

Impact of Covid-19 on Profitability on Company Value Mediated By Dividend Policy as Intervening Variable

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Abstract

This study aims to see and compare the connection between profitability, managerial ownership and company size to the value of real estate and property firms in the pre-pandemic period and the ongoing pandemic period. The property and real estate companies studied were only those registered on the Indonesia Stock Exchange (IDX) for 7 years from 2019 to 2020. The sample consisted of 97 companies based on the sample criteria determined by the purposive sampling method. Obtain financial data from the Indonesian Capital Market Directory published by the IDX. The data processing approach uses SEM-PLS with WarpPLS 7.0 as an analysis tool. The results of the study explain that the influence of the pandemic makes companies have to continue to carry out their activities, in this study dividend policy is an intervening or mediating variable, but it cannot be proven by data processing carried out. This can be explained by the bird in hand theory that profits should be distributed not held for shareholders, during the current pandemic it is very risky to invest.

Keywords

Profitability; dividend policy; bird in hand theory; firm value; property; real estate.



I. Introduction

The financial literature explains that dividend policy is a strategic decision that has a direct or indirect impact on the welfare of shareholders. Brigham (2013). Dividend policy is related to whether the operating results will be distributed to the owners of the company or reinvested to develop the company. Profit reinvestment is only justified if the decision will increase the share price more than the reinvested profit will be lost if it is not able to increase the share price. Related to that, Lintner J. (1956), Gordon (1959) in Bird in hand theory describes that reinvested profits cannot guarantee an increase in shareholder welfare. Profits are better distributed in the form of dividends because they can act as a medium of communication and profitability signals to external shareholders, because investors have information asymmetry (Bhattacharya, 1979). Financial statements are basically a source of information for investors as one of the basic considerations in making capital market investment decisions and also as a means of management responsibility for the resources entrusted to them (Prayoga and Afrizal 2021). Financial performance is a measuring instrument to know the process of implementing the company's financial resources. It sees how much management of the company succeeds, and provides benefits to the community. Sharia banking is contained in the Law of the Republic of Indonesia No.21 of 2008 article 5, in which the Financial Services Authority is assigned to supervise and supervise banks. (Ichsan, R. et al. 2021)

Research on dividends have been found by previous researchers, related to the factors that influence dividend decisions and their effect on firm value, as well as the parameters used, however the results of these studies have not produced consistent findings (Franc-Dąbrowska, Mađra-Sawicka, & Ulrichs, 2020) assistant. Based on empirical evidence shows that the difference in the findings is caused by several factors, for example,

the financial performance and debt position of a company (Bae & Elhusseiny, 2017). Industry sector, firm size, income stability, corporate governance, ownership structure, and investor preferences (Baker et al, 2019; Franc-Dąbrowska et al., 2020). Other factors identified to determine dividends are state-owned companies, investment opportunities, free cash flow and corporate governance (Dewasiri et al., 2019). Meanwhile, Budagaga (2020), identified the factors that determine dividends in the banking services sector, especially in developing countries, finding bank size, profitability and capital adequacy as determining factors.

Furthermore, the research gap in this study found gaps in research differences, namely empirical evidence that showed differences in findings, for example Boțoc & Pirtea (2014) in their research found that profitability and liquidity were determinants of dividends, while Kuzucu (2015) found profitability as factors affecting dividends, while liquidity is not a determinant of dividends. Yusof & Ismail, (2016), that past dividends are not a predictor of companies in Malaysia, while (Miller et al., 1999), Franc-Dąbrowska et al., (2020) identify that past dividends and previous year's financial condition as Key factors Although there are differences from the determinants of dividends, it is identified that there is a tendency for companies that pay dividends to generally have a good level of future income, income stability, current income level (Baker & Jabbouri, 2016).

Dividend policy is also related to stock market value, based on a theoretical perspective, returns in the form of dividends have more certainty when compared to capital gains, capital gains are more speculative because they are influenced by fluctuating stock price changes and management cannot control, thus investors will be more likes dividends (Lintner J., 1956; Gordon, 1959). A different view is explained in dividend irrelevance, that dividends have nothing to do with stock prices, in a perfectly competitive market nothing can affect market prices (Modigliani & Miller, 1961). Empirical proof of the relationship between stock prices and dividends was put forward by (Hooi et al., 2015; Hauser & Thornton, 2017; Ashamu & Abiola, 2018; Banerjee, 2018; Hansda et al., Sinha, & Bandopadhyay, 2020). While the findings that support dividend irrelevance were put forward by (Ashamu & Abiola, 2018; Karunarathne et al., 2021).

