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DIVIDEND POLICY AS A SUPPLY OF COMPANY FINANCIAL FLOWS IN THE PERSPECTIVE OF INFORMATION ASYMMETRY AND OWNERSHIP STRUCTURE

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Keywords: dividend policy, controller shareholder, information asymmetry, agency conflict, institutional ownership.
Abstract: Dividend policy is one of the important factors that supply the company's financial flows and operational activities. This study examines the determinants of dividend policy from the perspective of information asymmetry and institutional ownership. The research sample is the companies listed on Indonesia Stock Exchange that pay dividend consecutively from 2016 to 2020. The method of analysis is SEM-PLS operated with WarpPLS 8.0. The results showed that high information asymmetry between company management and shareholders encourages managers to reduce dividend payments for the purpose of providing company capital and production activities. Furthermore, the existence of institutional ownership supports managers' policies and prefers that company profits should be used to supply capital, not be distributed to shareholders. This finding is consistent with the pecking order theory and also implicates the need for a corporate governance system to be improved to give better protection to the investors.

1 Introduction

Dividend policy is one important decision made by the company. Empirical studies had been carried out to investigate determinant factors that influence dividend policy [1-5]. There are several theories used to explain the behavior of dividend policy. For instance, *pecking order* theory was used by Myers and Majlub [6] to explain that the company shall give priority on internal sources of funding, including retained earnings. This priority convinces the company to choose low dividend policy and to allocate the other proportion for reinvestment. Under *pecking order* theory, low dividend payout is associated with high information asymmetry. The managers hold the cash to finance investment projects and to avoid from generating funds with high capital cost, such as the fund from creditor loan with high interest rate or the fund from the offering of new share at low price [6,7].

Meanwhile, in *trade off* theory, the company is required to take priority on external funding (including loan) to finance the corporate projects at predetermined limitations [6]. However, this priority implicates to high dividend payout. The relationship between high dividend payout and high information asymmetry is compatible with *signaling* theory which says that dividend policy is a signal sent by the company to the market in order to reduce information asymmetry [8]. In this context, *signaling* theory is inherently corresponding to *trade off* theory but not in line with *pecking order* theory. This theoretical gap engenders several empirical studies on the relationship between information asymmetry and dividend policy [9-14]. Three of those studies, respectively Okpara [14], Sahar and Mayahi [11], and Harakeh, et al. [12], are supporting the use of high dividend policy as a signal to reduce information asymmetry. This position is in accord with both *signal* and *trade off* theories. Meanwhile, other empirical studies are more conforming to *pecking order* theory which advocates the negative relationship between information asymmetry and dividend policy [9,10,13].

Another studies were examining the contribution of ownership structure to the effect of information asymmetry on dividend policy. For instance, Lin, et al. [15] found that Chinese companies managed under state ownership control tend to pay dividend higher than the companies that are not controlled by the state. The allocation of shareholding has been reformed which has implicated to the improvement of information transparency and the strengthening of positive effect of information asymmetry on dividend policy. In addition, Lepetit, et al. [16] discovered that European banking companies with concentrated ownership and high information asymmetry are inclined to pay low dividend.

This finding was consistent to *entrenchment* behavior hypothesis which says that the *insiders* (manager or majority shareholder) are prone to pay low dividend to collect lucrative personal gains in the situation of high information asymmetry. The results of the studies above explain that dividend payout can alleviate agency conflict by decreasing information asymmetry. However, the effectiveness of dividend payout is still determined by the controller of corporate ownership. If the controller shareholding is through state ownership, then dividend payout can minimize agency conflict. Conversely, if the ownership is concentrated on majority shareholders, whom are mostly non-state owners, then these shareholders tend to ignore the consequence of high information asymmetry and give more focuses on personal interest.

In the context of Indonesia, the impact of information asymmetry on dividend policy through ownership structure was not yet deeply studied. The latest relevant study was carried out by Setiawan, et al. [17] which the finding was in agreement with Lin, et al. [15]. The finding showed that the company with state ownership has moderated positively the effect of information asymmetry on dividend policy in Indonesia. Most of Indonesian studies only associate the effect of ownership structure on dividend policy and never discuss information asymmetry [5,18-20]. The current research follows up the Indonesian studies by conducting review on the role of ownership structure in responding information asymmetry and in affecting dividend policy. The contribution of this research is on the review of the effect of information asymmetry on dividend policy by using ownership structure as moderation variable. In the context of this research, ownership structure is represented by institutional ownership. The objective of this research is therefore to find out the role of institutional ownership structure in handling information asymmetry and dividend policy.

