is conducted to test whether all independent variables included in the model have a mutual influence on the dependent variable. Table I

Assumption	Test	Characteristics	Criteria	Research result
Normality	Kolmogorov–Smirnov test	Sig = 0.200	Sig > 0.05	Assumption fulfilled
Non-Heteroscedasticity (OLS)	Breuch–Pagan test	Sig = 0.001	Sig > 0.05	Assumption not fulfilled
Non-heteroscedasticity	Breuch–Pagan test	Sig = 0.311	Sig > 0.05	Assumption fulfilled
Non-multicollinearity	Variance inflation factor	VIF X1 = 3.11 VIF X2 = 1.22 VIF X3 = 2.87 VIF X4 = 1.33 VIF X5 = 1.99	VIF < 5	Assumption fulfilled
Linearity	Ramsey RESET test	Sig 0.822	Sig > 0.05	Assumption fulfilled

Table I. Assumption fulfillment in regression analysis

		Coef.	SE	t-stat.	p-value
$\hat{\beta}_0$	Constant	5.377	1.269	4.238**	0.000
$\hat{\beta}_1$	Collateralizable assets	–1.392	1.186	-1.174^{ns}	0.254
$\hat{\beta}_2$	Growth in net assets	–6.400	3.084	–2.075*	0.050
$\hat{\beta}_3$	Current ratio	–0.823	0.268	–3.067**	0.006
$\hat{\beta}_4$	Debt-to-equity ratio	–1.150	0.397	–2.900**	0.009
$\hat{\beta}_5$	Return on assets	–1.487	2.118	-0.702^{ns}	0.490

Notes: F-stat. = 3.274* (p-value = 0.024) R^2 = 0.438 R^2_{adj} = 0.304. *,**Significant at 5 and 1 percent levels, respectively. ns = statistically not significant at 5 percent level

Table II. Results of multiple regression analysis

shows the results of the hypothesis with the F test; it is known that the value of F arithmetic is 3.274 with the significance level 0.024, so it can be concluded that collateralizable assets, growth in net asset, liquidity, leverage and profitability simultaneously affect dividend policy.

Partial test through t-test is done to test whether the independent variables influence the dependent variable individually. Table I also presents t-test results of each independent variable to the dependent variable. Here are the results of partial testing for each of the independent variables:

(1) p-value for collateralizable assets coefficient of 0.254 is greater than 0.05, indicating that H_o is accepted. The results show that collateralizable assets do not have a statistically significant influence on the DPR. The value of t arithmetic is −1.174, indicating that collateralizable assets do not influence dividend policy (DPR) statistically. This result is not in accordance with the research hypothesis that collateralizable assets have a positive effect on the dividend policy period 2011–2015. This shows that the collateralizable assets do not affect the size of the dividends distributed companies each year. The reason for not finding significant influence is the low level of bonds payable in Indonesia. Based on this, it can be interpreted that the conflict between shareholders and bondholders in Indonesia is relatively low or nearly absent (Santoso and dan Prastiwi, 2012).

(2) p-value for growth in net assets coefficient of 0.050 is less than equal to 0.05, indicating that H_o is rejected. The t-value of −2.075 indicates that growth in net assets negatively affects the dividend policy (DPR). This effect is statistically significant at the 5 percent level. This result is in accordance with the research hypothesis that companies with lower net profit growth were in the 2011-2015 period. The results show that the higher the growth rate of company assets, the lower will be the possibility of the company distributing dividends, because the funds used for pay dividends are transferred to the addition of company assets. These results support the results of research conducted by Amidu and Abor (2006), which stated a negative relationship between growth and DPR.

(3) p-value for liquidity coefficient (CR) of 0.006 is smaller than 0.01, indicating that H_o is rejected. This effect is statistically significant at a 1 percent level. The t-value of −3.067 indicates that liquidity (CR) has a negative effect on dividend policy (DPR), meaning that firms with lower liquidity will have higher dividend payouts. This result is not in accordance with the following hypothesis: the results show that the liquidity is too high, indicating the ineffectiveness of companies in using working capital, which is differentiated by the proportion of current assets that are not profitable, such as an excessive amount of inventory compared with estimated future sales levels so that the inventory turnover rate is low and indicates an over-investment in the inventory or the presence of large receivable balances that may be difficult to collect and the impact on dividend payouts to smaller investors (Pasadena, 2013). High corporate liquidity does not guarantee the availability of high internal funds as well, which may be due to other instruments such as inventories and receivables so that liquidity has no effect on the size of the dividends.

