

COMPARATIVE STUDY OF THE ACCOUNTING INFORMATION OF DIVIDEND TO INVESTORS REACTIONS ON THE EX-DIVIDEND DATE IN INDONESIA AND SINGAPORE CAPITAL MARKET

PUJIONO¹, DENDY ALFA SANDY² and ROHMAWATI KUSUMANINGTIAS³

Accounting Department, Fakultas of Economics, Universitas Negeri Surabaya^{1,2,3}

pujiono@unesa.ac.id

ABSTRACT

This research target is to examine the effect of changes and patterns of dividend policy on average stock prices. This study was conducted for the Singapore (SSX) and Indonesia (IDX) capital markets. The two markets of these two countries represent a type of capital market that is developing and an advanced capital market. The data used are companies that distribute dividends of 46 in Indonesia and 44 samples of data from Singapore for 2014-2018. This study uses analysis of variance as a test tool. The outcomes presented that there was no divergence in the average stock price seen from the changes in the DPS and the pattern of dividend distribution policies, both in Indonesia and in Singapore. This research concludes that it is set aside that market investors have reacted the same to the dividend information that occurred in the Singapore capital market.

Keywords: dividend change, dividend distribution policy, stock price.

BACKGROUND

The Indonesian stock exchange (IDX) and the Singapore stock exchange (SGX) are members of the Asian and Oceania Stock Exchange Federation, an association of trading organizations from a number of capital markets that were formed as organizations to promote closer relations between the exchange of information between regions and cooperation. Indonesia and Singapore are countries that have the largest market capital value on the ASEAN stock exchange in 2017. The Singapore and Indonesia stock exchanges are in the first position with a market cap value of \$ 553 billion and Indonesia's \$ 483 billion. Different economic, state, and industrial institutional structures have different policies as well as Indonesia in the law that discusses income tax, article (4th), verse (1st), letter "g" of Income Tax Law No. 36 of 2008 is a tax object. Unlike the regulations in Singapore, dividends and capital gains are not taxed.

The optimal dividend policy is the manager's goal to increase firm value. There are two conflicting theories, namely the theory of relevant dividends and irrelevant dividends. According to the irrelevant dividend theory progressed by Miller and Modigliani (1961), it asserts that there is no link between stock price and dividend policy. On the other hand, the bird hand theory given by Litner (1956) and Gordon (1963) contends that

shareholders choose to receive a definite dividend rather than capital gain. Dividend distribution will provide value for shareholders. Therefore dividend payments can influence the value of the organization. However, the average dividend distribution in Indonesia fluctuates wildly, as can be seen in table 1 of the average DPS in Indonesia from 2014 to 2018. Dividend payments that are so fluctuating can reduce investors' assessment of company performance and value. Based on research from Hussainey (2011), Malhorta and Tandon (2013), and Sulaiman (2015), they found that DPS can affect stock prices. This means that DPS is one of the considerations for investors in determining investment decisions.

Table 1. Increase/Decrease of DPS

Year	DPS Average	Increase/(Decrease) DPS
2014	225,48	
2015	270,75	45,27
2016	183,29	(87,46)
2017	142,72	(40,57)
2018	251,71	108,99

Source: IDX compiled by the author

In his research, Pujiono (2002) explains that dividends actually have a negative impact on the company because the cash flows issued as dividends can disrupt the company's operations. Furthermore, Isaksson (2013) argues that if the decline in share prices is different from the number of dividends, this indicates the capital market is inefficient. Short-term investors will be attracted by market inefficiencies for profit, but investors who seek profit from the difference between the purchase price and the selling price or capital gain. Therefore, they choose not to buy these shares because the stock price will reduce equal to the return rate that has been lost. Logically, dividend distribution should lead to a decline in stock prices.

LITERATURE REVIEW

The Bird in the hand theory

The theory by Litner (1956) and Gordon (1963) assumes that in an investment filled with uncertainty and asymmetry of information, dividends are valued differently from capital gains. This condition is caused by the uncertainty of future cash flows, and investors

choose dividends to retained profits. Meanwhile, Hussainey (2011) states that investors obtain imperfect information on company profitability and dividends as expected cash information.

Dividend Irrelevance theory

This theory states that dividend distribution has no response on stock prices in the theory discussed by MM (Miller & Modigliani, 1961), which implies that dividends do not add value to stock prices. The rationale for this theory is that the company's competence to form a profit. Conversely, if the company develops its business, it will determine its value of the firm, and it will not drive the stock price because of dividend payments. Dividends offer no additional advantage for investors, and that dividend payments can harm the health of the company.

Agency theory

The agency theory discussed by Jensen and Meckling (1976) is included in dividend policy. Managers and investors have different interests. Investors expect that the profits earned by the company will be distributed in the form of dividends as a return earned in addition to capital gains. Meanwhile, managers want the company's operating profit to be used for reinvestment activities in the hope that the company can grow continuously. However, dividends bring prosperity to owners and managers acting on behalf of the company.