The result of the current research indicated that information asymmetry has negative effect on dividend policy and also that institutional ownership negatively moderates the effect of information asymmetry on dividend policy. This research is outlined into several sections. First section is for introduction. Literature review and hypothesis development are put in the second section. Subsequently, third section is for method of research. The fourth section is allotted for result and discussion. Finally, the conclusion is placed on the fifth section.

1.1 Information asymmetry and dividend policy

Information asymmetry takes source from a situation when fundamental information concerning the company are not evenly distributed to the investors [21,22]. The lesser fundamental information owned by the investors will impact on the higher risk taken by investors in making investment decision. In this matter, dividend policy can minimize high information asymmetry. Agency theory may reduce information asymmetry between the company and the investor. The managers can do corporate action by stipulating high dividend policy [23]. Under the context of dividend policy, agency theory is in conformity with *trade off* theory [6] and getting a support from *signaling* theory [8]. Anyway, theories that support the role of high dividend policy in decreasing information asymmetry are advocated by further empirical studies done by Okpara [14], Sahar and Mayahi [11], and Harakeh, et al. [12]. The opposite findings declared that high information asymmetry is not followed by high dividend payout [9,10,13]. Low dividend policy signifies that the managers give high priority on personal interest and consider the majority owners as the controller of the company. Related to this statement, the first hypothesis is written as follows:

H1: Information asymmetry affects dividend policy.

1.2 Institutional ownership, information asymmetry, and dividend policy

The companies in the developing countries where the corporate governance system is poor and the protection for shareholders is weak tend to pay lower dividend [24]. In contrast, the companies in the developing countries with good corporate governance system always pay higher dividend [25]. Ownership structure enables the company not only to supervise the managers but also to attain the corporate goals. Therefore, ownership structure affects capital structure composition, profitability and dividend payout [26]. The effect of ownership structure on dividend policy may differ depending on the type of ownership structure and also on whether the corporate governance system is good or bad. The study carried out by Lepetit, et al. [16] documented that the concentrated ownership in European banking companies have impacted low dividend payout during the situation of high information asymmetry. This study also reported that the concentrated ownership has moderated the effect of information asymmetry on low dividend policy. Else, the study conducted by Jory, et al. [27] demonstrated that institutional shareholders with major and stable ownership percentage are preferring the company to pay dividend. Other study was performed by Reyna [28] which the finding indicating that institutional ownership can minimize agency problem through managerial control by maximizing dividend payment. Moreover, Setiawan, et al. [17] confirmed that state ownership leads to higher information asymmetry which must be minimized by high dividend policy. A question emerges, which is, “How is about the private companies that are dominantly held by institutional ownership?” According to the current data, Indonesian institutional ownership is dominated more by the ownership from “corporate” institutions rather than financial organizations (insurance, retirement fund, mutual fund, security and other financial institutions). The dominant shareholders in “corporate” institutions become the majority shareholders, or also called the controller shareholders. Concerning with this matter, the controller shareholders have strong control on the company which implicates to the expropriation over non-controller shareholders. A public opinion says that the

controller shareholders have strong proclivity to scale up their personal gains whereas the non-controller shareholders do not do such thing [29]. Basically, the institutional ownership in Indonesia companies is not willingly minimizing information asymmetry by paying higher dividend, as justified by Jory, et al. [27] and Reyna [28]. Based on the statement above, the second hypothesis is formulated as follows:
H2: Institutional ownership generates high information asymmetry through low dividend policy.

2 Methodology

2.1 *Data of research sample*

The research sample is acquired through non-probability sampling with criteria. This sampling method is also called purposive sampling. The criteria include that (1) the companies were listed on Indonesia Stock Exchange from 2016 to 2020; (2) the companies were distributing dividend periodically and consecutively during the research period; and (3) the companies have an institutional ownership structure. After applying the criteria to the sample, there were 63 companies considered eligible and there were 315 observation data obtained (63 x 5 years).