Many researches on the determinants of dividend decisions have been carried out, although there are some similarities in patterns that determine dividends, but there are still many contradictory findings caused by differences in the objects studied and the proxies used (Dewasiri et al., 2019), Some researchers focus on using data market (Baker et al., 2019), or Investor preferences (Hui et al., 2016). This study tries not only to use a market approach, but also a behavioral or motivational approach from management. This study predicts profitability, firm size and managerial ownership as determinants of dividend decisions, while dividend variables are placed as variables that mediate the relationship between these independent variables and firm value. The sample used is real estate and property firm on the Indonesia Stock Exchange (IDX), this sector is attractive as an object because the price index is stable in various economic conditions. This is understandable because Indonesia is a country that has a high population density, especially in big cities, so the need for property is still quite high. According to data collected by the Indonesian Real Estate Association (REI) the development of the property and real estate business in Indonesia grew by 30 percent and continued to increase until mid-2019 began to enter Indonesia in early 2020.

II. Review of Literature

The factors that determine the effectiveness of dividend policies are still interesting to debate, the object of the debate is related to whether dividend payments have a relationship with firm value, as well as what factors are considered in dividend payment decisions (Baker et al., 2019). The debate stems from differences in the assumptions used in forming the theory. Differences in views in theory are related to whether the company pays dividends as much as possible or vice versa. According to the view of dividend relevance as explained in the Bird in hand theory by Lintner J (1956) and Gordon (1959) the profits obtained will be more valuable if distributed to shareholders, thus these profits can increase welfare, therefore the profits should be paid to shareholders as much as possible, rather than retained earnings which will not necessarily increase the welfare of shareholders. The cash distributed can be invested by each shareholder, according to the available opportunities. From an agency perspective, conflicts that occur between two interests, namely managers as shareholders or owners and managers as management parties can be lost by paying dividends (Jensen & Meckling, 1976). Dividend is an asymmetric information because it is used as a signal and communication medium regarding financial performance to external stockholders. (Bhattacharya, 1979; Bulla, 2017; Budagaga, 2020).

Meanwhile, a different view is explained in dividend irrelevance, that dividends have nothing to do with stock prices, because in a perfectly competitive market nothing can affect market prices (Modigliani & Miller, 1961), based on this assumption, dividends are only paid after all investment needs are met.

Overcoming differences in findings related to dividend payment decisions, researchers have expanded the study to consider various factors, and such as economic uncertainty so that it is necessary to take into account future cash reserves (Kusuma & Semuel, 2019). In addition, dividend payments are also influenced by factors that are not directly related to financial conditions such as ownership structure (Rajverma et al., 2019; Bae & Elhousseiny, 2017, Karim & Ilyas, 2020). Financial institutions managing pension funds, insurance or shares owned by the state tend to be stable in paying dividends (Dewasiri et al., 2019; Khan et al., 2020) and concentrated ownership (Baker et al., 2019). As previously explained, this study focuses on the three independent variables: profitability, firm size and managerial ownership and their relationship to dividend decisions and firm value.

The financial literature explains that profitability is a measure of the company's effectiveness in operating assets to generate profits. Meanwhile, dividends are part of profits distributed to shareholders as compensation for invested capital. However, often not all profits are distributed to shareholders, part of the profit is retained to develop the company, the portion of retained earnings depends on available investment opportunities (Baker et al., 2019). Thus the dividend decision depends on retained earnings (DeAngelo, DeAngelo, & Stulz, 2006) That is, the dividend decision is a trade off between current cash and future capital gains, the greater the retained earnings, the smaller the cash paid out. Dividend payment decisions also need other factors, for example, earnings stability, this is important to maintain the risk of cutting dividends due to lower profits (Lintner J., 1956). Another opinion is explained by Kusuma & Semuel (2019) that dividend payments are also related to economic uncertainty which has an impact on earnings volatility, in such conditions cash reserves are needed to anticipate. Empirical evidence of the relationship between profitability and dividend payments shows the consistency that the greater the profit earned, the greater the dividend paid (Arko et al., 2014; Dąbrowska et al., 2020; Budagaga, 2020; (Baker et al., 2019) Baker et al., 2019).

