

## Moderation Firm Size on Influence Working Capital to Total Asset and Debt to Equity Ratio on Share Prices

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### Abstract

Information about ratios *Working Capital to Total Asset* and *Debt Equity Ratio* when viewed with *signaling theory* will provide positive/negative signals to investors so that it will influence share prices. Ratio *Firm size* based on contingency theory, it is then tried as a moderator to evaluate the strengthening/weakening of the relationship. This research aims to determine the effect *Working Capital to Total Asset* and *Debt Equity Ratio* to Firm size-moderated Share Prices. The research population was 281 companies listed on the Southeast Asian stock exchange in the 2012-2020 period, then sampled using purposive sampling to obtain 17 sample companies according to the criteria. The data was then analyzed using Moderating Analysis Regression. The research results show. The research results show *Working Capital to Total Asset* significant positive effect on stock prices, *Debt Equity Ratio* significant negative effect on stock prices, firm size is able to moderate the effect *working capital to total asset* on share prices and firm size are also able to moderate the influence *debt equity ratio* to the stock price.

**Keywords:** Working Capital to Total Assets; Debt Equity Ratio; Firm size and Share Price

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### INTRODUCTION

Shares are one of the most popular financial instruments traded on the capital market. Shares are securities as proof of participation or ownership of individuals or institutions in a company, by including capital the party has a claim on the company's income, a claim on the company's assets, and has the right to attend the general meeting of shareholders (Patar et al., (2014) According to Darmadji & Fakhrudin (2012: 102), share prices are the prices that occur in the capital market at a certain time, these prices can change, they can go up or down in a matter of minutes, they can even change in a matter of seconds. This is due to differences in quantities. demand and supply between share buyers and share sellers in the capital market. Therefore, before investing their capital, investors first need to recognize the factors that influence share prices.

Several factors influence the level of share price movements, namely internal and external factors. Internal factors are factors that influence share prices caused by the company itself, for example announcements that the company makes such as financial report announcements. Meanwhile, external factors that influence a company's share price come from outside the company, for example exchange rate increases, political turmoil and government regulations. These factors will influence the level of public demand and supply for shares traded on the capital market and influence the company's share price, whether there will be an increase in share prices or not.

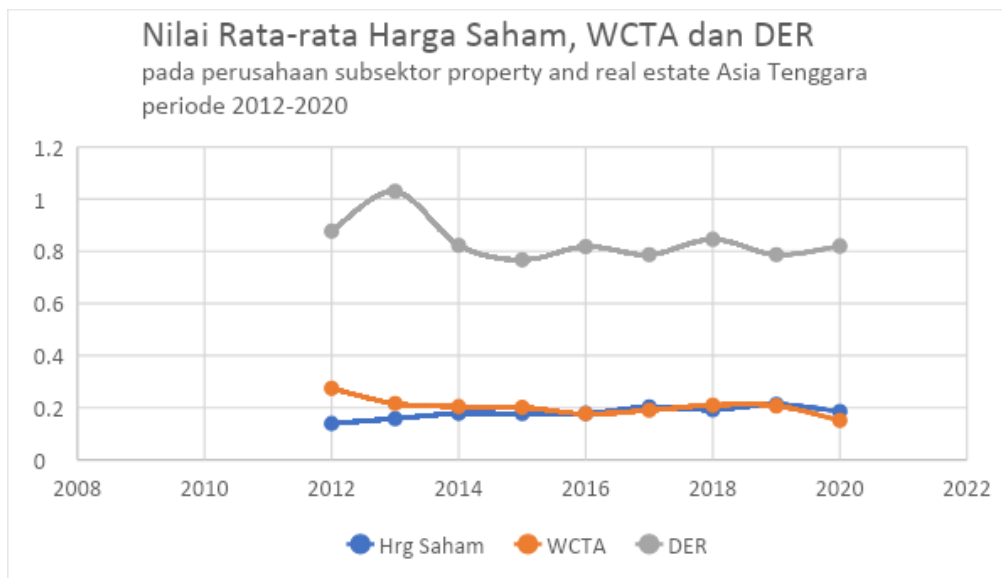
In this research, financial ratio analysis was carried out using two ratios. The first is Working Capital to Total Assets (WCTA). According to Zanora (2013:6) WCTA describes the proportion of working capital to the total assets owned by the company. Companies really need working capital to support company operations to generate company profits. High working capital to total assets indicates the company has large working capital. With large capital, the company's operational activities can run smoothly so that the company's ability to generate profits will also increase. This profit will be used by the company to pay its obligations when they fall due and can be one of the company's strengths in convincing investors that the company is liquid. According to Lakshan (2012:40) a good WCTA standard size is 16% -21% or 0.16 – 0.21.

Meanwhile, the second is the Debt Equity Ratio (DER). According to Kasmir (2014), DER is a financial ratio used to assess debt versus company equity. This ratio is used to determine the total funds provided by borrowers (creditors) and company owners. In other words, how much is the value of each rupiah of company capital used as debt collateral. Not only that, this ratio is considered important because it has a positive and negative influence on the profitability of the company's own capital. The greater this ratio, the lower the ability of own capital to guarantee long-term debt, so the

riskier it will be for the company and vice versa. According to Kasmir (2015:159) the industry average standard for debt to equity ratio is 80% or 0.8.

These two ratios can be things that can influence demand and supply between buyers and sellers of shares in the level of share price movements. As shown in historical data as follows:

Graph 1: Average value of share prices, WCTA and DER in Southeast Asian property and real estate subsector companies for the 2012-2020 period



Source: Processed from secondary data (Southeast Asia Stock Exchange, Investing.com, and Yahoo.Finance)

Based on Graph 1, it is known that there is a gap phenomenon that can be seen in Southeast Asian property and real estate subsector companies for the 2012-2020 period, namely the WCTA variable with share prices showing that in 2017-2018 share prices experienced a decline in price but the WCTA variable increased, then Also in 2012-2014, 2015-2016, and 2018-2019 share prices experienced an increase but the WCTA variable experienced a decrease. This shows that there is a gap phenomenon where according to signal theory, increasing liquidity can provide a good signal for investors to invest. So this causes the company's shares to increase.