2.2 *Research variable and measurement*

Dependent variable is dividend policy measured by dividend ratio. Referring to Elmagrhi, et al. [30], the dividend ratio is defined as the comparison between the cash dividend paid and the total assets owned by the company every year during the research period. the Dividend ratio can be calculated by dividing the total cash dividend by total assets.

The Independent variable of this research is information asymmetry, which is rendered as a situation when the fundamental information about the company is not evenly distributed to the investors [21]. According to Sahar and Mayahi [11], the current research measures information asymmetry by using the information of the lowest bid price and the highest ask price in period t (the research period). Information asymmetry is calculated by subtracting the highest ask price from the lowest bid price and then dividing by the addition of the highest ask price the lowest bid price divided by two.

Meanwhile, the moderation variable is institutional ownership which is measured by the percentage of share owned by institutional investors [27,28]. The authors of the current research are wishing to control all variables and therefore, two control variables, namely size and leverage, are used. Size is measured as the result of natural logarithm on total assets whereas leverage is the result of comparison of total liability with total assets [11,19].

2.3 *Analysis model*

Method of analysis is Partial Least Squares (PLS) - Structural Equation Modelling (SEM) which is operated using a program named WarpPLS version 8.0. A hypothesis test is conducted also with this program. Equation model describing research hypothesis is formulated as follows:

$$D = a + b_1IA + b_2 + b_3S + b_4L + b_5IO*D + e \qquad (1)$$

where:
D = dividend ratio, IA = information asymmetry, S = corporate size, L = leverage, and IO = institutional ownership.

3 Result and discussion

3.1 *Descriptive statistic*

The results of descriptive statistic test, which include maximum value, minimum value, mean value, and standard deviation value, are presented in Table 1.

Variable	Min	Max	Mean	SD
Information Asymmetry	0.053	1.653	0.550	0.297
Institutional Ownership	0.045	0.997	0.673	0.186
Dividend Ratio	0.0001	0.4452	0.050	0,081
Size	18.195	33.495	27.641	3.610
Leverage	0.071	0.820	0.397	0.184

Table 1 Descriptive statistic test
Source: Secondary data of Indonesia Stock Exchange are processed

Following the contents of Table 1, information asymmetry has mean value of 0.550. This result signifies that there is a gap between perceived corporate performance (as perceived by investors) and actual corporate performance. The gap is in the range of 55.5%. The minimum value and the maximum value of information asymmetry are 0.053 and 1.653. The standard deviation value of this variable is 0.297. The value of standard deviation is smaller than mean value (0.297<0.550), which indicates that data are not varying and not distributed.
Institutional ownership has a mean value of 0.673, which explains that all companies in the research sample are owned in the majority by institutional ownership, precisely over 50% or 67.3% on average. The minimum value and the maximum value of institutional ownership are 0.045 or 4.5% and 0.997 or 99.7%. The deviation standard value of this variable is lower than mean value (0.186<0.673), which denotes that data are less varying but closer to the mean value.

The dividend ratio has a mean value of 0.050. This result affirms that on average, the company distributes cash dividends for 5% of asset value. The minimum value and the maximum value of dividend ratio are 0.0001 and 0.445. The deviation standard value of this variable is higher than mean value (0.081>0.050), which informs that data are varying and distributed.

Furthermore, size has mean value of 27.641 (in logarithm) or 13.899 trillion (in Indonesia rupiah). Of 315 observations, the size of the companies in this research is in the large category. According to constitution No.20, 2008, a large company is a company with an asset value of over 15 billion rupiahs. The leverage value of the research companies is 0.397 or on average, the proportion of 39.7% of the corporate funds is derived from the debt.

3.2 Goodness of Fit test

Goodness of Fit test is aimed to find a model that is fit the original data. The evaluation of whether the model is fit or not is needed to measure the model quality. The results of Goodness of Fit test are shown in Table 2.

