

RESEARCH ARTICLE

Analysis of the Impact of Dividend on Returns Based on Market Condition

Bernardus Y. Nugroho and Ferdinand D. Saragih
Universitas Indonesia, Indonesia
nugroho_yuliarto@yahoo.com

This study investigates the dividend's impact on returns with profitability and free cash flow as control variables. The purpose of this paper is to analyze the effect of dividends on returns during both advancing and declining markets. The data utilized as the sample was gathered from non-financial companies listed on the Indonesian Stock Exchange from 2008 to 2017. The generalized least square method was used to analyze the impact of dividends on returns during advancing and declining markets. Variables used in this investigation are Dividend, Return, Beta, Market Capitalization, Book Value of Equity, Profitability, and Free Cash Flow. Results show that dividends have a significantly positive impact on market returns during both advancing and declining markets. The influence towards both cash and stock dividends is the same, namely significantly positive toward returns. The limitation of this research is that the results cannot attest that market conditions influence dividend's role toward returns in Indonesia. Therefore, it is suggested that a new benchmark be utilized in future research to determine whether the market condition is declining or advancing.

Keywords Dividend, Returns, Market Condition, Profitability, Free Cash Flow

JEL Classifications: G32, M20, M40

A phenomenon relating to dividends occurring during the last few years is the decline of dividend payments in several exchange markets. This phenomenon of dividends was presented in Jing-Min, Dennis, and Qingjing's study (2013) that studied 18 countries between 1989 and 2011. The sample countries included in the research were Canada, United States, Hong Kong, Singapore, Australia, France, Germany, United Kingdom, and other European nations. Jing-Min *et al.* (2013) discovered that the decrease in dividend payouts was supported by the life cycle theory, which argues that mature companies tend to pay out dividends more

than new companies do. Therefore, although there is an increase in the number of companies, there is a decrease in dividend-paying companies.

This phenomenon regarding dividends supports research that aims to answer the question "Are dividends relevant?" This dividend theory can be viewed as a puzzle. According to the dividend irrelevance theory by Miller and Modigliani (1961), the dividends paid out by a company do not affect that company's stock price. Miller and Modigliani (1961) argue that a company's value is based on its ability to create profit and manage its business risks. Hence,

Miller and Modigliani (1961) view that a company's worth solely depends on the revenue it can generate and not how that revenue is distributed as dividends and retained earnings.

However, according to DeAngelo and DeAngelo (2006), if dividends are irrelevant, as argued by Miller and Modigliani, then dividends must be irrelevant in all conditions. A study conducted by Chun, Cudia, Papa, Tahilramani, and Tan (2020) centered around the effect of different firm-specific moderating variables on the relationship between financial leverage and dividend payout of Philippines publicly-listed companies under the property sector for the years 2012 to 2016. The results showed that business risk and firm size significantly affect the relationship between financial leverage and dividend payout. Furthermore, liquidity, tangibility, and non-debt tax shield variables also significantly affect the relationship between financial leverage and dividend payout. Fuller and Goldstein (2011) expressed that dividends impacted returns depending on the market conditions, and the role of dividends is more significant during declining markets rather than in advancing markets. Other studies have also obtained theoretical and empirical evidence to answer whether or not dividends are relevant, such as the bird in the hand hypothesis (Litner 1962; Gordon 1963), agency theory (Jensen & Meckling, 1976), signaling hypothesis (Bhattacharya, 1979), tax effect hypothesis (Brennan, 1970), and catering hypothesis (Baker & Wungles, 2004).

Numerous studies on dividends have focused on questions such as who pays out the dividends and for what purpose. However, the question of "when would dividends be relevant" has not undergone much research, especially in Indonesia. Previous research by Manley and Glissman (2008) explained that dividends' contribution is more significant during declining market conditions, which gives it a more substantial influence on declining markets.

The capital market is closely related to economic growth. The better the capital market of a country, the better the country's economy. Capital market has a relationship with economic growth because all industries or companies in a country are represented by their capital markets (Crockett, 1997). Many companies choose the capital market as an alternative to funding because the funds from investors are long-term. The most dominant long-term instrument in the capital market is stocks.

Our research is the first to empirically examine the impact of dividends on returns, with profitability and free cash flow as control variables based on market conditions and dividing the categories based on market conditions and dividend payment methods. This research examines the impact of dividends on returns based on Indonesia's different market conditions and confirms previous research results in Indonesia. The research sample comprised non-financial companies listed on the Indonesian Stock Exchange during 2008 and 2017. The dividends in this research are dummies. Additionally, dividends are also categorized as cash and stock dividends.

