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Abstract

Earning response coefficient (ERC) is one of the important things for companies and investors as a reflection of the good value of the company. The COVID-19 pandemic that is happening globally has greatly affected capital market conditions and companies in general. It is necessary to examine what factors affect ERC significantly to provide an overview to the cave company while maintaining the good name of the company. This study aims to analyze the effect of firm growth, leverage, information asymmetry, and systematic risk on ERC with dividend payout ratio as moderating in Indonesian and Singapore Stock Exchange. The research uses a quantitative approach with secondary data in the form of company's annual reports. Population were food and beverage also tobacco manufacturing companies in 2018-2020. Consists of 38 companies JASICA index on IDX, and 33 companies SGX index on SGX. The results showed that, firstly, leverage and systematic risk had significant negative effect on ERC. Second, firm growth and information asymmetry have no effect on ERC. Third, Dividend payout ratio is able to weaken positive influence information asymmetry on ERC. Forth, Dividend payout ratio was unable to moderate positive influence firm growth also negative effect leverage and systematic risk on ERC. All variables have no difference significant statistical between two stock exchanges. These results indicate that the company must improve the performance and quality of information. Pay attention to obligations, mitigate and manage risk to obtain optimal ERC.

Keywords: Earnings Response Coefficient (ERC), firm growth, leverage, dividend payout ratio, JASICA, IDX, SGX

JEL Classification E22, E44, G15, G32

INTRODUCTION

Pandemic *covid*-19 that has been going on since the end of 2019 (www.covid19.co.id), has an impact on the development capital market (Indrayati *et al.*, 2020). The performance of the Indeks Harga Saham Gabungan (IHSG) as reference index of the Indonesian capital market, in 2017-2020 was corrected less well with 2020 down by 5.09%. However, based on the statistical data of PT Kustodian Sentral Efek Indonesia (2021), in 2020 the number of investors increased significantly by 56.21%.

The increase number of investors is inversely proportional to the IHSG value tends to decline. According *efficient market theory*, the concept of market efficiency explains the process of forming market equilibrium prices. Systematic risk in the form of the *covid*-19, makes the market respond to changes in economic fundamentals in the form of low movement stock transactions. The market predicts that the company's fundamentals will decline because the stability of the projected performance of profit is disrupted (Deng *et al.*, 2017).

The investor's response is in the form of a strong market reaction to earnings information, as reflected by the high *Earnings Response Coefficient* (ERC). The higher ERC, higher *return* expected stock ERC encourages easier investment decisions because profit becomes informative. However, other information besides earnings still needed to predict *returns*. Profit has limitations that influenced by calculation assumptions and the possibility of management manipulation.

Research of Al-Baidhani *et al.*, (2017) stated, when profits decline it is not necessarily followed by a decrease in stock prices. That every increase in profit is not always followed by changes in positive stock price increases and vice versa. Such conditions occur when companies carry out inappropriate earnings management practices (earnings manipulation) (Egbunike & Odum, 2018). Manipulation makes profits not presented according to the facts of economic conditions, so they cannot be the basis for decision making (Kurniawan & Khafid, 2016). The impact of earnings manipulation is the imbalance of profits earned with existing stock prices. This is *bad news* because the company considered to have failed to maintain the stability of its performance (Khasanah & Khafid, 2020). Complex and complicated operational activities are the main reasons for the practice of profit manipulation in manufacturing companies (Mamun *et al.*, 2017).

ERC, which is a benchmark for market response to the company's condition, needs to be evaluated so that the company always gets a good assessment from the stock market. For this reason, an analysis of the determinants of ERC is needed. According to several previous studies with fairly inconsistent results, several factors that influence the ERC studied in this study are firm growth, leverage, information asymmetry, and systematic risk and dividend payout ratio.

LITERATURE REVIEW

ERC is the sensitivity or sensitivity of the effect of earnings on returns which is reflected in the high and low slope coefficient of the earnings regression model (Millatina, 2012). This research is based on *efficient market theory*, *agency theory*, and *signaling theory*. *Efficient market theory* from Fama (1970), is a theory of the implications of investor responses to information published by companies and emphasizes market conditions and reactions (Rizki & Rosyidiana (2017). No party is able to control market efficiently, because the market reacts quickly and accurately achieve a new balance that reflects available information (Saputra & Mulyani, 2016). *Efficient market theory* supports the ERC, showing how strong financial information through stock price reflection affects investor response. *Efficient market theory* also explains the effect of *systematic risk*, because investment always has the opportunity to have unavoidable risks (Basuki *et al.*, 2017) and (Agustina, 2021). Ball *et al.*, (1999) stated, the implication of *systematic risk* encourages investors to seek the lowest risk for stocks with the same *return*.