The DER variable with share prices shows that in 2014-2015 share prices and the DER variable experienced a decline in price and ratio. Then in 2012-2013 and 2015-2016 share prices and the DER variable experienced increases in price and ratio. This shows that there is a gap phenomenon where according to signal theory, an increase in the level of leverage in the debt equity ratio can provide a negative signal to investors, that the company is unable to fulfill its permanent obligations. So this can have an impact on share prices and they tend to fall.

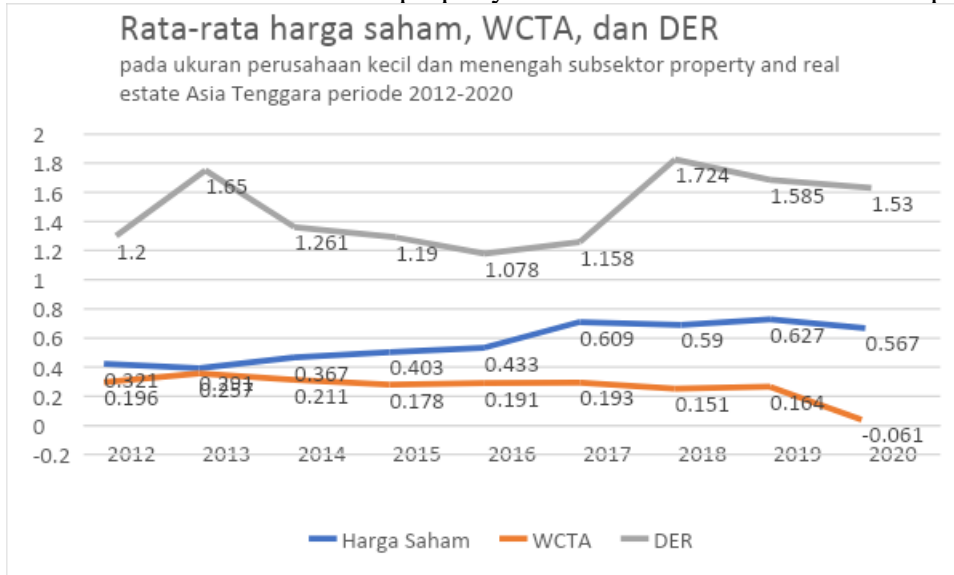
Based on the results found in previous research, it is indicated that there are inconsistent results between the variables that influence stock prices. This explains the existence of a research gap in previous research, namely according to Jernsittiparsert et al., (2019) which states that return on equity has a positive effect on stock prices, but this opinion contradicts Utami & Darmawan (2018) who state that return on equity has no effect on stock price.

Previous research conducted by Elizabeth (2016) stated that working capital to total assets had a positive effect on stock prices, but this opinion contradicted Radityatama & Mustafa (2020) which stated that working capital to total assets had no effect on stock prices. Previous research conducted by Wahyono et al. (2019) stated that the debt equity ratio has a negative effect on stock prices, but this opinion is contrary to Azhari et al. (2016) stated that the debt equity ratio has no effect on share prices. In this research too, researchers tried to add other variables to complement previous research, namely company size to moderate the influence of return on equity, working capital to total assets, and debt equity ratio on stock prices. Firm size is an important factor in investment considerations because companies with large assets are considered to have reached the maturity stage where large companies have more business certainty so that the accuracy of predictions about the company's future profits is higher. This certainty can of course be the basis for investment decision making so that it has a positive influence on shares. The greater the total assets of the company, the greater the consideration for investors to gain profits from their investment. This is in accordance with Mentari's statement (2012) where there is no doubt that the size of a company is superior in terms of wealth and good performance, so that it will attract investors to believe and want to invest their capital by buying shares, this causes share prices to move. go on. According to the Financial Services Authority Regulations (2011),

medium-sized companies have total wealth (total assets) of more than IDR 50 billion – IDR. 250 billion or 3.5 million USD – 17.5 million USD.

The following is a data table of average share prices, WCTA, and DER which are classified into medium companies and large companies to find out the gap phenomenon between medium companies and large companies.

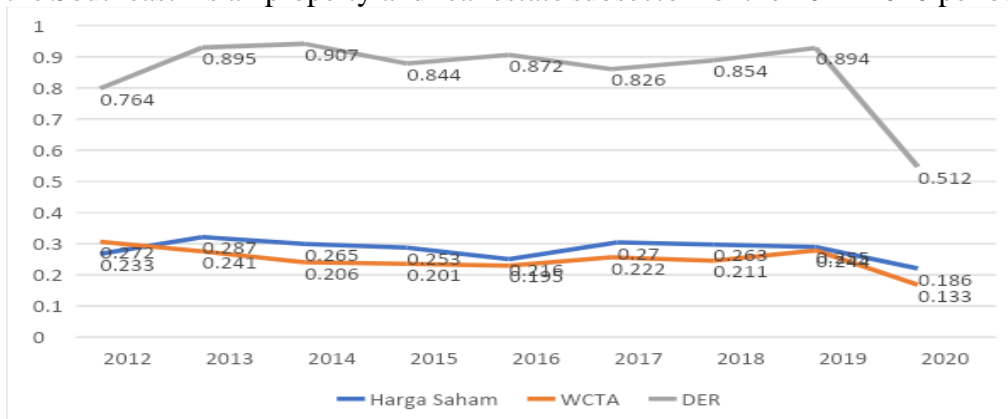
Graph 2: Average value of share price, WCTA and DER in small and medium companies in the Southeast Asian property and real estate subsector for the period 2012-2020



Source: Processed from secondary data (Southeast Asia Stock Exchange, Investing.com, and Yahoo.Finance)

Based on Graph 2, it can be seen that in the average share price, WCTA, and DER which are classified as small and medium companies, there is a gap phenomenon that occurs. The WCTA variable with share prices shows that in 2012-2013 share prices decreased but the WCTA variable increased, then in 2013-2015 share prices increased but the WCTA variable decreased. The DER variable with share prices shows that in 2016-2017 share prices increased but the DER variable also increased, then in 2019-2020 share prices decreased but the DER variable also decreased.