Signaling theory

The signaling theory states that dividends can operate as a management signal that promises the company's future cash flows. The dividend signaling theory discussed by Bhattacharya (1979) explains that the announcement of changes in cash dividends provides information to investors that cause investors to react to stock prices. With the information provided or conveyed by the company through dividends, it identifies that the company is in good performance prospects in the future.

Ex-dividend date

It is the date the rights to dividends distributed by the company do not apply. It means that an investor who buys distributes on the ex-dividend date or after that will not be eligible to receive declared dividends. In contrast, dividend payments are given to investors who own shares the day before the ex-dividend date.

Dividend policy

According to Baker and Weigand (2016), dividend policy refers to a company's wish whether to pay dividends to shareholders or retain them as retained earnings. If it is distributed as dividends, how many portions will the company share? If you decide to pay dividends or distribute the retained earnings, it will be used for reinvestment of the

company. In designing and implementing a dividend policy, another issue to consider is how to balance investor preferences with company growth. If the company distributes high dividends, shareholders will receive a high cash flow, but it will disrupt the company's performance and operations. A decrease and an increase in the number of dividends should be able to bring positive and negative values to the company's stock price, depending on the company's perspective and circumstances.

Dividend distribution policy pattern

According to Ahmad (2004: 193), the dividend distribution policy pattern is divided into four. First, the stable payout ratio dividend policy is a dividend policy in which the percentage of income paid in the form of dividends is kept constant, in other words maintaining the same percentage of revenue that is paid out as dividends to shareholders. Second, the stable dividend amount per share is a dividend policy used by companies with stable cash flow and stable income. Dividend payments are made regularly by the company; if the company gets high profits, the excess profits will not be distributed as dividends, and if the company loses the holder. Shares will still receive dividends based on the policy. Third, the low regular an extra dividend policy is a low dividend rate policy set by the company and is paid regularly, but if the income is high, it also pays additional dividends. Lastly, the residual dividend policy is a dividend policy that uses a dividend policy by basing the remaining capital budget funds on the available profit before paying dividends to shareholders.

HYPOTHESIS DEVELOPMENT

In agency theory, company managers have more details about the company than investors. Hence, this forms a gap between managers and investors. The way to link the gap is that managers utilize dividends as a tool to transfer data to shareholders. Hamill (2012) observes that the amount of dividends paid looks to carry good details about the company's prospects. This should be evidenced by stock price movements, an raise in dividends can be interpreted as great news and intense prospects for investors and vice versa.

H₁: There is a difference in the average stock price seen from the change in dividends.

The results of the study by Imran and Shahzad (2014) that companies that distribute dividends stably over a certain period of time generally have higher stock prices than companies that pay dividends based on a constant percentage of net income. This is because investors are more interested in dividends distributed by the company in a stable manner to avoid risk uncertainty in investment. For corporate investors who distribute dividends stably indicates that the company can maintain its performance, this belief can increase investors in investing.

H_2 : There is a difference in the average stock price seen from the pattern of dividend distribution policies.

METHOD

The type of data in this study uses secondary data from the annual financial statements of companies listed on the Indonesia and Singapore stock exchanges from 2014 to 2018. The data was collected using a purposive sampling method with predetermined criteria. First, companies listed on the IDX and SGX for the period 2014 to 2018 publish consistent financial reports. Second, companies that distribute cash dividends. Third, companies that consistently distribute dividends from 2014 to 2018. Fourth, companies that do not record in foreign currency. Data from the Indonesia Stock Exchange are 46 companies, and in Singapore, there are 44 companies.

Operational definitions and research variables

Dividend Change per Share

Changes in the company's DPS can be seen through the big difference between dividends this year and the previous year. There are three indicators, namely increasing, constant, and decreasing, as shown in Table 2.

Table 2. Indicators of The Change in DPS

No	Divident Payout	Indicators	Category
1	Increase	This year's DPS is higher than the previous year's DPS	1
2	Constant	This year's DPS was the same as that distributed the previous year	2
3	Decrease	This year's DPS is smaller than the previous year's DPS	3

Source: compiled by the author

Dividend distribution policy pattern

In table 3, there are pattern indicators adopted by companies in using dividend

distribution policies, indicators of dividend policy patterns as follows:

Tabel 3. Indicatorsof The Pattern in Dividend Distribution Policy

No	Policy Pattern	Indicators	Category
1	Dividend Constant Payout-Ratio Dividend Policy	The dividend value is the same every year	1
2	Stable dividend amount per share	The percentage of dividend distribution is the same every year	2
3	Low-Regular-an-Extra Dividend Policy	The pattern of increasing or decreasing dividends follows the pattern of increasing or decreasing EPS	3
4	Devidend residual	The pattern of increasing or decreasing dividends does not follow the pattern or decline of EPS	4

Source : Ahmad (2004)

Stock price

The dependent Variable used is the average share price obtained from the average share price after the ex-dividend date up to 10 days on the announcement made by the company. This 10-day window period is taken with the hope that there will be no bias if it is too short, and if it is too long, there will be no disturbing events in the observation of stock prices.