Agency theory from Jensen and Meckling (1976), expressed as a cooperative owner relationship (*principal*) by delegating authority and decision making to management (*agent*) to optimize profits (Reyhan *et al.*, 2014). There are opportunities for differences two parties resulting *information asymmetry*) (Irawan & Talpia, 2021). Agency theory also plays a role as an alternative solution to overcome the weaknesses of *efficient market theory* which contains anomalies such as stock price variances, namely through dividend distribution (Zein, 2016). Bathala *et al.*, (1994) states, to reduce *agent* and *principal*, supervision can be carried out by paying dividends through the *dividend payout ratio* to *earnings after tax*.

Signaling theory from Akerlof (1970), states that companies provide signals to interested parties regarding their performance, including growth rates and funding. Earnings announcements can produce varied responses. Signals can be in the form of *good news* or *bad news* which is the basis for assessing the company's performance (Assagaf *et al.*, 2019). The presentation of systematic and fair accrual earnings is a sign that the company has good ERC (Mashayekhi & Aghel, 2016).

Determinants of ERC are very diverse and there are still inconsistencies in the results. Research by Yeni *et al.*, (2018), Holiawati, 2017 also Tamara and Suaryana (2020) show that *firm growth* has a positive effect on ERC. Research by Widiatmoko and Indarti (2018) also Kurniawati and Dwimulyani (2018) shows that *firm growth* has a negative effect on ERC. Meanwhile, Santoso (2015) and Arif (2016) found that *firm growth* had no effect on ERC.

Firm growth according to Fitriah (2020), is a measure of how far the company puts itself in the economic system. Companies with good *firm growth*, have performance and progress that shape

profits and a positive image so that ERC will be of good value (Farizky, 2016). *Signaling theory* from Akerlof (1970) stated that the company will provide signals to interested parties regarding their performance.

Firm growth has a positive effect on changes in stock prices (Dewi & Wirajaya, 2013). Yeni *et al.*, (2018) also Dewi and Puspaningsih (2019) stated that *firm growth* has a positive effect on ERC. Companies with *firm growth* are able to provide *returns* compared to companies that do not grow (An, 2015). Dewi and Puspaningsih (2019) explained that *firm growth* will provide benefits and opportunities for the company to earn high profits in the future (Kurniawati & Dwimulyani, 2018).

Leverage is the proportion of the use of obligations in financing investment (Wulansari, 2013). When the company has big *leverage*, so when profits increase the beneficiary is *debtholders* (Dewi & Puspaningsih, 2019). *Signaling theory* from Akerlof (1970) stated that the company will provide signals to interested parties regarding their performance. Companies with high *leverage* are expected to increase profits due to additional funds from external parties (Lestari & Khafid, 2021).

The research of Shiri *et al.*, (2012) and Samosir (2018) show the positive effect of *leverage* on earnings quality as proxied by ERC. Research by Suardana and Dharmadiaksa (2018) also Tamara and Suaryana (2020), shows that *leverage* has a negative effect on ERC. Meanwhile, Kristanti and Almilia (2019) also Hasanuh *et al.*, (2020), shows that *leverage* have no effect on ERC.

High *leverage* levels provide *bad news* to investors, but *good news* to *debtholders*. *Bad news* will reduce market reaction, because creditors will benefit more (Scott, 2015). Dewi and Yadnyana (2019) also Dewi *et al.*, (2020), prove that *leverage* has a negative effect on ERC. Dewi *et al.*, (2020) concluded, better condition of company profits financed with high *leverage*, so more negative the shareholder response. . High *leverage* shows that total liabilities are greater than total equity, so expenses outside the company increase. Tamara and Suaryana (2020) indicated that investors prefer earnings announcements accompanied by bond redemptions over new bond issuances.

The relationship between *agent* and *principal* causes *information asymmetry* because *principal* has limited ability to manage the company (Agusti & Pramesti, 2013). *Information asymmetry* occurs when *agent* has more information on the state and prospects of the company than *principal* (Wardani & Masodah, 2011). *Agency theory* from Jensen and Meckling (1976) implies a separate function of management and ownership, thus encouraging *agents* to report accounting numbers to maximize performance and create *good news* to attract investor responses (Putri & Fitriasari, 2017).