Graph 3: Average value of share prices, WCTA and DER in large companies in the Southeast Asian property and real estate subsector for the 2012-2020 period.



Source: Processed from secondary data (Southeast Asia Stock Exchange, Investing.com, and Yahoo.Finance)

Based on Graph 3, it can be seen that in the average share price, WCTA, and DER which are classified as large companies, there is a gap phenomenon that occurs. The WCTA variable with share prices shows that in 2012-2014 and 2018-2019 share prices increased but the WCTA variable decreased, then in 2014-2015 and 2016-2018 share prices decreased but the WCTA variable increased. The DER variable with share prices shows that in 2014-2015 and 2016-2018 share prices decreased but the DER variable also decreased. Then in 2012-2013 share prices increased but the DER variable also increased. These three variables show a gap phenomenon because they are not in accordance with the signal theory which has been explained in the explanation in table 1.1.

Based on the results found in previous research, it is indicated that there are inconsistent results between variables on share prices which are moderated by company size. This explains the research gap that according to Surgawati et al., (2019) company size is able to moderate the relationship between profitability and share prices, but this opinion is contrary to Wati & Angraini (2018) who state that company size is not able to moderate the relationship between profitability and stock prices.

stock price. Therefore, in this study, researchers tried to add other indicators to see whether they could moderate and influence the relationship between working capital to total assets and debt equity ratio to share prices.

Based on this description, the researcher proposed 4 (four) research hypotheses, as follows:

- 1) How does Working Capital to Total Assets affect share prices?
- 2) How does the Debt to Equity Ratio affect stock prices
- 3) Is Firm size able to be a moderator of the influence of Working Capital to Total Assets on Share Prices?
- 4) Is Firm size able to act as a moderator on the influence of the Debt to Equity Ratio on share prices?

## I. LITERATUR REVIEW

### Stock Price

According to Murdhaningih, Mulyadi and Adi Wiratno (2018) in Kendrik et al., (2019:9) The share price is a measure of a company's performance index, namely the extent to which management manages the company on behalf of shareholders. The measurement of this share price variable is the average closing price of each company obtained from share prices at the end of the month.

Share price indicators can be seen from the share price value, according to Widiatmojo (2005: 45), share prices can be divided into several types, namely:

1. The nominal price is the value set by the issuer to value each share it issues, this nominal price is stated on the share sheet.
2. The initial price is the price before the price is listed on the stock exchange. The initial price depends on the agreement between the issuer and the underwriter.
3. The market price is the selling price from one investor to another investor, the market price occurs after the shares are listed on the stock exchange.
4. The opening price is the price requested by sellers and buyers when the stock exchange opens.
5. The closing price is the price requested by sellers and buyers at the end of the opening day.
6. The highest price, the share price is not only once or twice in one day, but can be done many times and does not occur at old share prices, of the prices that occur there is of course the highest price on one stock exchange day, that price is called the highest price .
7. The lowest price is the opposite of the highest price, namely the lowest price on a trading day.
8. Average price is the average price of the highest and lowest prices. This price can be recorded for daily, monthly or annual transactions.

Based on the share price values above, the share price indicators in this study are taken from the closing share price values (*close price*). Which is supported by Azis et al., (2015:80) and Bank Indonesia regulations, share prices are also assessed from the closing price

### Working Capital to Total Asset Ratio (WCTA)

According to Adi et al., (2015) *Working capital to total asset ratio* shows liquidity and total assets and net working capital position. In this ratio, net working capital is compared with total assets, this is often found in case studies of company problems, this is a net measure of the company's current assets relative to the company's capital. According to Zanora, (2013:4) shows the proportion of working capital to the total assets owned by the company. Companies really need working capital to support company operations to generate company profits. According to Harahap, (2011), *working capital to total asset* is one of the liquidity ratios. *Working capital to total asset* is a net measure of the company's current assets against the company's working capital. From the description of WCTA according to these experts, it can be concluded that this ratio shows the company's ability to generate net working capital from all the total assets it owns. This working capital is used to finance company operations or overcome financial difficulties that may occur.

According to Lakshan (2012:40), a good standard WCTA size is 16%-21%. This is a value that is considered moderate. Medium between 21%-40% is above the standard, just tolerable. And if it is more than 40%, then he stated that this ratio figure is considered too excessive and could have an unfavorable effect on the company's performance in the following period. And what you should be wary of is if it is at -8% and lower than this. The results of his research stated that this situation was a potential bankruptcy

### Debt to Equity Ratio (DER)

According to Kasmir, (2014:157) *debt equity ratio* is a ratio used to assess debt versus equity. This ratio is found by comparing all debt, including current debt, with all equity. This ratio is used to determine the amount of funds provided by the borrower (creditor) and the company owner. In other

words, this ratio functions to find out every rupiah of own capital used as collateral for debt. According to Sukamulja, (2017:50) *debt to equity ratio* is measuring the percentage of liabilities in the company's capital structure. This ratio is important for measuring the company's business risk which is increasing with the increase in the number of liabilities. According to Kuncoro, (2016:288) *debt to equity ratio* is a ratio that functions to determine the magnitude of the comparison between the amount of funds provided by creditors and the amount of funds originating from the company owner.