(4) p-value for leverage coefficient (DER) of 0.009 is smaller than 0.01, indicating that H_o is rejected. This effect is statistically significant at a 1 percent level. The value of t arithmetic is −2.900, which indicates that leverage (DER) has a negative effect on the dividend policy (DPR). This result is in accordance with the hypothesis that firms with lower leverage will have higher dividend payouts during the period 2011–2015. The results show that the higher the leverage of the company, the smaller will be the

possibility of companies to pay dividends to shareholders. Companies with high debt levels tend to have low agency costs because the company is more focused on repayment of principal debt as well as interest expense incurred due to the debt. This causes the company to hold dividends in the company rather than to distribute to investors. The results of this study are in line with the research by Jannati (2010), which stated that the higher the level of debt, the lower will be the dividend distributed by the company.

(5) p-value for profitability coefficient (ROA) of 0.490 is greater than 0.05, indicating that H_0 is accepted. These results show that profitability does not have a statistically significant effect on the DPR. The value of t arithmetic is −0.702, indicating that profitability (ROA) has a negative effect, but not significant, on the dividend policy (DPR). This result is not in accordance with the hypothesis that firms with higher profitability will have higher dividend payouts. The results show that it may happen if the company chooses to pay dividends with a fixed amount, no matter if the profitability level of the company does not comprise the amount of dividends paid to shareholders. The results of this study support the research conducted by Damayanti and Achyani (2006), who found that the profitability variable has no significant effect on the dividend policy.

The goodness of fit of model can be observed from the coefficient of determination (R^2), which measures the model's ability in explaining variation of dependent variable (Ghozali, 2013, p. 97). The greater the value of the coefficient of determination, the greater will be the contribution of all independent variables in influencing the variation or rise and fall of the dependent variable. Table I shows that the coefficient of determination (R^2) is 0.438 or 43.8 percent. This shows that the model's ability to explain variation of dependent variable is 43.8 percent, that is, the five free variables (collateralizable assets, growth in net assets, liquidity, leverage and profitability) affect 43.8 percent dividend policy variables, whereas the remaining 56.2 percent are influenced by other variables outside the model in this study.

6. Conclusions and recommendations

This study aims to determine the effect of collateralizable assets, growth in net assets, liquidity, leverage and profitability on thedividend policy at manufacturing companies listed on the ISE period 2011–2015. The results showed that collateralizable assets have a negative, but not significant, effect on the dividend policy. This shows that the high collateralizable assets do not affect the policy of the dividend of manufacturing companies. The second variable, growth in net assets, has a negative and significant effect on dividend policy. This shows that the higher growth in net assets will lower the dividend policy of manufacturing companies. Furthermore, the results show that liquidity has a negative and significant effect on dividend policy. This indicates that higher liquidity will lower the dividend policy of manufacturing companies. Furthermore, result that leverage has a negative and significant effect on dividend policy is obtained. This suggests that the higher leverage will lower the dividend policy of the manufacturing company. And lastly, profitability has a negative, but not significant, effect on the dividend policy. This shows that high profitability does not affect dividend policy of manufacturing companies.

The theoretical implication of this research is that it can be considered as a research material or advanced research. It can be followed up and developed in the similar research or another research that still relates. Practically, this research can be used as an input for a company or investor in making a dividend policy.

Some follow-up that can be done on the basis of this research is for the investor, who should consider the internal and external factors that affect the company's dividend policy so that it can be used as consideration of the investor in investing funds in the company.

Furthermore, for the company, it is better to consider the decision in dividend policy to reduce the potential of conflict caused by the policy. And further research is expected to extend the study period, adding other factors outside the research, both internal and external, and using other analytical methods such as moderation and intervening.

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