Agency theory emphasizes the importance of *principal* handing over the management of company to professionals (*agents*) (Paramita *et al.*, 2020). *Agents* want performance results to be judged good by the *principal*, so they get more bonuses through *a bonus plan* (Prihastomo & Khafid, 2018). Research by Indrawati (2011) and Widjayanti (2018) supported by Sari (2020) stated that *information asymmetry* has a positive effect on ERC. The greater *information asymmetry*, higher

opportunity for *agent* to create earnings quality and form a good image of the company through earnings publications. Management prioritizes the publication of good information about companies with bad information not announced and becoming company's internal secrets, thereby increasing investor response (Barus & Setiawati, 2015). Through the availability of information that is not owned by the *principal, the agent* provides satisfaction to shareholders (Azhar, 2014).

Systematic risk is a risk that affects all companies and cannot eliminated through diversification (Tandelilin, 2010). Awawdeh *et al.*, (2020) stated, the level of *systematic risk* can measured by the beta value. A high beta value has an impact on the company's high asset portfolio risk (Kurniawati and Dwimulyani, 2018). *Efficient market theory* from Fama (1970) stated that no investor is able to control the market efficiently. According to Santoso (2015), uncertainty always arises related to market conditions. Even though the company's operations are going well and the stock price has no reason to down, according to *efficient market theory* market will still react negatively due to *systematic risk* (Basuki *et al.*, 2017).

Sari (2020), found evidence of *information asymmetry having* a positive effect on ERC. However, Reyhan *et al.*, (2014) and Azhar (2014) stated that *information asymmetry* had no effect on ERC. Susanto (2012) proves that *systematic risk* has a positive effect on ERC. Research by Beredugo (2021), shows that *systematic risk* has a negative effect on ERC. Meanwhile, Beredugo (2021), shows that *systematic risk* has no effect on ERC.

Jumaidi and Rijal (2018) stated that *systematic risk* has a negative effect on ERC. The more fluctuating stock changes due to market conditions, so beta has high value and earnings at the end of period are difficult to predict, thereby reducing investor response. Suardana and Dharmadiaksa (2018) also Beredugo (2021) stated, high beta increases unexpected prices and future earnings revisions. Investors tend to be risk averse and less likely to like big profit surprises. Although promising *returns*, large profit surprises have a high degree of uncertainty as well.

The inconsistency of the results of previous studies underlies the emergence of a moderating variable that is a *dividend payout ratio*. *Dividend payout ratio* refers to the policy of measuring dividends in amount of profit per share (Setiawati & Yesisca, 2016). The higher *dividend payout ratio*, its mean more dividends paid out of net income. According *agency theory* from Jensen and Meckling (1976), to reduce *agent* and *principal* dividends can be distributed to *earnings after tax*.

Dividends are evidence of performance as well as an alternative to monitoring management policies (Paramita *et al.*, 2020). Dividend distribution is able to keep shareholders from investing even increasing the amount of investment funds. Investors are interested in dividends rather than *capital gains*, because they provide more certainty than relying on changes in stock prices (Marina *et al.*, 2020)

Dewi and Puspaningsih (2019) stated that firm growth has a positive effect on ERC. Companies

with *firm growth*, provide high benefits in the future. The higher *firm growth*, the higher ERC. Based on *agency theory* from Jensen and Meckling (1976), agency relationship causes *information asymmetry* and *conflict of interest*. *Information asymmetry* can reduced by performance transparency and corporate governance. Management supervision can be control by paying dividends to net income through the *dividend payout ratio* (Fred & Copeland., 1992).

Dividend payout ratio weakens the influence of *firm growth* on ERC. Companies with *firm growth* have lower *dividend payout ratio* (Deng *et al.*, 2017). The company's funds and profits are reused to finance the company's investment projects (Fitriah, 2020). Based on Sari and Daud (2016), the higher *firm growth*, greater funding and company's desire to retain profits. Growing companies tend not to distribute *dividend payout ratios*, but use these funds for expansion (Soly & Wijaya, 2017). The larger *dividend payout ratio*, *firm growth* will be hampered because the smaller the funds invested in the company (Aslindar & Lestari, 2021).

Dewi *et al.*, (2020) stated that *leverage* has a negative effect on ERC. The better condition of company financed by *leverage*, the more profitable the *debtholders*. Based on *agency theory* of Jensen and Meckling (1976), agency relationship causes *information asymmetry* and *conflict of interest*. Bathala *et al.*, (1994) stated, to reduce *agent* and *principal* it can do by paying dividends and funding obligations. *Dividend payout ratio* strengthens the negative effect of *leverage* on ERC.