According to Fahmi, (2013:160) debt is an obligation (*liabilities*). For *liabilities* or debt is an obligation owned by the company that comes from external funds, whether from banking loans, leasing, bond sales and the like. Therefore, an obligation requires a company to carry out these obligations and if these obligations are not carried out in a timely manner, it is possible for a company to receive sanctions or consequences. The sanctions and consequences obtained are in the form of transferring asset ownership at some point. According to Bachtia & Nurfadila, (2019) Equity is company capital which is the residual right to company assets after deducting all liabilities. Or in other words, equity is one source of company funds that comes from shareholders or company owners and business profits obtained by the company. Standard industry average ratio for *debt equity ratio* according to Kasmir (2015:159) is 80% or 0.8. The higher this ratio will indicate poor performance for the company. So companies must try to ensure that DER is low or below the industry standard, namely 80%.

### Company Size (Firm Size)

According to Hartono, (2013:282) Company size is a scale where the size of the company can be classified according to various ways (total assets, log size, share market value, etc.). According to Widiastari & Yasa, (2018:966) company size is a scale or value where companies can be classified as large or small based on total assets, total sales, share value and so on. According to Riyanto, (2012:305) company size (*firm size*) describes the size of a company which is aimed at total assets, number of sales, and average sales. Based on the experts' explanation above, it can be concluded that company size is a description of the size of a company according to various methods based on total assets, total sales, share value and so on.

According to Murhadi, (2013) *firm size* measured by transforming the total assets owned by the company into natural logarithmic form. Company size is proxied using *natural log of total assets* with the aim of reducing excessive data fluctuations. By using *log natural*, the number of assets with a value of hundreds of billions or even trillions will be simplified, without changing the proportion of the actual number of assets.

According to Law No. 20 of 2008 concerning Micro, Small and Medium Enterprises, the criteria for micro businesses are: 1) Having a net worth of a maximum of IDR 50,000,000.00 (fifty million rupiah) excluding land and buildings where the business is located; or; 2) Have annual sales proceeds of a maximum of IDR 300,000,000.00 (three hundred million rupiah). Meanwhile, for small businesses, they are: 1) Having net assets of more than IDR 50,000,000.00 (fifty million rupiah) up to a maximum of IDR 500,000,000.00 (five hundred million rupiah) excluding land and buildings where the business is located or; 2) Have annual sales results of more than IDR 300,000,000.00 (three hundred million rupiah) up to a maximum of IDR 2,500,000,000.00 (two billion five hundred million rupiah). Meanwhile, for medium-sized businesses: 1) have net worth of more than IDR 500,000,000.00 (five hundred million rupiah) up to a maximum of IDR 10,000,000,000.00 (ten billion rupiah) excluding land and buildings where the business is located; or 2) Has annual sales proceeds of more than IDR 2,500,000,000.00 (two billion five hundred million rupiah) up to a maximum of IDR 50,000,000,000.00 (fifty billion rupiah).

### Signalling Theory

*Signalling theory* or signal theory explains why companies have an incentive to provide financial report information to external parties. The company's urge to provide information is because there is information asymmetry between the company and outside parties because the company knows more about the company and its future prospects than outside parties (investors, creditors). One way to reduce asymmetric information is to provide signals to external parties, one of which is in the form of reliable financial information and will reduce uncertainty regarding the company's future prospects.

According to Brigham & Houston, (2015) states that signal theory provides an illustration that a signal or signal is an action taken by company management that gives investors a clue about how management views the company's prospects. This theory reveals that investors can differentiate between companies that have high value and companies that have low value.

According to this theory, there is a high level of liquidity ratio *working capital to total asset* can provide a positive signal to investors that the company is able to fulfill its short-term obligations. So this can cause stock market prices to tend to rise. According to this theory the rate increases *leverage* on

ratio *debt equity ratio* can provide a negative signal to investors, that the company is unable to fulfill its permanent obligations. So this can have an impact on share prices and they tend to fall.

### **Trade off Theory**

This theory explains that the higher a company finances using debt, the greater their risk of experiencing financial difficulties due to paying too much fixed interest to debtholders every year with an uncertain net profit. According to *trade-off theory* stated by Myers, (2001), the company will be in debt up to a certain level of debt, where the tax savings (tax shields) from additional debt are equal to the cost of financial difficulties (*financial distress*). Financial hardship costs (*financial distress*) are bankruptcy costs (*bankruptcy costs*) and agency fees (*agency costs*) which increases as a result of a decline in a company's credibility.

According to Brigham & Houston, (2006), *trade-off theory* is where the company exchanges funding benefits through debt. This theory explains the relationship between taxes, bankruptcy risk and the use of debt caused by capital structure decisions taken by the company.

Usage *Trade of Theory* in the variables determined in this research are as follows: According to this theory, the increase in the amount of debt (*debt equity ratio*) will increase the number of company fixed costs, which means the risk of the company being unable to repay its debt will increase. This makes investors unwilling to buy the company because it could cause company bankruptcy. So it is certain that share prices will tend to decline due to the company's poor performance

### **Contingency Approach Theory**

Contingency approach or *contingency approach* arises from the basic assumptions of the general view approach or *universalistic approach* which states that a control system can be applied to any company characteristics and in any environmental conditions. Fisher in Hapsari, (2010) argues that this contingency approach reveals that the planning and use of management control system design depends on the characteristics of the organization and the environmental conditions in which the system is established. The Contingency Approach is used to evaluate the relationship between participation in budget preparation and managerial performance.

Studies that examine the relationship between *return on equity, working capital to total asset, debt equity ratio* with share prices providing inconsistent results. Govindarajan in (Hapsari, 2010) said that it is necessary to use a contingency approach to resolve these various differences of opinion. A contingency approach is adopted in this research to evaluate the relationship between participation in budget preparation and managerial performance. The contingency factor used in this research is company size as a moderating variable because it is considered to strengthen the relationship between *return on equity, working capital to total asset, debt equity ratio* with the stock price.

### **Influence Working Capital to Total Asset to the Share Price**

According to signal theory, a high level of liquidity in the ratio *working capital to total asset* can provide a positive signal to investors that the company is able to fulfill its short-term obligations. So this can cause stock market prices to tend to rise.