Our research examined the impact of dividend payouts on returns and was conducted separately during both advancing and declining market conditions. The research method draws on previous research by Fuller and Goldstein (2011), which utilized market returns as a benchmark to determine both declining and advancing market conditions. Investors generally use the Jakarta composite index to observe stock price movements on the stock exchange to understand whether the capital market condition is good or imperfect. Capital market conditions will affect investors' perceptions of investing in affecting stock price movements (Crockett, 1997). This study also used returns data from the Jakarta Composite Index (JCI) as a proxy to determine market conditions. If the JCI returns are positive, then the market condition can be classified as an advancing market. In contrast, it will be classified as a declining market if the JCI returns are negative.

Our study discovered that cash dividends had a significantly positive influence on returns during declining and advancing markets. This study supports the research conducted by DeAngelo and DeAngelo (2006). DeAngelo and DeAngelo stated that if dividends were irrelevant, then it must be the case in all conditions. Similar to results obtained from cash dividends, the impact of stock dividends towards returns during declining and advancing markets also proved to be significantly positive. According to David and Ginglinger (2016), stock dividend payouts do not constitute bad news for the market; hence the impact of stock dividends towards returns is no different from the influence of cash dividends. This condition shows that the market conditions in Indonesia do not influence the role of dividends toward returns. The payout of a company's dividends during both declining and

advancing market conditions influences the company's returns.

The research of Allen *et al.* (2002) shows that a company's performance, as reflected by its profitability, tends to be better for a company that pays out dividends; in this case, company performance positively influences returns. Hence, the company profitability variables have been controlled in this research. Company profitability is measured based on the return on assets (ROA), return on equity (ROE), and Tobin's Q. Additionally, according to research conducted by Valikifard and Shahmoradi (2014), a company with high free cash flow will also generate a high stock return. Therefore, we have also controlled the free cash flow variable for this research. Besides controlling profitability and free cash flow, we have also utilized market capitalization, book value of equity, and beta as control variables.

Dividends can be a tool to indicate that a company can generate profit in the future, which conforms to the signaling theory. This is one reason why different market conditions do not have other impacts on dividends towards returns; a company that pays out dividends creates a signal that its profits are stable (Baker & Powel, 2012). Payment of dividends indicates there is future earnings growth, and the company can continue its business in the future. This factor is one that investors pay close attention to as a basis in considering investing in Indonesia during both declining and advancing markets due to the volatile nature of the Indonesian capital market with its many rumors due to being an emerging market.

Literature Review

Dividend Payment in Indonesia

The Indonesian market can be categorized as an emerging market (Mulyani *et al.*, 2016); therefore, it is an attractive investment destination for domestic and overseas investors. An emerging market offers a higher risk premium when compared to a developed market, which will present higher returns (Chandra, 2010). There has been an increase in investors in the Indonesian capital market over the last few years. The number of investors during mid-2017 increased by 25.24% compared to 2016 (KSEI, 2017). The number of companies listed on the Indonesian Stock Exchange (BEI) also increased with rising investor numbers. However, this was not followed by an increase in the

percentage of dividend-paying companies in Indonesia. From 2006 until 2015, the number of such companies was stagnant at an average of 41%.

The low number of dividend-paying companies in Indonesia is due to several reasons. According to Wardhana and Tandelilin (2011), dividend-paying companies in Indonesia tend to be mature companies, corresponding to the life-cycle theory. Additionally, there are many family corporations in Indonesia, which influences the low dividend payouts in the country (Mulyani, Singh, & Mirshra, 2016). Indonesia's laws do not make it compulsory for a company to pay out dividends to its shareholders each year from a regulation standpoint. The regulation regarding the payouts of dividends is stipulated in Law of the Republic of Indonesia Number 40 of 2007 Concerning Limited Liability Companies in Article 71 Subsection 2, which states that all net profits after deducting for reserve allocations shall be distributed to the shareholders as dividends unless determined otherwise in the General Shareholders Meeting. Therefore, companies in Indonesia are free to decide on the timing and amount of dividend payments.

Prior Research

Dividends are a means for a company to pay out its yields out of the excess of funds generated from company investments and operational activities to its shareholders (Palepu & Healy, 2012). Dividends are usually regularly paid out by a company once to four times a year. Several studies have found that dividends influence companies, one being the impact of dividend payouts on stock returns. Several studies have been carried out regarding the effect of dividends on stock returns. Several theories have been formulated; one is the signaling theory pioneered by research conducted by Battacharya (1979). This theory's background was information asymmetry between the management and outside parties, including company shareholders. This asymmetry of information caused the shareholders to have difficulty in assessing the company. As a result, companies use dividends as a signaling device to show that the company's performance is doing so well, such that it can pay out dividends.

Prior research from Fuller and Goldstein (2011) investigated the effect of dividends on return in a declining market and advancing NYSE, AMEX, and Nasdaq listed stocks from January 1970 to December 2007. Fuller and Goldstein (2011) found that dividend

payouts had a more significant impact on returns during declining market conditions compared to advancing conditions.