Companies with *leverage* high, have low *dividend payout ratio*. When a company earns a profit from liability financing, it focuses on returns to creditors rather than *returns* to investors. Kristanti and Almilia (2019) stated that the company's first choice of funding is *retained earnings*, then liabilities and equity. Dewi *et al.*, (2020) stated that the smaller the liability, it indicates the company has been able to use *internal equity* (retained earnings). Use *of internal equity* is the company's effort to minimize the cost of capital in reducing dividend payments through the *dividend payout ratio*.

Sari (2020) show that *information asymmetry* has a positive effect on ERC. *Agents* with more information than *principal* are able to create positive value through reporting the company's good performance. Based on *signaling theory* from Akerlof (1970), information signals are given by companies to interested parties regarding their performance. The signal acts as information and comes from *information asymmetry* (Putra *et al.*, 2014).

Dividend payout ratio strengthens the positive effect of *information asymmetry* on ERC. Dividend payout ratio indicates agent better understands the condition and performance of company. The information signal of the *dividend payout ratio* is a answers specific matters that occur in the company (Malau & Parhusip, 2016). Agents are motivated to convey good information to the public as quickly as possible. *Information asymmetry* makes external parties do not know for sure the truth of the information submitted by *agent*. When *agent* is able to give a convincing signal, public will be impressed and reflected in the price of securities (Khafid & Arief, 2017). Jumaidi and Rijal (2018) stated that *systematic risk* has a negative effect on ERC. High *systematic risk* which reflected in the beta value, causes unexpected income due to uncertainty in *returns* and investors who tend to avoid risk. *Signaling theory* from Akerlof (1970) explain the company's signaling information to interested parties regarding its performance. Price changes depend on new information and *systematic risk* previously unknown (Paramita *et al.*, 2020). *Dividend payout ratio* strengthens the negative effect of *systematic risk* on ERC.

Investments with *systematic risk* will not guarantee profits (Lie & Osesoga, 2020). Agustina *et al.*, (2021) stated, companies must be able to *control* risk for business continuity. *Dividend payout ratio* indicates the company's risk has controlled. Company is able to make dividend distribution decisions, when it is certain that the risks faced can overcome and do not cause sustainable losses. When company has a profit every year, mechanism for distribution of retained earnings must be determined by considering the risk (Husiano & Suratno, 2014). Brealey *et al.*, (2012) stated, companies with high risk do not get a good response from investors. Investors are *risk aversion*, when the risk is high, ERC will weakens (Fauzan & Purwanto, 2017). Investors dislike big profit surprises because they carry a lot of risk.

This research was conducted from the inconsistency of the previous research (research gap), by adding the dividend payout ratio (DPR) as the moderating variable. DPR is considered to be able reduce the conflict of interest between the principal and agent. So, the aims of this research is to analyze the effect of *firm growth*, *leverage*, *information asymmetry*, and *systematic risk* on ERC with *dividend payout ratio* as the moderating variable, so the hypothesis of this research are :

H1: Firm Growth Positively Effect on ERC

H2: Leverage Negatively Effect on ERC

H3: Information Asymmetry Positively Effect on ERC

H4: Systematic Risk Negatively Effect on ERC

H5: Dividend Payout Ratio Moderates Positive Effect Firm Growth on ERC

H6: Dividend Payout Ratio Moderates Negative Effect Leverage on ERC

H7: Dividend Payout Ratio Moderates Positive Effect Information Asymmetry on ERC

H8: Dividend Payout Ratio Moderates Negative Effects Systematic Risk on ERC

METHOD

The research population is a combination of two indices in two stock exchanges. Consist of *food*, *beverage*, *and tobacco* manufacturing companies 2018-2020 on the JASICA index (*Jakarta Stock Exchange Industrial Classification*) in *Indonesian Stock Exchange* (IDX) and SGX index (*Singapore Index Exchange*) in *Singapore Exchange* (SGX). Sample are *food*, *beverage*, *and tobacco*

manufacturing companies 2018-2020 in JASICA index on IDX and SGX index on SGX, according to the established criteria.