This signal theory is strengthened by the results of previous research conducted by Elizabeth, (2016) which states that *working capital to total asset* positive effect on stock prices. And research conducted by Dwisona & Haryanto, (2015) stated that *working capital to total asset* positive effect on stock prices. However, this is inversely proportional to the results of research conducted by Radityatama & Mustafa, (2020) which states that *working capital to total asset* has no effect on share prices

### **Influence Debt Equity Ratio to the Share Price**

According to theory the signal increases the level of leverage on the ratio *debt equity ratio* can provide a negative signal to investors, that the company is unable to fulfill its permanent obligations. So this can have an impact on share prices and they tend to fall. According to the trade off theory, increasing the amount of debt (*debt equity ratio*) will increase the number of company fixed costs, which means the risk of the company being unable to repay its debt will increase. This makes investors unwilling to buy the company because it could cause company bankruptcy. So it is certain that share prices will tend to decline due to the company's poor performance.

This signal theory and trade off theory are strengthened by the results of previous research conducted by Wahyono et al., (2019) which states that *debt equity ratio* negative effect on stock prices. And research conducted by Fitrianiingsih & Budiansyah, (2019) stated that *debt equity ratio* significant effect on share prices. However, this is inversely proportional to the results of research conducted by Azhari et al., (2016) which states that *debt equity ratio* has no effect on share prices.

### **Firm Size as a moderating variable in the relationship between *Working Capital to Total Asset* and Stock Price**

The contingency approach theory is used in this research because of differences in the results of previous research regarding influence *working capital to total asset* to stock price. Contingency theory is used as a tool to resolve differences in the results of previous studies, because this theory can provide opportunities for other variables to become moderating variables in order to strengthen the relationship between influences *working capital to total asset* to stock price. The moderating variable used in this research is company size. The size of the company is chosen because by looking at the large assets the company has in order to pay off all of the company's short-term obligations in a timely manner, this makes investors interested in investing in the company and causes the price of a share to increase. The contingency approach theory is strengthened by the results of previous research conducted by Wati & Angraini, (2018) which states that company size is able to moderate the relationship between *working capital to total asset* to the stock price.

### **Firm size as a moderating variable in the relationship between *Debt Equity Ratio* and Stock Price**

The contingency approach theory is used in this research because of differences in the results of previous research regarding influence *debt equity ratio* to stock price. Contingency theory is used as a tool to resolve differences in the results of previous studies, because this theory can provide opportunities for other variables to become moderating variables in order to strengthen the relationship between influences *debt equity ratio* to stock price. The moderating variable used in this research is company size. Company size was chosen because it is one of the things that investors pay attention to when investing long term. Therefore, a large company size will usually give a good signal to investors to invest in the company, because investors assume that the company is considered capable and controls the high level of solvency of the company. So this can increase the price of a share. This contingency approach theory is inversely proportional to the results of previous research conducted by Pratiwi, (2019) which states that company size is unable to moderate the relationship between *debt equity ratio* to the stock price.

## **II. RESEARCH METHODS**

A quantitative approach with a causal design is used in this research to determine the pattern of causal relationships between independent variables, dependent variables and moderating variables so that they can explain the causal relationships between these variables.

The research population was 281 P Companies *property and real estate* listed on the Stock Exchange of Southeast Asian countries for the 2012-2020 period, then sampling was carried out using purposive sampling criteria. The sample criteria used by researchers were as follows: 1) Companies that fall into the category *property and real estate* those listed on the stock exchanges of Southeast Asian countries; 2) Companies that report complete and consecutive annual financial reports for the 2012-2020 period, namely reports consisting of balance sheets, profit and loss reports, financial ratio reports and notes to financial reports. A total of 17 sample companies met the criteria, consisting of 7 companies in the Philippines, 6 companies in Malaysia and 4 companies in Indonesia and 153 observation data were obtained during 9 years of observation.

There are three types of variables examined in this research, namely:

- 1) 2 Independent Variables, viz *Working Capital to Total Asset* and *Debt Equity Ratio* measured by the formula:

$$WCTA = \frac{\text{Working Capital}}{\text{Total Assets}}$$

$$DER = \frac{\text{Total Amoun of debt}}{\text{Equity}}$$

- 2) 1 Dependent Variable, namely the Share Price ratio measured by the formula:

$$\text{Stock Price} = \text{Closing stock price}$$

- 3) 1 Moderator variable, namely firm size, measured using the formula:

$$\text{Firm Size} = \text{Ln (Total Assets)}$$

Data collection was carried out by downloading directly from the official website, namely the Indonesian Stock Exchange (IDX) <https://www.idx.co.id>, Malaysia Stock Exchange <https://www.bursamalaysia.com>, and the Philippine Stock Exchange <https://www.pse.com.ph>. Apart from that, researchers also took secondary data to support other research from several sources, scientific journals and textbooks.

The data in the research were analyzed using *Moderating Analysis Regression* (MRA). Before testing MRA and hypotheses, the research data in this study was first tested using classic assumptions,

namely: 1) Normality Test; 2) Multicollinearity Test; 3) Heteroscedasticity Test; and 4) Autocorrelation Test with the following design:

- 1) Normality Test, using One Sample *Kolmogorov-Smirnov*, To determine whether the variables are normally distributed, a hypothesis is created:  $H_0$ =residual data is normally distributed;  $H_a$ =residual data is not normally distributed. According to Ghazali (2018:166) if the significant value is  $<0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. If the significant value is  $> 0.05$ , then  $H_a$  is rejected and  $H_0$  is accepted.
- 2) Autocorrelation test, using Durbin-Watson with the following criteria:

Table 1: Autocorrelation Test Criteria

Null Hypothesis	Decision	If
There is no positive autocorrelation	Reject	$0 < d < d_l$
There is no positive autocorrelation	<i>No decision</i>	$d_l \leq d \leq d_u$
There is no negative correlation	Reject	$4 - d_l < d < 4$
There is no negative correlation	<i>No decision</i>	$4 - d_u \leq d \leq 4 - d_l$
There is no positive or negative autocorrelation	Not rejected	$d_u < d < 4 - d_u$