Data analysis technique

Descriptive statistical analysis.

Descriptive statistics (Sugiyono, 2012: 206) is part of statistical data collection, presentation, determination of statistical values or depiction of a general conclusion, and informative data presentation. Descriptive statistical analysis calculations include the mean, standard deviation, and distribution of data.

Analysis of variance

To test the first and second hypotheses using analysis of variance (ANOVA). ANOVA is a method to test the relationship between one dependent Variable and one or more independent variables with more than two categories. Equations used as follows:

$$Y = \mu + \alpha x_1 x_2 + \pi x_2 + e$$

Y = average share price

μ = grand mean

αx_1 = Change in DPS

πx_2 = Pattern in Dividend Distribution Policy

e = error

Hypothesis Statistic

First Hypothesis

Ho : $\mu_1 = \mu_2 = \mu_3$, jika p value > 0,05 (average of Change in DPS is the same)

Ha : $\mu_1 \neq \mu_2 \neq \mu_3$, jika p value < 0,05 (average of Change in DPS is not the same)

Second Hypothesis

Ho : $\mu_1 = \mu_2 = \mu_3$, jika p value > 0,05 (average of Pattern in The Dividend Distribution Policy is the same)

Ha : $\mu_1 \neq \mu_2 \neq \mu_3$, jika p value < 0,05 (average of Pattern in The Dividend Distribution Policy is not the same)

RESULT

Descriptive Statistics

Table4: Descriptive Statistics of Average Share Price in the IDX

Dependent Variable: average share price in IDX						
Change in Pattern in The Dividend	DPS	Distribution Policy	Mean	Std. Deviation	N	
Increase		Constant dividend payout ratio	3,2831	,22779	28	
		Low regular plus extra	3,1522	,30479	87	
		Dividend residual	3,1189	,32151	16	
		Total	3,1761	,29566	131	
Constant		Stable dividend amount per share	3,1013	,31029	28	
		Total	3,1013	,31029	28	
Decreased		Constant dividend payout ratio	3,2254	,31001	13	
		Low regular plus extra	3,1578	,26186	32	
		Dividend residual	3,2637	,28736	26	
		Total	3,2090	,28052	71	
Total		Constant dividend payout ratio	3,2648	,25416	41	
		Stable dividend amount per share	3,1013	,31029	28	
		Low regular plus extra	3,1537	,29279	119	
		Dividend residual	3,2085	,30535	42	
		Total	3,1772	,29334	230	

Source: data processed by SPSS

Tabel 5. Descriptive Statistics of Average Share Price in the SSX

Dependent Variable: average share price				
DPS changes	Dividend distribution policy pattern	Mean	Std. Deviation	N
Increase	Constant dividend payout ratio	1,3423	,15272	2
	Low regular dividend plus extra	1,5510	,20499	36
	Dividend residual	1,5088	,16471	13
	Total	1,5321	,19553	51
Constant	Stable dividend amount per share	1,5359	,23682	110
	Total	1,5359	,23682	110
Decreased	Constant dividend payout ratio	1,3509	,06286	2
	Low regular dividend plus extra	1,5069	,21595	45
	Dividend residual	1,6090	,23958	12
	Total	1,5224	,22154	59
Total	Constant dividend payout ratio	1,3466	,09548	4
	Stable dividend amount per share	1,5359	,24067	110
	Low regular dividend plus extra	1,5265	,21099	81
	Dividend residual	1,5569	,20611	25
	Total	1,5314	,22287	220

Source: data processed by SPSS

Classic Assumption Test Normality Test

Table 6. Normality Test of the IDXData

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			230
Normal Parameters ^{a,b}	Mean		,0000000
	Std.		,29297219
	Deviation		
Most Extreme Differences	Absolute		,054
	Positive		,054
	Negative		-,035
Test Statistic			,054
Asymp. Sig. (2-tailed)			,200 ^{c,d}
a. Test distribution is Normal.			
b. Calculated from data.			
Source: data processed by SPSS			

Table 7. Normality Test in SSX Data

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			220
Normal Parameters ^{a,b}	Mean		,0000000
	Std.		,22283779
	Deviation		
Most Extreme Differences	Absolute		,050
	Positive		,045
	Negative		-,050
Test Statistic			,050
Asymp. Sig. (2-tailed)			,200 ^{c,d}
a. Test distribution is Normal.			
b. Calculated from data.			
Source: data processed by SPSS			

Based on tables 6 and 7, the data normality test in Indonesia and Singapore each shows a value of 0.2 provided that the normality of the Kolmogorov Smirnov test is greater than 0.05, which means that data in Indonesia and Singapore are normal.

