The Effect of Dividend Changes on Stock Returns with Firm Size as a Moderating Variable in Development and Acceleration Board Companies

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Abstract. An increase or decrease in a company's dividend can provide a positive or negative signal so that the market will react to fluctuations in stock prices. This research aims to determine the effect of changes in dividends on stock returns by using firm size as a moderating variable. The theory used is signal theory and uses purposive sampling in determining research objects based on Indonesian Stock Exchange (IDX) regulations regarding the classification of companies into development and acceleration listing boards for the 2019-2022 period. The test uses multiple regression analysis with the results showing that changes in dividends have no effect on stock returns with the presence of firm size as a moderating variable.

Keywords: Dividend Changes, Stock Return, Firm Size, Development Board, Acceleration Board.

1 Introduction

In accordance with the press release of the Financial Services Authority (OJK) through SP 86/DHMS/OJK/XII/2021 dated 30 December 2021. OJK noted that the stability of the financial services sector until the end of 2021 was still maintained. This is accompanied by an intermediary function by banks and fundraising by companies in the capital market which are getting better with the Corona Virus Disease 2019 (COVID-19) pandemic under control.

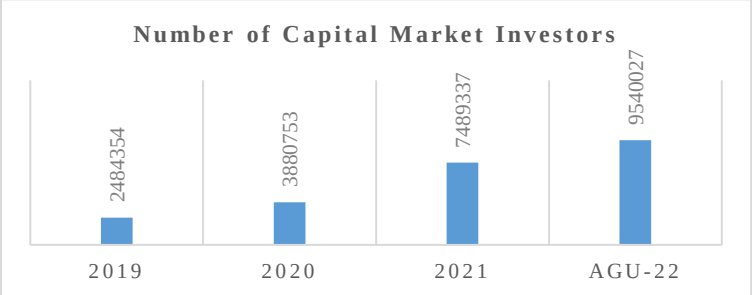

Chart. 1. Number of Capital Market Investors
Source: KSEI (2022)

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Based on **Chart. 1.**, it can be seen that in recent years there has been an increase in the number of investors trading shares registered with the Indonesian Central Securities Depository (KSEI). The development of the capital market cannot be separated from the role of investors who carry out transactions in the capital market. Dividends are a type of profit given to investors and obtained from profits received by business actors [1]. Before dividends are distributed to shareholders, the company will determine the dividend policy first.

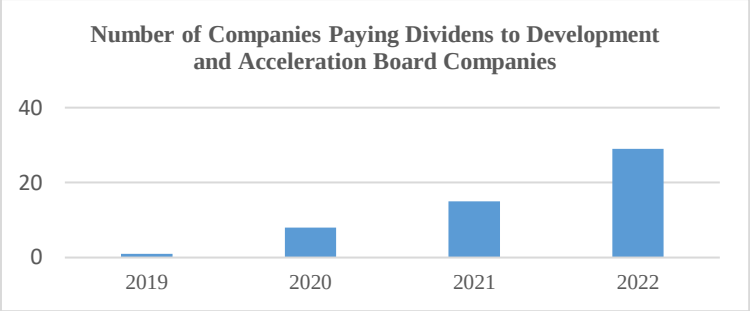

Chart. 2. Number of Companies Paying Dividends to Development and Acceleration Board Companies

Based on **Chart. 2.**, the number of dividends distributed annually to development and acceleration board companies has increased every year judging from the number of companies distributing them. Companies that do not pay dividends prefer to use retained earnings to be used as a source of costs in financing the company's operations in achieving maximum profits. The retained earnings are used in the development of the company in the future to obtain stock returns provided by the company.

An increase in a company's dividend gives a positive signal so that the market will react positively and vice versa to a decrease in dividends [2] This positive signal makes shareholders have the option to receive dividends in cash or buy more company shares through dividend reinvestment, this is done to strengthen share ownership and increase the potential for long-term investment growth. Negative signals will make shareholders make adjustments to the portfolio, meaning selling part or all of the company's shares to reduce risk and further potential losses. A change in dividends will affect stock returns if the company distributes dividends that experience an increase or decrease. Thus, changes in dividends become a factor affecting stock returns.

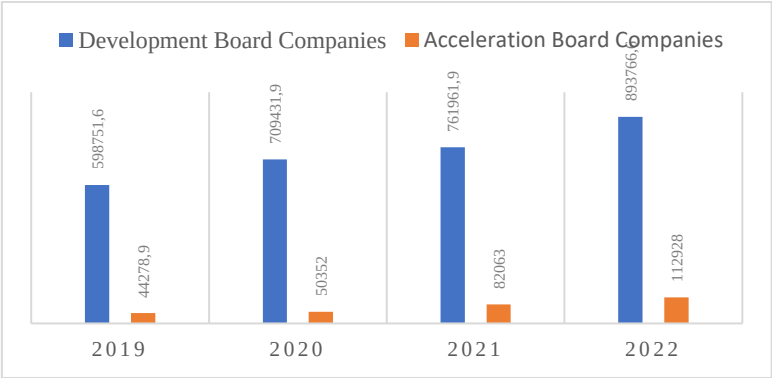

Chart. 3. Average Total Assets of Board of Development and Acceleration Companies for the 2019-2022 Period

Based on **Chart. 3.**, the total assets of development board companies and accelerated board companies show an increase every year. Firm size in a company also determines the amount of stock returns provided by the company [3]. The larger the size of the company, the greater the return on shares, and vice versa. It is this firm size that needs to be considered in order to get large share returns by shareholders.