Table 2 Goodness of Fit of structural model

Criteria	Parameter	Rule of Thumb	Conclusion
Average path coefficient (APC)	0.119, P=0.004	Acceptable P < 0.05	Accepted
Average R-squared (ARS)	= 0.269, P=0.038	Acceptable P < 0.05	Accepted
Average adjusted R-squared (AARS)	= 0.257, P=0.060	Acceptable P < 0.1	Accepted
Average block VIF (AVIF)	1.110	acceptable if ≤ 5, ideally ≤ 3.3	Accepted
Average full collinearity VIF (AFVIF)	1.053	acceptable if ≤ 5, ideally ≤ 3.3	Accepted
Tenenhaus GoF (GoF)	0.263	small ≥ 0.1, medium ≥ 0.25, large ≥ 0.36	Accepted

Source: Secondary data of Indonesia Stock Exchange are processed

In accordance with the contents of Table 2, the research model has met the parameters of goodness of fit. For instance, all p-values for APC, ARS and AAR are similarly < 0.1, which respectively are APC = 0.119, ARS = 0.269 and AARS = 0.257. The values of AVIF and AFVIF are 1.110 and 1.053, which fulfill the criterion that requires the value to be ≤ 3.30. This position indicates that there is no multicollinearity problem across exogenous variables. The value of Tenenhaus GoF is 0.263 (≥ 0.25), which signifies that the predictive power of the model is in the medium category and considered to be acceptable. As a whole, the results of Goodness of Fit test declare that the research model has a very good fit. This position clarifies that the evaluation model is fit with the data.

3.3 Estimated relationship across variables

The analysis of the significant relationship across variables (involving main variables and control variables) is conducted to answer research questions or hypotheses. The results of estimated relationship across variables are displayed in Table 3.

Table 3 Effect Across Variables

Description Path	Path Coefficient	R^2	Q^2
Information Asymmetry to Dividend Ratio	-0.079**	0269	0.276
Institutional Ownership * Information Asymmetry to Dividend Ratio	-0.071*		
Size to Dividend Ratio	0.168***		
Leverage to Dividend Ratio	-0.159***		

***, **, * denote significance levels at 0.001, 0.05 and 0.1, respectively
Source: Secondary data from Indonesia Stock Exchange are processed

According to the contents in Table 3, the value of Adjusted R-Square (R^2) is 0.269, which affirms the variation of information asymmetry, the interaction between institutional ownership and information asymmetry, and the presence of control variables can affect dividend policy by 26.9%. Meanwhile, the remaining 73.1% is affected by other factors beyond the research model. The value of Q-Square (Q^2) is 0.276(>0) which indicates that the research model has predictive validity. The first hypothesis says that “information asymmetry affects dividend policy”. The output in Table 4 shows that information asymmetry has a negative and significant effect on the dividend ratio. The path coefficient value of this relationship is -0.079. This result supports the hypothesis, which therefore Hypothesis 1 is accepted. Meanwhile, the second hypothesis states that “institutional ownership generates high information asymmetry through low dividend policy”. The output in Table 4 exhibits that the interaction of institutional ownership and information asymmetry has a negative and significant effect on dividend ratio. This position is justified by a path coefficient value of -0.071. In other words, institutional ownership moderates negatively the effect of information asymmetry on dividend policy. This result supports the hypothesis, which therefore Hypothesis 2 is accepted.

The relationship between control variable and dependent variable has a positive and significant effect on the dividend ratio. The larger size of the company is associated with a higher dividend payout policy. In addition, leverage has a negative and significant effect on the dividend ratio, which denotes that when the company has a higher debt level, then dividend payout policy becomes smaller.