Uji Homogeneity

Table 8.Homogeneity Test in IDX

Levene's Test of Equality of Error Variances^a			
Dependent Variable: average share price			
F	df1	df2	Sig.
,892	6	223	,501
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + Perubahan + Pola + Perubahan * Pola			

Source: data processed by SPSS

Table 9.Homogeneity Test in SDX

Levene's Test of Equality of Error Variances^a			
Dependent Variable: average share price			
F	df1	df2	Sig.
,620	6	213	,714
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + Perubahan + Pola + Perubahan * Pola			

Source: data processed by SPSS

For ANOVA testing, the data homogeneity test is needed to determine whether the data

variants used are the same. The homogeneity test table in Indonesia and Singapore shows a significant value of 0.501 and 0.714, which is greater than 0.05, which means that the data used are the same.

Analysis of variance (ANOVA)

Table 10. Anova Test Results at IDX

Tests of Between-Subjects Effects					
Dependent Variable: average share price					
Source	Type Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	,821 ^a	6	,137	1,617	,144
Intercept	1616,603	1	1616,603	19090,594	,000
Changes	,034	1	,034	,397	,530
Patterns	,256	2	,128	1,511	,223
Changes * Patterns	,212	2	,106	1,251	,288
Error	18,884	223	,085		
Total	2341,393	230			
Corrected Total	19,705	229			

a. R Squared = .042 (Adjusted R Squared = .016)

Sumber : data diolah SPSS

Table 11. Anova Test Results at IDX

Tests of Between-Subjects Effects					
Dependent Variable: average share price					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	,259 ^a	6	,043	,865	,522
Intercept	114,374	1	114,374	2294,006	,000
Changes	,003	1	,003	,070	,792
Patterns	,162	2	,081	1,588	,213
Changes * Patterns	,099	2	0,50	,996	,371
Error	10,620	213	,050		
Total	526,824	220			
Corrected Total	10,878	219			

a. R Squared = .024 (Adjusted R Squared = -.004)

Sumber : data diolah SPSS

Based on the ANOVA test results, in Indonesia and Singapore for changes in dividends and dividend distribution policy patterns, with a value greater than 0.05, which means that there is no difference in the average share price of changes in DPS and the pattern of dividend distribution policies.

DISCUSSION

The first hypothesis testing for data samples in Indonesia and Singapore is not accepted. It supports Modigliani and Miller (1961), where the theory regarding dividend irrelevance theory means that dividend sizes do not influence stock prices. The results are also the same as previous studies by Ebrahimi & Chadegani (2011) and Kadioglu

(2015) that dividend changes do not affect stock prices. An acceptable explanation is the tendency of shareholders to choose capital gains. This investor preference can occur because they are getting smarter in doing investment analysis. It indicated that the average value of the dividends paid, which is smaller than the capital gain. The data show that changes in dividends delivered by the company do not affect the company's share price after the ex-dividend date. Finally, investors do not care about dividend information that the company distributes even though the value increases, remains or decreases.

Based on the ANOVA test table 5, the ANOVA test in Indonesia with a significant value of 0.233 and the 6th table ANOVA test in Singapore with a significant value of 0.207. Next, it can be concluded that there is no difference in the average share price seen from the pattern of dividend distribution policies carried out by the company. It means that even though the company distributes dividends that experience increasing, decreasing, or constant each year, the residual dividends have no effect on the average stock price after the ex-dividend date. There is no average difference in the pattern of dividend distribution policies that can be interpreted as the first hypothesis supports the dividend irrelevance theory. So dividend information does not affect investment decisions made by investors. The results of this study also provide evidence that investors in Indonesia have experienced a change in their thinking on dividend information as different from the effects of previous research by Pujiono (2002).

CONCLUSION

This research-based on the results and discussion of these two tests provides evidence that investors in Indonesia and Singapore do not react to information on changes and patterns of dividend distribution policies. Therefore, this study also concludes a shift in thinking about dividend information for investors in the Indonesian capital market, which has changed to support the irrelevant theory. This result is impressive because the Indonesian capital market is still categorized as an emerging market. However, investors in the Singapore capital market are still consistent in supporting the irrelevant theory because investors are more rational and in the advanced market.

SUGGESTION

The next research is proposed that the next researchers try to conduct research in ASEAN capital markets apart from Indonesia and Singapore so that to get more consistent results regarding dividend research. In addition, hopefully, the results of this study can provide input for potential investors in making investment decisions.

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