This differs from Phohan (2013) on previous research in Indonesia which argued that dividend payouts do not affect returns during declining market conditions, whereas the opposite was seen during advancing market conditions. During advancing market conditions, dividends have a significantly positive impact on returns (Phohan, 2013). The market conditions may have influenced the different prior research outcomes between Phohan (2013) and Fuller & Goldstein (2011) in Indonesia.

An increase in the dividend payout of a company would usually cause an increase in stock price (Weston & Brigham, 1990). An increase in stock price may give the impression that investors prefer dividends to capital gain. However, according to Black (1976), companies are always reluctant to lower dividends due to specific reasons, so the managers would not increase it unless they anticipate higher profits or at least stable profits in the future. This becomes the basis for some observers to view that an increase in dividends is a signal that the company's management is expecting an increase in profits. On the contrary, lower dividend signals that there might be a decrease in profits in the future.

According to Miller and Modigliani, investors' reactions towards a change of dividend payouts by a company do not indicate that investors prefer dividends compared to capital gain (Weston & Brigham, 1997). Instead, the increase in stock prices after dividend payouts was caused by the important information expressed in the dividend announcement. The company is expecting an increase in profits in the future. This theory is called the dividend signaling theory.

Return is the profit obtained from investment (Home & Eachowisz, 2008). Several studies have been carried out to test out variables that affect stock returns; one that is still debated is dividends towards stock returns. According to Goldstein and Fuller's (2011) research, the effect of dividends on returns is influenced by the market conditions of when the dividend was paid out, either during a declining or advancing market.

Investors are more appreciative of the amount of the dividend paid during declining market conditions, and dividend payouts become very valuable to investors (Goldstein & Fuller, 2011). When the market declines, there is a higher probability of financial distress, and dividend payouts become a challenge to companies.

Hence, a company that can pay out dividends provides a strong signal that the company's performance is still good even during weaker market conditions. Consequently, there is an increase in price and return for companies that pay out dividends. Also, investors are less optimistic in investing during declining market conditions. Therefore, investors prefer returns from dividends compared to returns from the increase of stock prices; this conforms to the bird in the hand theory.

Litner (1959) and Gordon (1963) argue that the dividends obtained by shareholders (in hand) have a lower risk compared to the possibility of an increase in stock prices, which is uncertain (in the bush). This is in line with Kolb (1988), which states that the value obtained through dividends is certain, while the value reinvested by the company in the form of retained earnings is uncertain. Investors have no way of knowing when the company's money will be paid out to them. Hence, according to the bird in the hand theory, shareholders prefer dividend payouts to capital gain or reinvestment in the company.

However, according to Allen *et al.* (2006), a company that pays out dividends is a company with good performance; and based on the research by Anwar (2016), company performance is in line with stock returns. Thus, control of company performance is necessary and is reflected through its profitability. Here profitability is measured based on return on asset (ROA), return on equity (ROE), and Tobin's Q. By using cash flow proxy, Bhattacharya, Chang, and Li (2019) found that the company is likely to pay dividends in line with the company's life cycle. Further, according to Vakilifard and Shahmoradi (2014), there is a positive relationship between free cash flow and stock returns. Hence, control of the company's free cash flow is necessary. Our paper is the first to empirically examine the impact of the dividend on return with profitability and free cash flow as control variables based on market conditions in Indonesia.

Methodology

Data and variable identification

The generalized least square method was used to analyze dividends' impact on returns during both advancing and declining markets. Data was collected from various sources for this research. Data on company dividend payouts was collected from the

Indonesian Central Securities Depository (KSEI). The company returns variable was calculated based on stock prices from *yahoo finance*. The risk-free variable was collected from the Bank Indonesia rate (BI – rate) data. Data on company financial reports for the book value of equity (BVE), ROA, and ROE variables were obtained from the Indonesia Capital Market Institute (Icamel).

This study examines the effect of dividends on returns during declining and advancing market conditions separately. The categorization of the market conditions in this research refers to Goldstein and Nelling (1999) and Fuller and Goldstein (2011). The market condition can be reviewed from market returns; if the market returns' value is positive, it is an advancing market. Meanwhile, if market returns are negative, the market declines (Goldstein & Nelling, 1999; Fuller & Goldstein, 2011). Therefore, the reference to determine whether the market condition is declining or advancing for this research is through the Jakarta Composite Index (JCI) monthly returns.