Source: Ghazali (2018:111-112)

- 3) Heteroscedasticity test, using graphs *Scatterplot* between SRESID and ZPRED where the Y axis is the predicted Y, and the X axis is the studentized residual (predicted Y – actual Y). The way to analyze it according to Ghazali (2018: 137) is: If there is a certain pattern, such as points that form a certain regular pattern then it indicates heteroscedasticity is occurring, conversely if no particular pattern is formed then it indicates heteroscedasticity is not occurring
- 4) Multicollinearity test using *Variance Inflation Factor (VIP)*. According to Ghazali (2018: 107), if the tolerance value is  $< 0.01$  or  $VIF > 10$ , it is indicated that there is multicollinearity between the independent variables, conversely if the tolerance value is  $> 0.01$  or  $VIF < 10$ , it is indicated that there is no multicollinearity between the independent variables.

After that, a multiple regression test was carried out and *moderating analysis regression* by using the following equation:

$$Y = a + b_1X_1 + b_2X_2 + \text{and}$$

$$Y = \alpha + \beta_1X + \beta_2Z + e$$

$$Y = \alpha + \beta_1X + \beta_2Z + \beta_3X*Z + e$$

According to Solimun, (2011) Moderation variables can be classified into 4 types, namely pure moderation, quasi moderation (pseudo moderation), moderation homologizer (potential moderation) and moderation predictor (moderation as a predictor).

- 1) Pure Moderation Variable (Pure Moderator) Pure moderation is a type of moderation variable that can be identified through the coefficients  $b_2$  and  $b_3$  in equation (3), namely if the coefficient  $b_2$  is declared insignificant but the coefficient  $b_3$  is statistically significant. Pure moderation is a variable that moderates the relationship between the predictor variable and the dependent variable where the pure moderation variable interacts with the predictor variable without becoming a predictor variable.
- 2) Quasi Moderation Variable (Quasi Moderator) Quasi moderation is a type of moderating variable that can be identified through the coefficients  $b_2$  and  $b_3$  in equation (3), namely if the coefficient  $b_2$  is declared significant and the coefficient  $b_3$  is statistically significant. Quasi moderation is a variable that moderates the relationship between the predictor variable and the dependent variable where the quasi moderation variable interacts with the predictor variable while also becoming a predictor variable.
- 3) Potential Moderating Variable (Homologiser Moderator) Homologizer moderation is a type of moderating variable that can be identified through the coefficients  $b_2$  and  $b_3$  in equation (3), namely if the coefficient  $b_2$  is declared insignificant and the coefficient  $b_3$  is not statistically significant. Moderation homologizers are variables that have the potential to become moderating variables that influence the strength of the relationship between the predictor variable and the dependent variable. This variable does not interact with the predictor variables and does not have a significant relationship with the dependent variable.
- 4) Moderation Predictor Variable (Moderation Predictor Variable). A moderation predictor is a type of moderating variable that can be identified through the coefficients  $b_2$  and  $b_3$  in equation (3), namely if the coefficient  $b_2$  is declared significant and the coefficient  $b_3$  is not statistically significant. This means that this moderating variable only plays a role as a predictor variable in the relationship model that is formed



### III. RESULTS AND DISCUSSION

#### Classic Assumption Test Results

##### Normality Test Results

Table 2: Results of the 1st Normality Test

		Unstandardized Residual
N		153
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.37445980
Most Extreme Differences	Absolute	.082
	Positive	.044
	Negative	-.082
Test Statistic		.082
Asymp. Sig. (2-tailed)		.014 <sup>c</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on the Kolmogorov-Smirnov test above, it can be seen that the residual data is not normally distributed. This can be proven with Asymp. sig. (2-tailed) which is 0.014, which is smaller than the significance level (0.05). Therefore, according to Ghozali (2016) to fulfill the normality test criteria, data transformation can be carried out to SQRT(x) on variables X1 and after transformation:

Table 3: Results of the 2nd Normality Test

#### **One-Sample Kolmogorov-Smirnov Test Results After Transformation**

		Unstandardized Residual
N		120
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.47455203
Most Extreme Differences	Absolute	.080
	Positive	.037
	Negative	-.080
Test Statistic		.080
Asymp. Sig. (2-tailed)		.059 <sup>c</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

After data transformation, the results of the normality test using Kolmogorov-Smirnov show the Asymp value. Sig (2-tailed) is 0.200, which means that the significance value of the Kolmogorov-Smirnov test is  $> 0.05$ . So after testing it can be concluded that the data is normally distributed and the regression model used meets the normality assumptions.

#### Autocorrelation Test Results

Table 4: Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.461 <sup>a</sup>	.213	.185	.48273	2.019

a. Predictors: (Constant), Z, Transform\_X1, Transform\_X2

b. Dependent Variable: Transform\_Y

From the results of the data autocorrelation test, it can be seen that there is no positive or negative autocorrelation. This can be proven by the value  $du (1.7715) < Durbin\ Watson (2.019) < 4 - du (2.2285)$ . The Autocorrelation Test aims to test whether in the linear regression model there is a correlation between confounding errors in period t and confounding errors in period t-1 (previously). If correlation occurs, it is called an autocorrelation problem. Of course, a good regression model is a regression that is free from autocorrelation Santoso (2012:241).