Sampling technique of this research is *purposive sampling*. The sample was selected based on certain criteria during the 2018-2020 period, so that 71 companies (38 IDX and 33 SGX companies) were obtained with total 87 data analysis units. During the research through the IBM SPSS version 25 program, 29 *outlier* so that the data used became 58 data analysis units. *Outlier* is known by looking at the *Z-Score*, which is then removed from the research sample. The research conducted using quantitative methods. All data is presented by the quantitative approach by using numerical data, which can be processed and analyzed using statistical techniques. The type of data is secondary data consists of *annual reports*, daily share prices, and company joint stock prices. Data collected by documentation method. Data obtained from the IDX *website* (www.idx.co.id), *website* SGX (www.sgx.com), *website* of each company, and through www.marketwatch.com. Data analyzed by descriptive statistics, inferential statistics, and different tests.

Dependent variable of this research is Earnings Response Coefficient (ERC) which is the reflection of investor response to information in earnings component (Fauzan & Purwanto, 2017). The independent variables are firm growth (realization of asset growth) (Nathaniel & Arfianti, 2019) and (Tamara & Suaryana, 2020), leverage which indicates by Debt To Equity Ratio; information asymmetry with the percentage of bid ask spread and systematic risk (beta stock) and the moderating variable is dividend payout ratio with proxy Dividend per share to Earning per share.

RESULTS

Different test (Mann-Whitney test/Mann-Whitney U Test) performed with two different samples (two indices and stock exchanges (IDX and SGX)). Test of Normality all variables are not normally distributed, with still variable have sig < 0.05. Based on Mean each variable has a significance > than 0.05, so the data variance is the same (homogeneous). Based on the results of the Mann-Whitney test, there is no statistically significant difference for each variable as a whole.

Furthermore, the ERC value was reanalyzed with descriptive statistics based on the research year period (2018-2020) from each stock exchange or a combination of both. A summary graph of the movement of the average ERC value in 2018-2020, observed in Figure 1 below:

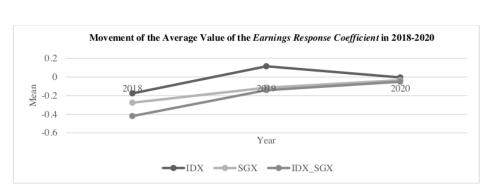


Figure 1. Summary of Movement of Average ERC Value in 2018-2020

The ERC value of IDX stock exchange in 2018, 2019, 2020 has an average value of (-0.1760), 0.1152, (-0.0051) with the highest value in 2019. In 2019 (the beginning of the emergence of *covid*-19), the Indonesian capital market has received the impact of *covid*-19 with increasing investor response. While in 2020 (increase in *covid*-19 cases), ERC has decreased because investors have reacted to the impact of *covid*-19 since the initial announcement of case.

The average ERC of SGX stock exchange in 2018, 2019, 2020 has a value of (-0.1004), (-0.2297), (-0.0294). While in the combined stock exchanges (IDX and SGX), the highest average ERC value is also found in 2020 with 2018, 2019, 2020 has a value of (-0.1436), (-0.0268), (-0.0161). Higher average value in 2020 (increase in *covid*-19 cases and the year when *covid*-19 was announced as a pandemic), indicating the increase in ERC was due to increased investor response to information published by companies during *covid*-19 pandemic. Every information will become more valuable and we look forward to its development, because it has the potential to affect investment activities and have a global impact due to the *covid*-19.

Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Decision
		В	B Std. Error Beta				
1	(Constant)	0.047	0.088		0.530	0.599	
	Zscore(FG)	-0.047	0.045	-0.160	-1.064	0.292	Rejected
	Zscore(LEV)	-0.112	0.050	-0.376	-2.242	0.030	Accepted
	Zscore(SPREAD)	0.026	0.053	0.087	0.485	0.630	Rejected
	Zscore(BETA)	-0.085	0.041	-0.286	-2.054	0.045	Accepted
	ABSZFG_DPR	0.041	0.052	0.132	0.798	0.429	Rejected
	ABSZLEV_DPR	0.044	0.060	0.133	0.728	0.470	Rejected
	ABSZSPREAD_DPR	-0.168	0.064	-0.516	-2.638	0.011	Rejected
	ABSZBETA_DPR	0.000	0.050	-0.001	-0.007	0.995	Rejected
a. Dependent Variable: ERC							

Table 3. Results of Partial Significance Test (t-test)

DISCUSSION

Firm growth has no effect on ERC and contradicts the *signaling theory* of Akerlof (1970), that company will give signals to interested parties regarding its performance. High asset growth does not

necessarily result in a high profit response, and vice versa. Investors more focused on the *real* current (Irawati, 2018). While *firm growth* for this study uses proxy in total assets for the current and previous periods, according to research by Tamara and Suaryana (2020), so that it does not only focus on data for the current period. The goal of investors is not long-term profit, but short-term performance (*capital gain*) (Suwarno *et al.*, 2017). While *firm growth* tends to have long-term goals (Kristi & Yanto, 2020). *Covid*-19 made investors focus on the stability of their investments than investment prospects.