The independent variable used in this research is the dividend. If a company is categorized as a

dividend-paying company, then the dummy variable is 1; if a company is categorized as a non-dividend paying company, the variable for the dummy is 0. Subsequently, a dividend-paying company is further classified based on the form of dividend paid, namely cash and stock dividends. Dummy variables are used to determine the effect of dividends on returns without considering the number of dividends paid by the company. Furthermore, dividends are classified based on the payment method to determine whether cash dividends or stock dividends have more influence on returns. The running model of the effect of cash dividends and stock dividends is carried out separately.

Categorizing companies into dividend-paying and non-dividend paying was a method used by Litzenberg and Ramaswany (1982), whereby a company is given value of 1 on the months the dividends are paid out. Furthermore, the dividends are further classified according to the form paid out, namely cash and stock dividends. In the stock dividend variable, the value is one if the company pays out the dividend as stock; if not, then the value is 0. This research's control

Table 1. *Definition of the Research Variable*

Variable	Definition
Dependent Variable	
<i>Return</i>	$R_{it} = \frac{P_{it} - P_{it-1} + D}{P_{it-1}}$
Independent Variables	
<i>Dividend Dummy</i>	
<i>Cash dividend</i>	
<i>Stick Dividend</i>	
Control Variables	
<i>Beta</i>	$\beta_i = \frac{Cov(R_i, R_m)}{\sigma^2(R_m)}$
Market Capitalization	
<i>Book Value of Equity</i>	
Profitability	
ROA	$Return\ on\ Assets = \frac{Net\ Income}{Total\ Assets}$
ROE	$Return\ on\ Equity = \frac{Net\ Income}{Total\ Equity}$
Tobin's Q	$q = \frac{MVE + DEBT}{TA}$
Free Cash Flow	$FCF = (INC - TAX - DIV)/TA$

variables include beta, market capitalization, book value of equity, profitability, and free cash flow.

In this research, there may be an assumption that a positive relationship exists between dividends and stock returns during declining market conditions. While investors are more optimistic about investing in stocks during advancing markets, they are more focused on returns from capital gain than dividends. This may lead to assumptions that dividends paid out during declining market conditions will significantly impact when market conditions are advancing.

Model

The first model was used to examine the impact of Dividend to Return with profitability as the control variable. According to the variable, the model used in this research was the same as Fuller and Goldstein (2011), which is:

$$r_{it} - r_{ft} = \alpha_{it} + \gamma_{it}\beta_t + \mu_{it}Ln(Mktcap)_t + \eta_{it}Ln(BVEquity)_t + \varphi Profitability + \delta_{it}DIV_t + \varepsilon_{it} \quad (1)$$

Where $r_{it} - r_{ft}$ is the company stock return of the month t subtracted by the risk free rate of month t. β is the stock beta. $Ln(Mktcap)$ is the natural logarithm of the book value of equity for month t. Profitability is proxied as return on assets (ROA), return on equity (ROE), and Tobin’s Q, which is utilized separately. DIV is the dividend dummy, which is categorized as cash or stock dividends.

The next model used in this research utilizes free cash flow as a control variable. This model was used to examines the impact of dividend on return with free cash flow as control variable, which is:

$$r_{it} - r_{ft} = \alpha_{it} + \gamma_{it}\beta_t + \mu_{it}Ln(Mktcap)_t + \eta_{it}Ln(BVEquity)_t + \varphi Free Cash Flow + \delta_{it}DIV_t + \varepsilon_i \quad (2)$$

This study examines the effect of dividends on returns during declining and advancing market conditions separately. The reference for determining whether the market condition is declining or advancing for this research is through the Jakarta Composite Index (JCI) monthly returns. When JCI returns are negative,

the month is categorized as a declining market. On the contrary, if the JCI returns are positive, then the month can be classified as an advancing market. The JCI is considered able to representing the market because it is the average index of the stock prices listed on the Indonesian Stock Exchange. The returns used in this research are the monthly JCI returns.

The calculation method of JCI returns utilized a simple return method, which is the JCI return during period t, subtracted by JCI t-1 and divided by JCI t-1. The formula is written as

$$RIHSG_t = \frac{PIHSG_t - PIHSG_{t-1}}{PIHSG_{t-1}} \quad (3)$$

$RIHSG_t$ = the JCI return rate during time t
 $PIHSG_t$ = the JCI value during time t
 $PIHSG_{t-1}$ = the JCI value during time t -1

The sample gathering period for this study was from 2008 until 2017. There were 47 months when it was a declining market and 73 months when it was advancing.

Table 2. Numbers of declining market and advancing market in the year 2008 – 2017

Declining Market	47 month
Advancing Market	73 month
Total	120 month

Results and discussion

Table 3 describes the statistics from each variable utilized. The cash and stock dividend variables are dummy variables. The value is determined as 1 or 0 according to the classification of whether the company i at the time of t is a dividend-paying company or a non-dividend company. After this is done, the dividend-paying company is further classified by whether it pays out cash or stock dividends. For the cash dividend variable, if company i at the time of t is classified as a cash dividend-paying company, then the value is 1; if not, the value is 0. The cash dividend variable has a mean value of 0.053 and median of 0 during declining market conditions. Whereas during advancing market conditions, the mean of the cash dividend is 0.046. This shows that the majority of the sample was not dividend-paying companies.