Profitability is also in contact with market performance, as explained earlier, profitability as a measure of the effectiveness of using assets in generating profits. Investors' positive response to the value of the company can occur if the firm's profitability increases, which means the firm's prospects also increase (Sudipto Bhattacharya et al., 1979). Empirical evidence of the connection between profitability and firm value is explained by (Sabrin et al., 2016; Sari, 2017; Sutrisno & Panuntun, 2020; Pratiwi, 2020)

Based on the discussion of the connection between profitability and dividends and firm value, the following hypothesis is proposed:

H1: Profitability (ROI) has a positively impact on firm value (Q)

H5: Profitability (ROI) has a positively impact on dividend policy (DIV)

Company size is a scale that can be used to classify large or small companies, company size can be measured by sales volume Franc-Dąbrowska et al., (2020) or can also be measured by total assets (Yusof & Ismail, 2016; Dewasiri et al. , 2019). Large companies have an advantage over small companies, for example, higher bargaining power in terms of funding options for a wider range of alternative sources of funds such as the capital market. From a risk perspective, large companies are generally well diversified so that their income tends to be stable, this condition allows large companies to be able to pay higher dividends. Previous researchers have proven that company size can affect dividend payments (Yusof & Ismail, 2016; Baker et al., 2019; Sutrisno & Panuntun, 2020). The level of risk and income stability, and flexibility of company resources are attractive for potential investors to invest the capital. Empirical proof of the connection between firm size and stock prices shows that firm size has a positively effect on firm value (Reschiwati et al., 2020; Shin & Hasan, 2020). Based on the explanation of the connection between company size and dividends and firm value, the following hypothesis is proposed:

This study proposes hypothesis 2 as follows:

H2: Firm size has a positively impact on firm value (Q)

H6: Firm size has a positively impact on dividend policy (DIV)

Managerial Ownership (OWN) indicates the active involvement of individuals in operational decision making because they own a number of shares in the company. According to Shleifer & Vishny (1997) management's ownership of company shares can align the differences in interests between outside shareholders and management. As explained in the agency theory put forward by Jensen & Meckling (1976) that there is a tendency for dissimilarity of interest between managers and shareholders, conflicts arise as a result of misaligned interests between the two parties. It is also explained that managerial ownership can reduce conflict, because management is also involved in supervision. Thus, theoretically, managerial ownership is predicted to eliminate opportunistic behavior by managers. This means that management will act as the owner of the company, so that the decisions taken are in line with the owners' interests, including dividend decisions. Empirical evidence from research results regarding the relationship between managerial ownership and dividends conducted by previous researchers shows a positive relationship (Vo & Nguyen, 2014; Mardani, & Indrawati, 2018; Sita & Gennusi, 2021).

Research on managerial ownership is also associated with market performance, the rationale is that managerial ownership can eliminate manager's opportunistic behavior, thus, decisions made by management are in line with the owners' interests, namely maximizing firm value empirical support for managerial ownership relationship with market performance shows a positive relationship (Kusumawati & Setiawan, 2019; Asiri, T, & Andayani, 2018; Santi Novita, 2020). Based on the explanation of the relationship between managerial ownership and dividends and firm value, a hypothesis is proposed:

H3: Managerial ownership (OWN) has a positively influence on firm value (Q)

H7: Managerial ownership (OWN) has a positively influence on dividend policy

Bird in hand theory focuses on the connection between dividends and firm value which states that profit sharing is more valuable than retained earnings, because profit sharing makes the welfare of shareholders better. (Lintner J, 1956, and Gordon, 1959). In addition, dividends paid from profits earned by the company can reduce conflicts between managers as management and managers as shareholders. (Jensen & Meckling, 1976). This opinion is supported by Bhattacharya (1979) who explains that dividends are asymmetric information because they function as signals and communication media for external shareholders regarding the company's financial performance. Empirical support for the connection between dividends and firm value strengthens the information asymmetry that dividends are a signal of the firm's financial performance that has an influence on market performance (Bulla, 2017; Eka Handriani & Robiyanto, 2018; Hansda et al., 2020; Budagaga, 2020). Based on the explanation regarding the relationship between dividends and firm value, the following hypothesis is proposed:

H4: Dividends policy (DIV) have a positively effect on firm value (Q)

III. Research Method

Property and real estate companies listed for 7 years from 2014 to 2020 on the Jakarta Stock Exchange are the population in this study. While the research data, namely financial data obtained from the Capital Market Directory published on the IDX. Representative sampling using a purposive method with several sample criteria as follows: (1) Companies included in property and real estate companies during the 2019-2020 period, (2) Companies that regularly report financial statements to companies' property and real estate during the 2019-2020 period, companies that met the purposive sampling criteria were 97 samples.