Multicollinearity Test Results

Table 5: Multicollinearity test results

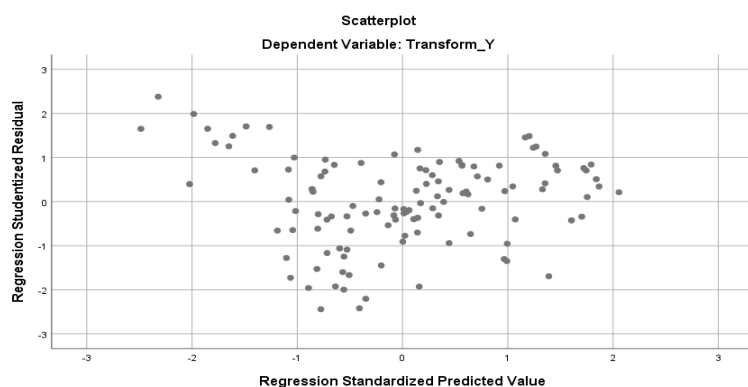
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Transform_X1	.920	1.088
	Transform_X2	.940	1.064
	WITH	.936	1.069

a. Dependent Variable: Transform\_Y

In a good regression model there should be no correlation between the independent variables. The condition for data not to have multicollinearity is a tolerance value > 0.1 or VIF < 10. The data test results show that there is no multicollinearity, this can be seen from the tolerance value ROE (0.920) > 0.1 and VIF (1.088) < 10, values WCTA tolerance (0.940) > 0.1 and VIF (1.064) < 10, DER tolerance value (0.889) > 0.1 and VIF (1.125) < 10, and Company Size tolerance value (0.936) > 0.1 and VIF (1.069) < 10. A good regression model should not have correlation between independent variables, if this is violated then one of the variables must be replaced or deleted (Saumi & Nasrullah, 2020: 86).

Heteroscedasticity Test Results.

Graph 4: Heteroscedasticity Test Results



Test results using graphs *Scatterplot*. By looking at the residual plot, it shows a distribution of points that does not form a particular pattern, so it can be said that the test results show that there are no symptoms of heteroscedasticity.

Multiple Regression Test Results

Table 6: Multiple Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Say.
		B	Std. Error	Beta		
1	(Constant)	1.447	.173		8.375	.000
	Transform_X1	1.063	.241	.372	4.406	.000
	Transform_X2	-.469	.147	-.279	-3.181	.002

a. Dependent Variable: Transform\_Y

From this table, a multiple linear regression equation model can be obtained as follows:

$$Y = a + b_1X_1 + b_2X_2 + e$$

$$Y = 1.447 + 1.063 + (-0.469)+e$$

From the multiple linear regression equation, it can be interpreted that: a) A constant of 1.447 means that if WCTA and DER are 0, then the share price will be influenced by other variables. The effect of this share price is mathematically measured numerically at 1.447; b) The regression coefficient The regression coefficient

Table 7: Partial Test Results (t)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Say.
		B	Std. Error	Beta		
1	(Constant)	1.447	.173		8.375	.000
	Transform_X2	1.063	.241	.372	4.406	.000
	Transform_X3	-.469	.147	-.279	-3.181	.002

a. Dependent Variable: Transform\_Y

First hypothesis, Based on the results of the partial test above, it is known that the t value is 4.406 and the t table value is 1.65765, so it is known that t count > t table. Variable significance value *working capital to total asset* (X1) is smaller than 0.05, namely 0.000 so it is known that  $0.000 < 0.05$ , so it can be concluded that partially the variable *working capital to total asset* (X1) has a significant positive effect on the stock price variable (Y). This means that H0 is rejected while Ha is accepted so that the first hypothesis is accepted.

Second hypothesis, Based on the results of the partial test above, it is known that the calculated t value is -3.181 and the t table value is 1.65765, so it is known that t calculated > t table. Variable significance value *debt equity ratio* (X2) is smaller than 0.05, namely 0.000 so it is known that  $0.000 < 0.05$ , so it can be concluded that partially the variable *debt equity ratio* (X2) has a significant negative effect on the stock price variable (Y). This means that H0 is rejected while Ha is accepted so that the third hypothesis is accepted.

### Moderating Analysis Regression Test Results

Table 8: Results of the 1st Moderation Test

		Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Say.
Model		Unstandardized Coefficients B	Std. Error			
1	(Constant)	1.484	.432		3.436	.001
	WITH					
	Transform_X1	-.020	.021	-.081	-.968	.335
		.846	.221	.322	3.833	.000

a. Dependent Variable: Transform\_Y

Table 9: Results of the 2nd Moderation Test

		Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Say.
Model		Unstandardized Coefficients B	Std. Error			
1	(Constant)	1.171	1.402		.836	.405
	WITH					
	Transform_X1	.115	.071	.471	1.625	.107
		5.892	2.547	2.239	2.314	.022
		.259	.130	1.873	1.989	.049

a. Dependent Variable: Transform\_Y

The test results show that the influence of Z on Y on the first output has a significant value of  $0.335 > 0.05$  and the influence of X1Z on the second output has a significant value of  $0.049 < 0.05$ . So it can be said that the Firm Size variable *ispure moderation*. Then if you look at the t table X1Z of -1.989, it proves that firm size strengthens the influence of WCTA on share prices.

Table 10: Results of the 1st Moderation Test II

		Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Say.
Model		Unstandardized Coefficients B	Std. Error			
1	(Constant)	2.743	.431		6.370	.000
	WITH					
	Transform_X2	-.049	.020	-.197	-2.393	.018
		-.405	.138	-.241	-2.930	.004

a. Dependent Variable: Transform\_Y

Table 11: Results of the 2nd Moderation Test II

		Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Say.
Model		Unstandardized Coefficients B	Std. Error			
1	(Constant)	9.449	1.335		7.078	.000
	WITH					
	Transform_X2	-.401	.070	-1.610	-5.768	.000
		-7.037	1.268	-4.188	-5.551	.000
		.351	.067	4.004	5.258	.000

a. Dependent Variable: Transform\_Y

The test results show that the influence of Z on Y on the first output has a significant value of  $0.018 < 0.05$  and the influence of X1Z on the second output has a significant value of  $0.000 < 0.05$ . So it can

be said that Firm Size is *quasi moderation*. Then if you look at the t table X1Z of 5.258, it proves that Firm Size strengthens the influence of DER on share prices

## Discussion

### **Working Capital to Total Asset Significant Positive Influence on Stock Prices**

Based on the results of these statistical tests, the first hypothesis in this study was proven, namely that *Working Capital to Total Asset* has a significant positive influence on share prices. If referring back to *signaling theory* then the results of this research can be interpreted as follows the higher the level of liquidity in the ratio *working capital to total asset* can provide a positive signal to investors that the company is increasingly able to fulfill its short-term obligations, which in turn will have a positive impact on the company's share price. and vice versa, the lower the level of liquidity in the ratio *working capital to total asset* can give a negative signal to investors that the company's ability to fulfill its short-term obligations is becoming weaker, which in the end will have a negative impact on the company's share price.