Stock dividends were also dummy variables, and the value is based on the classification of whether

Table 3. *Descriptive Statistics*

Market Condition	Variable	Minimum	Maximum	Mean	Median	Mode
Declining Market No Obs =6345	<i>return</i>	-0,98	6,57	-0,081	-0,092	-0,065
	beta	-8,44	7,91	0,695	0,625	0
	lnmc	16,1	33,7	27,03	26,88	30,37
	lnbve	23,2	38,7	27,39	27,30	24,40
	ROA	-1,19	0,54	0,059	0,030	0,140
	ROE	-1,17	2,70	0,097	0,080	0,270
	FCF	0.000093	0,84	0,029	0,025	0,090
	Q	0	20,5	1,217	0,888	0,374
	cash_dividend	0	1	0,053	0	0
	stock_dividend	0	1	0,0006	0	0
Advancing Market No Obs = 9855	<i>return</i>	-1,04	4,85	-0,0075	-0,058	-0,065
	beta	-7,62	8,89	0,720	0,658	0
	lnmc	16,61	33,69	27,07	26,89	30,68
	lnbve	23,2	37,00	27,38	27,29	24,39
	ROA	-1,19	0,540	0,052	0,035	0,137
	ROE	-1,17	2,700	0,096	0,073	0,870
	Q	0	20,13	1,191	0,875	1,958
	FCF	0.000093	0,840	0,029	0,026	0,255
	cash_dividend	0	1	0,046	0	0
	stock_dividend	0	1	0,0002	0	0

the company is a stock dividend-paying company (1) or not (0). The mean value of this variable is 0.0006 during declining market conditions and 0.0002 during advancing market conditions. Hence, we can conclude that the majority of the sample was not stock dividend-paying companies.

Table 4 shows that cash dividend payouts' impact is significantly positive towards returns during both declining and advancing market conditions. There is no difference in whether the dividend is paid out during declining and advancing market conditions. These results show that market conditions do not influence dividend payouts towards return in the Indonesian capital market. Both cash dividends and stock dividends' impacts on returns are significantly positive in declining and advancing market conditions. Stock dividend payouts are not viewed as bad news for the market because stock dividends are an effort by the company to pay out dividends even when its financial conditions decline (David & Ginglinger, 2016). The effect of stock dividends towards returns is the same

as the effect of cash dividends towards returns, and there is no difference whether the dividend is paid out in cash or as stock (Xi *et al.*, 2015). Table 4 also displays the influence of market capitalization towards returns, and results were significantly positive in both declining and advancing market conditions. Market conditions impacted the beta variable. The beta had a significantly negative impact on return during declining market conditions, while it was significantly positive during advancing market conditions. The book value of equity variable was also not impacted by market conditions. According to this research, the impact of the book value of equity was significantly negative towards return during declining and advancing market conditions.

The regression results with profitability as a control variable is displayed below:

Similar to Table 4, Table 5 also shows that cash dividends' impact towards return is significantly positive. This was also the case with stock dividends, which also had a significantly positive effect on returns.

Table 4. *Impact of dividend on return with profitability as control variable*

The following table contains the *generalized least square* coefficient of dividend-paying and non dividend-paying companies. The regression model used is as follows:

$$r_{it} - r_{ft} = \alpha_{it} + \gamma_{it}\beta_t + \mu_{it}\text{Ln}(\text{Mktcap})_t + \eta_{it}\text{Ln}(\text{BVEquity})_t + \varphi \text{Profitability} + \delta_{it}\text{DIV}_t + \varepsilon_{it}$$

Where $r_{it} - r_{ft}$ is the stock return of the company in month t subtracted by the risk-free rate on month t. β is the stock beta. $\text{Ln}(\text{Mktcap})$ is the natural algorithm from the market capitalization of month t. $\text{Ln}(\text{BVEquity})$ is the natural algorithm of the book value of equity for month t. Profitability is the return on assets (ROA), return on equity (ROE) dan Tobin's Q from the previous year. DIV is the dividend dummy that was categorized as either a cash dividend or stock dividend. A declining market condition is a condition when JCI returns are of negative value, while an advancing market condition is when JCI return is positive. The number of observations for declining market is 6345, while the number of observations for advancing market is 9855.