The magnitude of the role of the capital market in the recovery of the Indonesian economy after the COVID-19 pandemic and the contradictions in the results of previous studies motivated the authors to conduct research on the analysis of the effect of changes in dividends on stock returns. In addition, this research is even more interesting because there has not been much research on the effect of changes in dividends conducted in Indonesia, the results are still different and the objects of research carried out, and also no one has used a sample of companies according to the new IDX regulations regarding development and acceleration company boards. This research will examine the effect of changes in dividends on stock returns by using firm size as a moderating variable.

2 Literature Review

2.1. Dividend Theory

Kresna & Ardini [4], this dividend payment is a reflection of the state of the distribution level of the company's dividend determination, when the company has high profits it provides a high determination of dividend payments that is possible to implement, if the company experiences a decrease in dividend distribution it will give a bad signal for investors, so that profits will be retained and replayed as company capital. According to Tangkilisan & Hessel [5], dividends are part of the net profit distributed to shareholders. Meanwhile, according to Stice & Skousen [6], dividends are distributions to shareholders of a company proportionally according to the number of shares held by each owner.

2.2. Dividend Theory: Signaling Models

Signal theory was put forward by Arkelof [7], explaining that a signal is informed by shareholders through dividend announcements, if it occurs there will be an increase in dividends and will generate good income in the future and this has been predicted by the company's management. Then the signaling theory was developed by Spence [8], this theory explains that good financial reports are a signal that the company has been operating well and vice versa if the financial reports are not good it indicates that the company is not operating well.

2.3. Research Hypothesis

H_1 : The effect of changes in dividends on stock returns.
H_2 : The effect of firm size on stock returns.
H_3 : Tthe moderating effect of firm size on changes in dividends on stock returns.

2.4. Research Framework

This research will examine how the influence of changes in dividends on stock returns: between development and acceleration board companies. The framework for the relationship

between dividend changes and stock returns with firm size as a moderating variable is as follows:

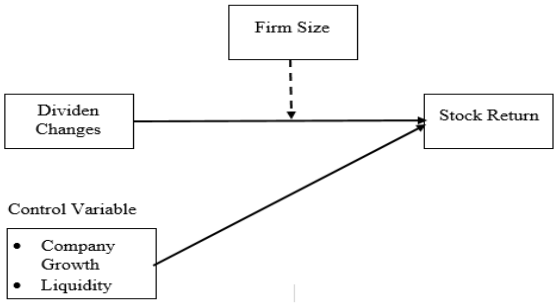

Fig. 1. Research Framework on Development and Acceleration Board Companies

3 Methodology

3.1. Data Types and Sources

In this research the data used is quantitative and is secondary data, in the form of the company's annual financial report data. Data sources come from data published on the official website of the Indonesia Stock Exchange (www.idx.co.id) and other related supports, including finance.yahoo.com, ksei.co.id, idnfinancials.com, investing.com, and other websites.

3.2. Method of Collecting Data

The data collection method used is the documentation method because it is in the form of secondary data. The documentation method was obtained from literature studies and was quoted from various literatures; books, internet, journals, articles, and others related to the information needed in research.

3.3. Population and Research Sample

The population of this research are companies that are listed on the development board and listed on the acceleration board of the Indonesian Stock Exchange (IDX). This research uses a purposive sampling method based on the criteria for companies listing in the 2019-2022 period as many as 138 companies in development and 25 in acceleration.

3.4. Data Analysis Method

3.4.1 Descriptive Statistical Analysis

Ghozali [9] states that descriptive statistics provide an overview of data seen from statistical calculations. These descriptive statistics are usually used to provide an overview of the sample data profile to be examined before utilizing statistical analysis techniques that function to test the hypotheses in this study.

3.4.2 Panel Data Regression Model

According to Basuki & Prawoto [10], the panel data model consists of the Common Effect Model or Pooled Least Square (PLS), Fixed Effect Model (FEM), and Random Effect

Model (REM). The first step to analyze panel data is to determine the best estimation model among the Common Effect Model, Fixed Effect Model, and Random Effect Model.

3.4.3 Classic assumption test

This assumption test aims to determine the direction of the relationship between the independent variable and the dependent variable whether each independent variable is positively or negatively related and to predict the value of the dependent variable if the value of the independent variable increases or decreases, then the data must meet the four basic assumptions used to find out whether the results of the multiple linear regression analysis used to analyze in this study are free from assumption deviations or not [9].