Santoso (2015) stated that investors tend to see market movements compared the company's fundamental aspects. Based on the technical information announcement, there three factors that do not affect *firm growth* on ERC. Consists of the expected content and timing of information announcements, the implications of earnings announcements on the distribution *returns* of future (Syarifulloh & Wahyudin, 2016). Investor tend not to care about firm growth because it does not directly affect to their returns.

The results of this study are in line with Syarifulloh and Wahyudin (2016), Suwarno *et al.*, (2017), also Rizki and Rosyidiana (2017). However, it is not in line with Yeni *et al.*, (2018), and Puspaningsih (2019), also Tamara and Suaryana (2020) that *firm growth* has a positive effect on ERC. This finding also contradicts with Kurniawati and Dwimulyani (2018), Suardana and Dharmadiaksa (2018), Widiatmoko and Indarti (2018), Kristanti and Almilia (2019), and Awawdeh *et al.*, (2020) which proves that *firm growth* has a negative effect on ERC.

Leverage has a significant negative effect on ERC and shows conformity signaling theory. Signaling theory from Akerlof (1970) stated, companies provide signals to interested parties regarding their performance. High level leverage gives a signal of bad news to investors, but a signal of good news to debtholders. Bad news reduce market reaction, because creditors will more benefited (Scott, 2015).

The negative impact is exacerbated *covid*-19 pandemic, causing the obligation to increase. When a company has *leverage* and profits increase, the *debtholders* will more benefited. Company prioritizes payment obligations to *debtholders*, compared to dividend distribution to investors. Investor lacks confidence in investing in the company, because the risk of bankruptcy is higher. Investors need *returns* and guarantees funds that have been invested (Agustina & Baroroh, 2016). the better condition of profit financed by *leverage*, more negative the shareholder response

The results of this study are in line with Suardana and Dharmadiaksa (2018), Tamara and Suaryana (2020), and Dewi *et al.*, (2020). However, it is not in line with Shiri *et al.*, (2012), Samosir (2018), and Assagaf *et al.*, (2019) that *leverage* has a positive effect on ERC. This result is also inconsistent with Kristanti and Almilia (2019), Hasanuh *et al.*, (2020), Awawdeh *et al.*, (2020), also Irawan and Talpia (2021) that *leverage* has no effect on ERC.

Information asymmetry has no effect on ERC and is contrary to agency theory. Agency theory

from Jensen and Meckling (1976) implies a separate function of management and ownership function (Reyhan *et al.*, 2014). *Agents* with more information ownership know internal information and company prospects (Putri & Fitriasari, 2017). This encourages *agents* to report accounting numbers to maximize performance, create *good news*, and attract investor responses.

Reyhan *et al.*, 2014)explained, when *information asymmetry* is high, management has the opportunity to manipulate information. Investors will not respond to published earnings information, because it is not guaranteed and its reliability, credibility, and validity are doubted. Investors tend to focus on the final information that is publicly published, compared to the company's internal secrets in the form of *information asymmetry* (Azhar, 2014). Lack of it causes market participants to rate the company on average with a lower or higher rating. The investor's response is not in accordance with the actual situation of each company. The results of this study are in line with Reyhan *et al.*, (2014) dan Azhar (2014). However, this result is not in line with Widjayanti (2018), and Sari (2020) that *information asymmetry* has a positive effect on ERC.

Systematic risk has a significant negative effect on ERC and is in accordance with efficient market theory. Efficient market theory from Fama (1970) stated, no party is able to control the market consistently. Beredugo (2021) explained that the more fluctuating stocks due to market conditions led to a high beta value. Income at the end of the period is difficult to predict and reduces the level of market demand, so ERC is low because systematic risk is a risk that cannot eliminated, targeting fluctuations in macro factors, affecting overall market conditions (Suardana & Dharmadiaksa 2018).