	Intercept	Beta	Ln(MktCap)	Ln(BVE)	Profitability	Cash-Div	Stock-Div
Panel A: ROA							
<i>Declining Market</i>	-0.13	-0.00066***	0.011*	-0.0087**	-0.0512	0.0396*	0.1342***
<i>Advancing Market</i>	0.267*	0.0043**	0.0086**	-0.0188*	0.0157	0.0359*	0.1585***
Panel B: ROE							
<i>Declining Market</i>	-0.14	-0.0066***	0.011*	-0.0084**	-0.041**	0.04*	0.14***
<i>Advancing Market</i>	0.288**	0.004***	0.008*	-0.019*	0.03**	0.036***	0.16***
Panel C: Tobin's Q							
<i>Declining Market</i>	-0.12	-0.006***	0.015*	-0.013*	0.014*	0.04*	0.13***
<i>Advancing Market</i>	0.259**	0.0046***	0.012*	-0.022*	0.01**	0.036***	0.15***

- significant on 1%
- significant on 5%
- significant on 10%

Table 5. *The impact of dividend on return with free cash flow as control variable*

The following table contains the *generalized least square* coefficient of dividend-paying and non dividend paying companies. The regression model used is as follows:

$$r_{it} - r_{ft} = \alpha_{it} + \gamma_{it}\beta_t + \mu_{it}\text{Ln}(\text{Mktcap})_t + \eta_{it}\text{Ln}(\text{BVEquity})_t + \varphi \text{FCF} + \delta_{it}\text{DIV}_t + \varepsilon_{it}$$

Where $r_{it} - r_{ft}$ is the stock return of the company in month t subtracted by the risk free rate on month t. β is the stock beta. $\text{Ln}(\text{Mktcap})$ is the natural algorithm from the market capitalization of month t. $\text{Ln}(\text{BVEquity})$ is the natural algorithm of the book value of equity for month t. DIV is the dividend dummy that was categorized as either a cash dividend or stock dividend. A declining market condition is when JCI returns are of negative value, while an advancing market condition is when JCI return is positive.

$$\text{FCF} = \text{INC} - \text{TAX} - \text{INTEXP} - \text{DIV}$$

Where FCF is free cash flow, INC is operating income before depreciation; TAX is total income tax, INT is interest expense, DIV is the total amount of dividend. We standardize the FCF by total assets of the firm.

	Intercept	Beta	Ln(MktCap)	Ln(BVE)	FCF	Cash-Div	Stock-Div
<i>Declining Market</i>	-0.11	-0.0067***	0.01*	-0.0088*	0.0063	0.039*	0.13***
<i>Advancing Market</i>	0.268**	0.004***	0.0088*	-0.019*	0.041	0.036***	0.159***

- significant on 1%
- significant on 5%
- significant on 10%

During declining market conditions, the probability of financial distress increases and dividend payouts are one of the most challenging decisions that a company has to make (Fuller & Goldstein, 2011). Hence, if a company can pay out dividends during a declining market, it positively signals the stability of the company's profits and that there is future earning growth; this is in line with the signaling theory of Bhattacharya (1979). The future earning growth is why a company can create positive returns by paying out dividends during a declining market condition. Moreover, investors are more pessimistic in making investments during declining markets and will review their investments and become more sensitive to the misuse of funds (DeAngelo et al., 2006).

Investors prefer to have the dividends paid out in cash during declining market conditions rather than having it reinvested (Fuller & Goldstein, 2011). This is because there is a possibility that the manager uses the funds for things that are not in the shareholders' interests during these conditions. This matter can be avoided if the dividend is paid out in cash. This is also a reason why dividends are irrelevant (Fuller Goldstein, 2011). Investors are more optimistic in investing during advancing market conditions, resulting in a greater preference towards returns and capital gain.

However, this research found a difference with Fuller and Goldstein (2011) because different market conditions did not differ in the impact of dividends towards returns. According to a study conducted by Sirait and Siregar (2014) and by Harsono and Nugroho (2019), dividend payouts in Indonesia indicate future earnings growth. This, in turn, creates a positive signal for the dividend-paying company, which is an example of the signaling theory in Indonesia (Baker & Powell, 2012). According to Baker and Powell (2012), the impact of dividend payouts in Indonesia is relevant because dividend payouts are able to influence the increase of stocks and company returns.

The Indonesian capital market can be categorized as an emerging market (Mulyani et al., 2016), as the conditions are more fluctuative than developed markets (Broner Rigobon, 2004) in times of both declining and advancing markets. As a result, one of the most important considerations for investors is selecting companies that can remain in business for the long term. An indicator of this is a company's ability to generate profits in the future. Dividends can be used to indicate a company can generate future

profits, which conforms to the signaling theory. This is one reason why different market conditions do not cause the influence of dividends towards returns to be different. This is because a dividend-paying company creates a signal of company profits' stability (Baker & Powell, 2012), the existence of future earnings growth (Siregar & Sirait, 2014; Harsono & Nugroho, 2019), and its ability to continue doing business in the future. This will always be a deciding factor for investors in selecting stocks in Indonesia, both during declining market conditions as well as advancing market conditions because the Indonesian capital market is more fluctuative. This ties into how the Indonesian capital market is categorized as an emerging market.