3.4 Discussion

3.4.1 Effect of information asymmetry on dividend policy

First hypothesis stating that "information asymmetry affects dividend policy" was put on the test. The result of the test showed that path coefficient value of the relationship is negative but significant (p-value<0.05). This result supports the hypothesis which signifies that information asymmetry affects dividend policy negatively. Or, high information asymmetry is associated with dividend payout policy. This finding is not in line with agency theory that requires the managers to do corporate action, including high dividend payout policy, in order to alleviate information asymmetry between company and investor [23]. On the other hand, this finding is consistent to the statements given by Deshmukh [9], Li and Zhao [10], and Kim, et al. [13], which indicated that high information asymmetry is not followed by high dividend payout policy. In the sample companies, dividend were paid. Descriptive statistic data indicated that in average, the companies pay dividend ratio for 5% of total asset. Meanwhile, the data of information asymmetry experienced by investors regarding fundamental information about the company are reaching 0.55 or 55%. Two arguments are given to this position. The first argument says that dividend policy is not used by corporate management as an instrument to minimize information gap but used more to create better corporate image. More specifically, dividend policy is like "entrenchment" but oriented toward personal favor of the manager. The second argument asserts that high information asymmetry is associated with irrational behavior of the investors. The decision of investors is not underlain by fundamental information factors but more dominated by psychological factors. This situation is in agreement with the finding given by Sumani, et al. [31] which stated that the behavior of Indonesian individual investors is generally irrational in their investment in capital market. The corporate value does not reflect the intrinsic value of the company. Therefore, the effect of corporate fundamental value on corporate market value is not consistent at all.

3.4.2 Role of institutional ownership in moderating the effect of information asymmetry on dividend policy

Hypothesis test was also applied on second hypothesis which states that "institutional ownership generates high information asymmetry through low dividend policy". The result of the test indicated that the role of moderation of institutional ownership in the effect of information asymmetry on dividend policy has a path coefficient value which is negative and significant (p-value<0.1). By this result, the hypothesis is supported and therefore accepted. Besides, this result clarifies that institutional ownership extenuates information asymmetry to improve dividend payout. This research corresponds to *pecking order* theory explained by Myers and Majlub [6]. This theoretical version urges the company to emphasize on internal funding such as retained earnings, which thus requires the company to set low dividend payout policy and to allocate the major proportion for reinvestment. This result is in conflict with agency theory that suggests high dividend payout to alleviate agency conflict. In other words, institutional ownership is preferring low dividend payout despite high information asymmetry. In line with Porta, et al. [24], the corporate behavior in developing country with poor governance system tend to pay low dividend and to be powerless in protecting the minority investors. Indonesian institutional investors are dominated by corporate institutions. As majority and also controller shareholders, institutional investors use their power to benefit themself from various important decisions, including the decision about dividend payout.

Institutional shareholders as the corporate controller often increase their wealth by not paying dividend or by paying low dividend. In this situation, institutional shareholders use dividend policy to acquire personal gains from their control. The incentive toward such personal gains is increasing because the controller shareholders will only lose dividend payout that is proportional to their right of cash flow. Despite this lose, the controller still can get full personal gains from the expropriation. Moreover, institutional shareholders as the corporate controller show a stronger preference to get personal gains rather than non-controller shareholders such as individual or minority shareholders [29]. This argument explains the role of institutional ownership structure in Indonesia in responding high information asymmetry through low dividend policy. This role is different from state ownership which tends to increase dividend policy in encountering high information asymmetry [17].

4 Conclusion

This study examines how the behavior of management and company owners in distributing dividends in Indonesia. Dividend policy greatly influences the distribution of cash on operational activities. The results show that in the context of high information asymmetry, company management tends to pay dividends with low ratios. Although the company continues to distribute dividends, the dividend policy implemented by the company's management is not used as an instrument to reduce information asymmetry, but is used to create a good corporate image or is a " entrachment ". Furthermore, high information asymmetry and low dividend policy are followed by market behavior (public investors) that is not rational in which their investment decision is dominated by psychological factors rather than by corporate fundamental information.

Another major result shows that the controlling shareholder, in this case, institutional investors, actually supports a low dividend policy. The dominant institutional ownership of corporate institutions uses their power to take advantage by encouraging low dividend payments but getting full private benefits for their expropriation actions. As the majority and controlling shareholder, institutional investors exercise their power in their favor in various important decisions, including decisions about dividend payments.

Theoretically, the current research supports the pecking order theory that gives priority on internal funding such as retained earnings. The sample companies tend to set a low dividend policy. The practical implication of this research is that a weak governance system causes low protection for individual investors, therefore the government can improve governance regulations and disclosure of information that can better protect minority investors.

Research limitation

The current research only uses secondary datas and has not explored yet the primary datas. A direct interview is conducted by the authors with the corporate manager to get information or data about dividend policy and information asymmetry. The collected data are expected to be complete and comprehensive. Further research shall use the mixed method in data collection.

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