3.1 Variable Operational Definition

Firm value shows how much ownership of total assets by the company

$$Q = \frac{\text{Current Price (CP)} \times \text{Total Share (TS)} + \text{Total Liabilities}}{\text{Total Assets}}$$

Dividends describe the proportion of the share of net income distributed to share holder

$$\text{DPR} = \frac{\text{DPS}}{\text{EPS}}$$

Managerial Ownership: describes the number of shares owned by the management; the management has an active role in decision making because it has a portion of the number of shares in the company. Company Size: Describes the total amount of assets or wealth owned: Natural Logarithm of Total Assets.

3.2 Technique of Data Analysis

The nature of this research is predictive and explorative. The data analysis process uses a SEM (Structural Equation Modeling) approach with WarpPLS 7.0 as a research data processing tool. Some of the advantages of SEM PLS compared to other analytical tools are that it is more efficient for complex sample sizes and is slightly looser in distribution assumptions compared to other methods such as CB (Covariance-based)-SEM.

The following is the form of the equation model for testing hypothesis 1 to hypothesis 7:

$$\text{TOBINS Q} = \alpha_1 + \beta_1 \text{ROI} + \beta_2 \text{OWN} + \beta_3 \text{SIZE} + \beta_4 \text{DIV} + \epsilon_1 \quad (1)$$

$$\text{DIV} = \alpha_1 + \beta_1 \text{ROI} + \beta_2 \text{OWN} + \beta_3 \text{SIZE} + \epsilon_2 \quad (2)$$

IV. Result and Discussion

Table 1. Model of Fit

Provisions	Conclusion
Avg. path coeff. - APC=0.180, P=0.016	fit
Avg. R-squared - ARS=0.235, P=0.004	fit
Avg. Adj.R-squared - AARS=0.205, P=0.009	fit
Avg. block VIF - AVIF=1.055, not rejected if ≤ 5 , ideally ≤ 3.3	fit
Avg. full coll. VIF - AFVIF=1.136, not rejected if ≤ 5 , ideally ≤ 3.3	fit
Tenenhaus GoF - GoF=0.4, S ≥ 0.1 , M ≥ 0.25 , L ≥ 0.36	fit

Source: WarpPLS 7.0 data processing

The model suitability test found that the form of the research model used was appropriate or fit for this study. This fit result is evidenced by the AVIF value of 1.055 and the AFVIF value of 1.136 < 3.3 , which means that there is no multicollinearity relationship between exogenous variables and other exogenous variables or other indicators. The results of table 1 also illustrate that the GoF value is 0.4 > 0.36 , which means that the predictive power of the model is very large.

Table 2. Effect Size and VIF Results

Path Description	Effect Size	VIF
ROI \rightarrow Q	0.015	1.151
OWN \rightarrow Q	0.000	1.081
SIZE \rightarrow Q	0.015	1.033
DIV \rightarrow Q	0.003	1.078
ROI \rightarrow Q	0.028	1.181
OWN \rightarrow Q	0.175	1.198
SIZE \rightarrow Q	0.083	1.017

Source: WarpPLS 7.0 data processing

The vertical multicollinearity relationship did not appear in this study. This is indicated by the VIF value of all variables below 3.

Table 3. Path Coefficient and P-Value Results

Path Descript	Path Coeff	P-Value
ROI \rightarrow Q	0.078	0.218
OWN \rightarrow Q	0.394	< 0.001
SIZE \rightarrow Q	0.002	0.492
ROI \rightarrow DIV	0.106	0.143
OWN \rightarrow DIV	0.382	0.003
SIZE \rightarrow DIV	0.262	< 0.001
DIV \rightarrow Q	0.004	0.360

Source: WarpPLS 7.0 data processing

Hypothesis testing and the results can be seen in table 3. The first hypothesis is not accepted because the p-value is greater than 0.05, which is 0.218, which means that ROI

has no effect on Tobins Q. The third hypothesis can be accepted because the p-value is less than 0.05, which is <0.001 , which means managerial ownership (OWN) has a positively significant effect on Tobins Q. While the second hypothesis cannot be accepted because the p-value is 0.492 (above 0.05) which means that firm size (SIZE) has no effect on Tobins Q. The sixth hypothesis and seventh hypothesis are accepted, because they have a p value -value of 0.003 and <0.001 , which means that the size of the firm and managerial ownership has a positively significant impact on dividend policy. Furthermore, the fourth hypothesis and fifth hypothesis are rejected because they have a p-value of more than 0.05, namely 0.364, 0.143, and 0.360, which means that dividend policy has no effect on Tobins Q and ROI has no effect on dividend policy.