According to Beredugo (2021), manufacturing companies are defensive with uncertainty always appearing. Even though the company's operations are going well and the stock price has no reason to down, according to *efficient market theory* the market will still react negatively because of *systematic risk* (Basuki *et al.*, 2017). Widiatmoko and Indarti (2018) stated, investors choose safe conditions when investing by avoiding risk and dislike big profit surprises. Investment decisions in financial markets always have risks and uncertainties (Shivaprasad *et al.*, 2022). Although promising *returns*, large earnings surprises have a high degree of uncertainty.

The negative effect can observed in the *systematic risk* PT Buyung Poetra Sembada Tbk in 2019, which fell from 1.033906, in 2020 to 0.791076. However, ERC increased from 2019 (-0.40216), in 2020 to 0.116879. Contrary, *systematic risk* in 2018 rise from 0.681634, in 2019 to 1.2275. Meanwhile ERC in 2018 decreased from 0.260515 in 2019 to 0.042316.

The results of this study are in line with Suardana and Dharmadiaksa (2018), and Beredugo (2021). However, contrary to Susanto (2012) that *systematic risk* has a positive effect on ERC. The results of this study are also not in line with Santoso (2015), Rizki and Rosyidiana (2017), Basuki *et al.*, (2017), Widiatmoko and Indarti (2018), and Awawdeh *et al.*, (2020) that *systematic risk* has no effect on ERC.

Dividend payout ratio is not able to moderate the positive effect of firm growth on ERC.

Dividends have a low and significant value because they are included in the low category (20 companies or 34.48%). This is due to the use of a *dividend payout ratio* by comparing dividend payments with net income (Lie & Osesoga, 2020). Higher the company's profits, more funds available (Yanto *et al.*, 2020). Profit which should be the benchmarks for *firm growth*, is not a priority for investors to pay attention to. *Covid*-19 pandemic reduced profits and small dividends per share.

PT Sekar Bumi Tbk in 2020 has *firm growth* (-0.028412), *dividend payout ratio* 0.200334 with ERC (-0.05002). PT Bumitama Agri Ltd in 2020 has *firm growth* of 0.0176893, *dividend payout ratio* of 0.372093 with ERC (-0.08005). *Dividend payout ratio* is not able to moderate the effect of *firm growth* on ERC because ERC remains in the moderate category. *Covid*-19 has made *profit* deficit, so it does not meet the requirements to distribute dividends. Nofianti (2014) stated that the company does not use profits as dividends but is reuse as *going concern*.

The results of this study contradict the *agency theory* of Jensen and Meckling (1976), regarding the agency relationship between *agent* and *principal* which causes *information asymmetry* and *conflict of interest. Information asymmetry* can reduced by performance transparency and corporate governance. Supervision of management can do by paying dividends to net income through the *dividend payout ratio* (Fred & Copeland., 1992).

Dividend payout ratio is not able to moderate the effect *leverage* on ERC because of the company's alternative funding. Kristanti and Almilia (2019) explained that the first choice of funding is *retained earnings*, then liabilities and equity. When external funding needed, companies will choose the safest securities, namely low-risk liabilities then riskier liabilities, then common stock.

PT Campina Ice Cream Industry Tbk in 2019 has *leverage* 0.130577, *dividend payout ratio* of 0.32592 with an ERC (-0.07267). Yeo Hiap Seng Ltd in 2018 has *leverage* of 0.109248, *dividend payout ratio* of 0.193237 with an ERC (-0.05654). First Resources Limited in 2018 has *leverage* of 0.72889, *dividend payout ratio* of 0.897098 with ERC (-0.03526). *Dividend payout ratio* still makes ERC in the medium criteria.

Dewi *et al.*, (2020) stated, smaller liability indicates the company has been able to use *internal equity* (retained earnings). *Internal equity* is oriented to company's efforts to minimize the cost of capital because it will reduce the *dividend payout ratio*. *Internal equity* reduces dependence on external funding and proves that internal funding (*retained earnings*) and external funding (*leverage*) are separate units and do not influence each other. The results of this study contradict the *agency theory* from Jensen and Meckling (1976) that the agency relationship between *agent* and *principal* can cause *information asymmetry* and *conflict of interest*. Efforts to reduce conflict can do by paying dividends to net income and financing liabilities.

Dividend payout ratio able to moderate the effect of *information asymmetry* on ERC in a negative direction. *Dividend payout ratio* weakens the positive effect of *information asymmetry* on ERC. Results of the study confirm the *signaling theory* from Akerlof (1970) regarding the signaling

of company information to interested parties regarding its performance. Signal that is sent acts as information, rooted in *information asymmetry*. *Information asymmetry* is an *agent* with access to more information, so *agent* needs to give certain information signals to the *principal* (Putra *et al.*, 2014).