3.4.4 Multiple Linear Regression Analysis

Multiple linear regression analysis is an analytical tool used to test the relationship or linear influence between two or more independent variables on the dependent variable [9]. The multiple regression model in this study, as follows:

$$RET_A = \beta_0 + \beta_1 DVC_{it} + \beta_2 SIZE_{it} + \beta_3 (DVC_{it} SIZE_{it}) + \beta_4 GROWTH_{it} + \beta_5 LIK_{it} + \in_{it}$$

Explanation

RET_A	: Stock Return
β_0	: Constant
β_{1-5}	: Regression Coefficient
DVC_{it}	: Dividen Changes
$SIZE_{it}$	: Firm Size
$GROWTH_{it}$	: Growth Company
LIK_{it}	: Liquidity
$\in_{it}$	: Error

3.4.5 Hypothesis Testing

Hypothesis testing is the answer or conjecture to the existing problem formulation in research. Testing the hypothesis in this study consisted of the T test, F test and the Coefficient of Determination (R2) test.

4 Results and Discussion

4.1. Descriptive Statistical Analysis

Table 1. Descriptive Statistical Analysis Results of Development and Acceleration Board Companies

Development Board Companies					
	RET	DVC	SIZE	GROWTH	LIK
Mean	0,117	0,047	12,219	0,461	7,829
Median	0,000	0,000	12,522	0,086	1,714
Maximum	27,472	1,000	16,959	20,200	504,278
Minimum	-0,973	0,000	0,000	-1,000	0,000
Std. Dev.	1,452	0,212	2,483	1,721	34,808

Observations	552	552	552	552	552
Acceleration Board Companies					
	RET	DVC	SIZE	GROWTH	LIK
Mean	0,432	0,030	9,393	1,483	4,647
Median	0,000	0,000	10,813	0,078	1,961
Maximum	46,122	1,000	12,882	68,949	42,783
Minimum	-0,828	0,000	0,000	-0,875	0,000
Std. Dev.	4,626	0,171	3,810	7,148	7,296
Observations	100	100	100	100	100

Table 1. shows the results of descriptive statistical tests for all research variables. The final sample of this study were 138 companies on the development board and 25 companies on the accelerated board. Using accumulated data for 4 (four) years, the total number of observational data obtained was 552 and 100 after deducting outlier data.

4.2. Panel Data Regression Model

a. Chow Test Results of Development Board Companies and Acceleration: 0.253 and 0.446 <0.05, then the common effect model is accepted.
b. The results of the Hausman Test for Development Board and Acceleration Companies: 0.632 and 0.948 > 0.05, then the random effect model is accepted.
c. LM Test Results for Development and Acceleration Board Companies: 0.511 and 0.532 > 0.05, then the common effect model is accepted.

4.3. Classic assumption test

According to Dirk et al [11], Basuki & Yuliadi [12], and Napitupulu et al [13] said that in the CEM method, the resulting sample distribution is based on the desired objective functional value using a probability approach. Therefore, normality and autocorrelation tests should not be required in the CEM context.

a. The variable coefficient of development and acceleration board companies is smaller than the correlation matrix of 0.8, so this research model does not have multicollinearity problems.
b. Tthe results of the heteroscedasticity test, the probability value of the development board company and acceleration is greater than 0.05, it is concluded that the data is free from heteroscedasticity problems.

4.4. Multiple Linear Regression Analysis

The results of the regression coefficients of each variable, the resulting multiple linear regression equation is as follows:

a. Development Board Companies

$$RET = 0{,}046461 + 0{,}621373\ DVC_{it} + 0{,}006663\ SIZE_{it} - 0{,}062193\ (DVC_{it}SIZE_{it}) - 0{,}008329\ GROWTH_{it} + 0{,}000173\ LIK_{it} + \in_{it}$$

b. Acceleration Board Companies

$$RET = 0{,}167877 - 74{,}48953\ DVC_{it} - 0{,}049024\ SIZE_{it} + 6{,}250444\ (DVC_{it}SIZE_{it}) - 0{,}052592\ GROWTH_{it} + 0{,}186541\ LIK_{it} + \in_{it}$$

4.5. Hypothesis Testing

The following are the results of the hypothesis testing carried out:

Table 2. Hypothesis Testing

Hypothesis	Board Companies	β	Regression Coefficient	Prob-t	Conclusion
Hypothesis 1	Development	β_1	0,621373	0,8768	H_1 rejected
	Acceleration	β_1	-74,48953	0,3159	
Hypothesis 2	Development	β_2	0,006663	0,7921	H_2 rejected
	Acceleration	β_2	-0,049024	0,6974	
Hypothesis 3	Development	β_3	-0,062193	0,8432	H_3 rejected
	Acceleration	β_3	6,250444	0,3281	

5 Conclusion

The effect of changes in dividends on stock returns with firm size as a moderating variable in development and acceleration board companies shows that the hypothesis which states that changes in dividends affect stock returns is not supported, because changes in dividends do not have a direct effect on stock returns. This is because stock returns are primarily determined by factors such as the company's financial performance, growth prospects, market conditions, and other factors that affect the supply and demand for stocks.

The hypothesis which states that company size has an effect on stock returns is not supported, because company size does not have a direct effect on stock returns. This is because investors cannot consistently generate higher returns than the market as a whole using fundamental or technical analysis.

The hypothesis which states that company size influences dividend changes on stock returns is not supported, because company size does not have a direct effect on stock returns.

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