In this study, arguments that support the influence of stock dividends towards returns is that stock dividend payouts do not constitute as bad news for the market because stock dividend payouts is a means for the company to show its ability to pay out dividends even though the financial conditions of the company are in decline (David & Ginglinger, 2016). Stock dividends have the same influence as cash dividends over stock returns, namely increasing the shareholders' returns from capital gain (Xi et al., 2015; David & Ginglinger, 2016). Subsequently, this shows that there is no difference in whether the dividends are paid out in cash or as stock to analyze the impact of dividends on returns.

To check the robustness of the general linear regression analysis results, we also run the analysis using ordinary least squares. The results using ordinary least squares are almost the same results for the general linear regression analysis. For both declining and advancing market conditions, the results are positively significant either with cash-dividend or stock-dividend.

This research shows that the impact of dividends in Indonesia is relevant due to dividend payouts positively influencing company returns. Dividend payouts provide a positive signal of future earnings growth (Sirait & Siregar, 2014; Harsono & Nugroho, 2019), consequently increasing stock prices and company returns; this is in line with the signaling theory. The research results of Baker and Powell (2012) also suggest that the impact of dividends towards returns in Indonesia corresponds with this theory.

Based on the results of this research, it is suggested that dividend-paying companies can influence their returns during both declining and advancing market conditions. This is influenced by the positive signal

caused by dividend payouts.

Conclusions and Recommendations

This research examined the impact of dividends on returns with profitability and free cash flow in declining and advancing market conditions. The research ran a model separately for declining and advancing markets. Control variables, profitability, and free cash flow were also ran separately. From some of the results that were obtained, a conclusion will be drawn in unity. The generalized least square method was used to analyze the impact of dividends on returns during both advancing and declining markets. This paper is the first of its kind to empirically examine the impact of dividends on returns with profitability and free cash flow as control variables based on market conditions in Indonesia.

The hypothesis of this research is that there is a positive relationship between dividends and stock returns during declining market conditions. While investors are more optimistic about investing in stocks during advancing markets, they are more focused on returns from capital gain rather than dividends. This may lead to assumptions that dividends paid out during declining market conditions will have a more significant impact than when market conditions are advancing. Although the results of this study are contradictory, the dividend paid out during advancing market is more significant than in declining market.

This study finds that investors take notice of the dividend payouts made by companies. Results show that cash dividend payouts have a positive impact on returns during declining and advancing market conditions. The same results are present even though the profitability and free cash flow proxies used were different. The impact of stock dividends toward returns was also significantly positive. This study shows a different result to prior research by Fuller and Goldstein (2011) and Phohan (2013). The Indonesian capital market can be categorized as an emerging market (Mulyani et al., 2016), so the conditions are more fluctuative compared to developed markets (Broner & Rigobon, 2004), in times of both declining and advancing markets. This is one reason why different market conditions do not cause the influence of dividends towards returns to be different.

This study cannot attest that market conditions

influence the role of the dividend toward returns in Indonesia. For further research, it is suggested that a new benchmark is utilized in determining declining and advancing market conditions. Investors are advised to select companies that pay out dividends regularly. In addition, it is also advised that investors select companies that are large size because this study indicates that the impact of market capitalization is significantly positive toward returns. Tobin's Q value also positively affects returns; hence, Tobin's Q can also be a variable that investors can review to determine which stocks to select. It is also suggested that companies pay out dividends because it may positively signal shareholders in Indonesia.