PT Nippon Indosari Corpindo Tbk in 2018 has an *information asymmetry* 1.22449, *dividend payout ratio* of 0.348415, and ERC 0.543128. In 2019, *information asymmetry* was 0.78125, *dividend payout ratio* was 0.522013, while ERC was 0.054331. In 2020, *information asymmetry* is 0.0000, *dividend payout ratio* is 1.347693 with ERC (-0.03417). *Dividend payout ratio* reduces or weakens the effect of *information asymmetry* on ERC.

Dividend payout ratio indicates agent knows more about the company's performance and prospects, and understands the purpose of dividend policy. Distribution of dividends indicates that the company no longer has prospects because the profit funds have been distributed, giving rise to a bad image of management because they do not pay attention to the prospects and profits *going concern*. Dividends are more synonymous *returns* with long-term *capital gains*. Dividend are the remaining funds distributed because investment needs have been met (Wisnumurti, 2010). When dividends are high, future investments are less prospective. Dividend announcement does not affect the market reaction, so it does not affect the ERC. When the percentage of dividends to stock prices is high but does not match the conditions of the financial statements, it indicates a ERC is bad (Pathak & Ranajee, 2018).

Dividend payout ratio is not able to moderate the negative effect of systematic risk on ERC. According to Bhama (2022), uncertainty systematic risk always appears targeting macro fluctuations in overall market conditions. Presence or absence of dividend distribution will still make systematic risk affect the ERC. Dividend payout ratio is not able to moderate the negative effect of systematic risk on ERC because the role and impact of dividend payout ratio is not more important than systematic risk. This is supported by the frequency distribution of the dividend payout ratio which is in the low category (20 companies or 34.48%). Meanwhile systematic risk is in the medium category (20 companies or 34.48%).

PT Gudang Garam Tbk in 2020 has a *systematic risk* of 0.83696, *dividend payout ratio* 0.654088 with ERC 0.084613. In 2020, PT Garudafood Putra Putri Jaya Tbk has *systematic risk* 0.52798, *dividend payout ratio* 0.511364 while ERC is 0.021499. JB Food Limited has *systematic risk* of 1.12191, *dividend payout ratio* of 0.3125 with an ERC (-0.08669). Japfa Ltd has *systematic risk* 1.489873, *dividend payout ratio* of 0.630517 with an ERC (-0.04275). *Dividend payout ratio* still makes the ERC in the medium criteria.

When the company has a constant dividend policy, company will determine the amount of dividends regardless of the amount of profit or loss and the potential risk is large or small (Nguyen

& Bui, 2019). Dividends are not the only factor that increases or decreases *systematic risk*, because *systematic risk* is a risk that cannot avoided and has an overall impact. Results of this study contradict the *signaling theory* of Akerlof (1970), which explains the company's information signals to interested parties regarding its performance. Price changes only depend on the arrival of new information and influenced by *systematic risk* previously unknown (Paramita *et al.*, 2020).

CONCLUSION

The results show that leverage and systematic risk have a significant negative effect on ERC. Companies with high leverage and high systematic risk will also reduce investors' interest in owning company shares. Leverage and systematic risk are considered a threat to the safety of investors' funds. They will tend to avoid companies with a high amount of debt and high risk if they want to invest.

Dividend payout ratio is able to weaken the positive effect of information asymmetry on ERC. Dividend distribution that is too high, indicates that the company is experiencing an abnormal condition, it can also occur because the company's going concern is not guaranteed. So that the presence of a high DPR will actually be a negative signal for investors, it will weaken the influence of information asymmetry that has been carried out by the management to investors. Investors must also be careful of the company's dividend distribution that occurs, before things that are not desirable occur in the company's investment activities.

There is no significant difference on all variables studied, between Indonesian and Singaporean companies. The two countries have almost the same economic conditions, and both have experienced cases of COVID 19 globally which have an impact on the capital markets of each country.

Limitation of this study is that the research time span is only 3 years. The addition of the research period can deepen the comparative analysis of *gap phenomena* and the *up-to-date* of ERC against the *covid*-19 pandemicFurther research can add variables outside of this research. Expand the population and sample, test comparisons, and increase the range of the research period.

AUTHOR CONTRIBUTIONS

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Visualization: Dinda Ayu Setyowati.

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Writing - review & editing: Heri Yanto, Muhammad Khafid, Kuat Waluyo Jati.

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