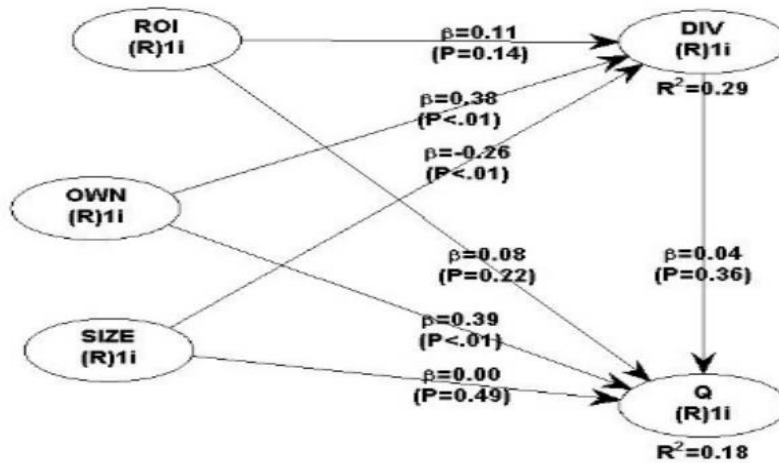


Figure 1. Full research model

4.1 Mediation Impact Test

According to Baron and Kenny (1986) there are two types of mediation, namely partial mediation and full mediation. While partial mediation is a condition where the variable X as independent variable affects the dependent variable or variable Y directly without any mediator variable. Full mediation is a condition when the variable X does not have a significantly impact on the variable Y when there is no mediator. On the other hand, when the independent variable (X) can directly predict the dependent variable (Y) eventhough its value is smaller than the predicted value of the mediator variable, then mediation occurs. If the coefficient of the mediating variable on the independent variable is smaller than predictive variable coefficient, then it should not be called a mediator. While the value of the coefficient of the indirect relationship is obtained from the indirect effect test and the total effect.

Table 4. Total and Indirect

Indirect effect	Path coeff	P-value
ROI → DIV → Q	0.004	0.479
OWN → DIV → Q	0.013	0.426
SIZE → DIV → Q	0.009	0.449
Total effect	Path coeff	P-value
ROI → DIV → Q	0.081	0.143
OWN → DIV → Q	0.407	0.003
SIZE → DIV → Q	0.007	<0.001

Source: WarpPLS 7.0 data processing

4.2 Discussion

The mediation hypothesis test for the $ROI \rightarrow DIV \rightarrow Q$ variable shows that the indirect effect coefficient is 0.004 and the p-value is 0.479 which means that the dividend policy (DIV) is not able to mediate the $ROI \rightarrow Q$ relationship. While the $DIV \rightarrow Q$ relationship is tested through direct pathway is significant with a coefficient of 0.004, but not able to mediate. Dividend policy (DIV) is also not able to mediate the connection $OWN \rightarrow DIV \rightarrow Q$ because the coefficient value is 0.394 and p value < 0.001 . So it can be concluded that there is no partial mediation in the connection between ROI and firm value (Q) through dividend policy (DIV) as a mediator. These results support previous research, namely Safitri et. al (2020) which revealed that there is a negative influence between dividend policy on firm value caused by the opinion of shareholders who prefer high dividends to dividend distribution in the future.

The findings of this study support the Bird in Hand theory which states that the profits distributed to shareholders are more valuable to improve the welfare of shareholders than the profits are reinvested. In addition, dividends are more valuable because they are asymmetric information as a form of communication media and profitability signals for shareholders outside the company. However, in this study dividend policy cannot mediate because it is in accordance with the theory used in this study.

V. Conclusion

The purpose of this study is to study and analyze the connection among the variables of profitability, managerial ownership and firm size to firm value, both in the pre-pandemic and pandemic periods that are currently ongoing. The research population comes from a list of property and real estate firms published by the Indonesia Stock Exchange or IDX for 2 years (2019-2020). From this population, 97 companies were collected as samples based on criteria that have been determined by the purposive sampling method. The financial data collected comes from the Indonesian Capital Market Directory which is published by the IDX. The results of the study explain that several hypotheses are accepted significantly, but there are several hypotheses that are rejected. The accepted variables are company ownership and size, it can be explained if company ownership and size are benchmarks for a company in running a good management system in the company, thus attracting investors to invest their shares, and increasing the value of the firm. Furthermore, dividend policy in this study is used as an intervening variable or mediating the relationship between the influence of profitability on firm value, but cannot mediate, this can be explained by the grand theory used in this study, namely the bird in hand theory which describes that profits should be distributed rather than retained. The difference between this study and other studies is that there are intervening variables that mediate the connection between profitability and firm value.

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