References

- Allen, F., Bernardo, A. E., & Welch, I. (2000). A theory of dividends based on tax clienteles. *Journal of Finance*, 55, 2499 – 2539
- Baker, H. Kent., & Powell, Gary. (2012). Dividend policy in Indonesia: survey evidence from executives. *Journal of Asia Business Studies*, 6(1), 79-92
- Baker, Malcolm., & Wungler, Jeff. (2004). *A catering theory of dividends*. *Journal of Finance* 59, 1125 -1165
- Bhattacharya, Sudipto. (1979). Imperfect information, dividend policy, and the bird in the hand fallacy. *Bell Journal of Economics*, 10, 259 – 270
- Bhattacharya, D., Chang, C., & Li, W. (2019). Stages of Firm Life Cycle, Transition, and Dividend Policy. *Finance Research Letters*, 33, 1544-6123.
- Brennan, Michael. (1970). Taxes, market valuation, and financial policy. *National Tax Journal*, 23, 417 – 427
- Chandra, Rudy. (2010) Analisis saham oleh investor asing di Bursa Efek Indonesia. *Jurnal Ilmu Administrasi dan Organisasi*, 17, 101-113
- Chun, H. K. L., Cudia, C., Papa, T. D. M., Tahilramani, R. S., & Tan, A.R. (2020). Effect of Moderating Variables: Financial Leverage and Dividend Payout of Publicly-Listed Property Setor of the Philippines. *DLSU Business & Economic Review*, 29 (2), 58-70
- Crockett, A. D. (1997). Why is Financial Stability a Goal of Public Policy, *Economic Review*, 82(Q4), 5-22
- David, Thomas., & Ginglinger, Edith (2016). When cutting dividends is not bad news: The case of optional stock dividends. *Journal of Corporate Finance*, 40, 174-191
- DeAngelo, Harry., & DeAngelo, Linda. (2006). The irrelevance of the MM dividend irrelevance theorem. *Journal of Financial Economics* 79, 293 – 315
- Fuller, Kathleen P., & Goldstein, Michael A. (2011). Do

- dividends matter more in declining markets? *Journal of Corporate Finance* 17, 457 – 473
- Goldstein, Michael A., & Neilling, Edward F. (1999). REIT Return behaviour in advancing and declining stock market. *Real Estate Finance* 15, 68 – 77
- Harsono, Galuh Setiowati., & Nugroho B. Yulianto (2019). Pengaruh Dividend Payout Terhadap Future Earnings Growth pada Perusahaan Non Keuangan yang Terdaftar di BEI 2002-2016. *Sinergi*, 9(2), 32-41
- Horne, J. C., & Wachowicz, J. M. (2008). *Fundamental of Financial Management (13th ed)*. New Jersey: Prentice-Hall, Inc
- Jensen, Michael C., & Meckling, William H. (1976). Theory of The Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3, 305-360
- Jing-Min, Kuo., Denis, Philip., & Qingjing, Zhang (2013). What drives the disappearing dividends phenomenon? *Journal of Banking & Finance*, 37, 3409-3514
- KSEI. (2017). *KSEI terus upayakan kemudahan pembukaan rekening investasi*. Berita Pers: PT Kustodian Sentral Efek Indonesia, Agustus, 2017. http://www.ksei.co.id/files/uploads/press_releases/press_file/id-id/135_berita_pers_ksei_terus_upayakan_kemudahan_pembukaan_rekening_investasi_20170816154208.pdf
- Lintner, John. (1962). Dividends, Earnings, Leverage, Stock Prices and the Supply of Capital to Corporations. *The Review of Economics and Statistics*, 44, 243-269
- Litzenberger, R., Ramaswamy, K., (1982). The effect of dividends common stock prices: tax effects on information effects. *Journal of Finance*, 37, 429-443
- Manley, Richard., & Glissman, Christina Mueller. (2008). The Market for Dividends and Related Investment Strategies. *Financial Analysts Journal*, 64, 17 - 29
- Miller, Merton H., & Modigliani, Franco. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34, 411-433
- Mulyani, Evi., Singh, Harminder., & Mishra, Sagarika. (2016). Dividend, Leverage, and Family Ownership in The Emerging Indonesia Market. *Journal of International Financial Market, Institution & Money*, 43, 16-29.
- Palepu, Krishna G., & Healy, Paul M. (2012). *Business Analysis & Valuation: Using Financial Statement*. USA: South-Western Cengage Learning
- Phohan, Samuel. (2013). *Skripsi Pengaruh Dividen Tunai Terhadap Imbal Hasil Saham pada Kondisi Pasar Melemah dan Pasar Melemah: Studi Kasus Pasar Saham Indonesia Periode 2001 – 2011*. Skripsi: Fakultas Ekonomi Manajemen Universitas Indonesia
- Sirait, Febriela., & Siregar, Veronica Sylvia. (2014). Dividend payment and earning quality: evidence from Indonesia. *International Journal of Accounting and Information Management*, 22(2), 103-117
- Vakilifard, Hamid Reza., Shahmoradi, Nasim. (2014). Investing the Effect of Stable Profitability and Free Cash Flow in Stock Return Companies Listed in Tehran Stock Exchange. *International Journal of Academic Research in Accounting, Finance, and Management Sciences* 4, 21 – 27
- Wardhana, L I., & Tandelilin, E. (2011). Institutional Ownership and Agency Conflict Controlling Mechanism. *Journal of Indonesian Economy and Business*, 26, 389 – 406
- Xi, He., Li, Mingsheng., Jing, Shi., & Twite, Garry (2016). Why do firms pay stock dividends: Is it just a stock split?. *Australian Journal of Management*, 41 (3), 508-537