The results of this research are in line with or support the results of previous research conducted by Dwisona & Haryanto, (2015) and Elizabeth, (2016) which stated that *working capital to total asset* significant effect on share prices. However, the results of this research contradict the results of research conducted by Radityatama & Mustafa, (2020) which states that *working capital to total asset* has no effect on share prices.

### **Working Debt To Equity Ratio Significant Negative Influence on Stock Prices**

Based on the results of these statistical tests, the second hypothesis in this study was proven, namely that *Debt to Equity Ratio* has a significant negative influence on share prices. If referring back to *signaling theory* then the results of this research can be interpreted increasingly increasing debt levels on the ratio *debt equity ratio* can give a negative signal to investors because it can increase the risk of the company's inability to pay its long-term obligations which will ultimately have a negative impact on the decline in the company's share price because it is less popular with investors. Likewise, on the contrary, the level of debt in the ratio decreases *debt to equity ratio* can reduce the risk of the company's inability to pay its long-term obligations so that in the end it will increase the company's share price because investors like it.

The results of this research support the results of research from previous researchers, including those conducted by Wahyono et al., (2019) and Fitriyaningsih & Budiansyah, (2019) which stated that *debt equity ratio* negative effect on stock prices. However, the results of this study are inversely proportional to the results of research conducted by Azhari et al., (2016) which states that *debt equity ratio* has no effect on share prices.

### **Firm Size can be a moderator of influence Working Capital to Total Asset to the Share Price**

Based on the results of these statistical tests, the third hypothesis in this study was proven, namely that *Firm Size* able to become a moderator variable in the influence relationship between *Working Capital to Total Asset* to Share Prices. The type of moderation is pure moderation or *pure moderator* can be seen from coefficient b2 and b3 in equation (3), namely if the coefficient b2 is declared insignificant but the coefficient b3 is statistically significant, where the moderating variable purely interacts with the predictor variable without becoming a predictor variable. This means that the larger the size of the company in terms of its assets, the faster the turnover of working capital, which will strengthen the relationship of influence *Working Capital to Total Asset* to Share Prices. The results of this research are in line with research conducted by Wati & Angraini, (2018) which states that company size is able to moderate the relationship between *working capital to total asset* to the stock price.

### **Firm Size can be a moderator of influence Debt to Equestrian Account to the Share Price**

Based on the results of these statistical tests, the fourth hypothesis in this study was proven, namely that *Firm Size* able to become a moderator variable in the influence relationship between *Debt to Equity Ratio* to Share Prices. The type of moderation is pseudo moderation or Quasi Moderation which can be seen from the coefficients b2 and b3 in equation (3), that is, if the coefficient b2 is declared significant and the coefficient b3 is statistically significant or the pseudo moderating variable interacts with the predictor variable and becomes a predictor variable. This can be interpreted as meaning that the larger the size of the company in terms of its assets, the weaker the influence of debt (DER) on share prices. Investors' point of view will not only look at the company's debt, when the company's assets grow, the negative influence of debt on share prices will weaken. .

The reason is because company size is one of the things that investors pay attention to when investing long term. Therefore, a large company size will usually give a good signal to investors to invest in the company, because investors assume that the company is considered capable and can control high levels of investment. *debt equity ratio* owned by the company. So this can increase the price of a share

## CONCLUSIONS AND SUGGESTIONS

Based on the results of data analysis and discussion, the results of this research can draw four conclusions as follows:

- 1) *Working capital to total asset* partially has a significant positive effect on share prices in subsector companies *property and real estate* on the Southeast Asian Stock Exchange for the 2012-2020 period
- 2) *Debt equity ratio* partially has a significant negative effect on share prices in subsector companies *property and real estate* on the Southeast Asian Stock Exchange for the 2012-2020 period
- 3) *Firm Size* able to become a moderator to strengthen influence *Working Capital to Total Asset* on share prices in property and real estate subsector companies on the Southeast Asian Stock Exchange for the 2012-2020 period
- 4) *Firm Size* is able to act as a moderator to strengthen the influence of the *Debt Equity Ratio* on share prices in property and real estate subsector companies on the Southeast Asian Stock Exchange for the 2012-2020 period.

However, this research still has limitations, including only two independent variables and one moderator variable, even though there are many variables that influence stock prices, the research sample is only limited to 17 companies. *Proerty & Realestate* even though there are many types of industry and the observation time interval is only nine years so it cannot be generalized to different situations. Therefore, the researcher tries to provide suggestions for future researchers as follows:

- 1) Adding or replacing independent variables with other variables that may have a greater influence on stock prices, namely external factors such as inflation, interest rates, foreign exchange rates, etc.
- 2) Try other variables to serve as moderators that are more optimal in strengthening or weakening the relationship between the independent variable and stock prices
- 3) Try other types of industrial sectors that have industrial characteristics that are different from industry *Property & Real Estate* thus adding to the treasures of research results in the field of financial management
- 4) Using quarterly or semesterly financial report data, not annual financial report data like this research.
- 5) Future research needs to identify other moderating variables to determine the effect of interactions in strengthening or weakening the influence on stock prices or further researchers can identify the influence of intervening variables on stock prices.

## ACKNOWLEDGEMENTS

We would like to thank LPPM Unsera for providing assistance in supporting this work to be published as one of the annual research with funding through the salary scheme

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