# DETERMINANTS OF HOLDING PERIOD BEHAVIOR IN INDONESIA AND MALAYSIA PUBLIC COMPANIES

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## ABSTRACT

This study aims to test the effect of Bid Ask Spread, Market value, and Variance Return, Dividend payout ratio, and Interest Rate on the Holding Period with Interest Rate as a moderating variable. The type of data used is secondary data in the form of financial statements of companies listed on the Indonesia Stock Exchange and Bursa Malaysia. The data analysis technique used is Moderating Regression Analysis (MRA). The population in this study is all manufacturing companies listed on the Indonesia Stock Exchange and Bursa Malaysia with a population of 488 companies using the purposive sampling method. The independent variables of this study are Bid Ask Spread, Market Value, Variance Return, and Dividend Payout Ratio. The dependent variable of the company's value is measured by the Holding Period. Meanwhile, Interest Rate is a moderation variable. The results of the study show that Bid Ask Spread, Market Value, Variance Return, Dividend Payout Ratio, and Interest Rate simultaneously have a significant positive effect on the Holding Period. Meanwhile, partially, the Bid Ask Spread, Variance Return and Dividend Payout Ratio have a positive and significant effect on the Holding Period. Market Value has a positive but not significant effect on the Holding Period. Interest Rate has a negative and insignificant effect on the Holding Period. Then with the addition of Interest Rate as a moderating variable between independent variables and dependent variables, the result obtained is a positive and significant Bid Ask Spread to the Holding Period through Interest Rate. Variance Return has a positive and insignificant effect on the Holding Period through the Interest Rate. Meanwhile, Market Value and Dividend Payout Ratio have a negative and insignificant effect on the Holding Period through Interest.

**Keywords**: Bid Ask Spread, Market Value, Variance Return, Dividend Payout Ratio, Holding Period

## INTRODUCTION

Investors who invest not only look at investment prospects, the rate of return or risk obtained, but psychological factors also determine investment. The existence of these psychological factors affects investment and the results to be achieved. Therefore, investment analysis using psychology and financial science is known as behavior *finance*. With the development of investment, financial behavior plays a very important role in a person's decision to invest. Financial behavior means understanding investor behavior in making investment decisions. Decision-making is a process of selecting the best alternative from a number of alternatives available under the influence of complex situations. Investment decision-making will be greatly influenced by the information received, as well as the level of ability and knowledge of investors about investment.

Financial behavior is a relatively new field of science that aims to combine behavioral and cognitive psychology theories with conventional economics and finance to provide an explanation for why people make irrational financial decisions (Sadalia and Andrani, 2016). An investor who invests in stocks will get two benefits, namely *capital gains* and *yields.* To get these benefits, investors need to know when they have to buy and sell stocks and how long they have to hold or hold the shares they own (Nurwani, 2012). If an investor considers that the shares he currently owns provide profits and good future prospects, then the investor will tend to hold his or her stock holdings for longer. This is indicated by the decision of investors who tend to have a higher *stock holding period*. On the other hand, if investors estimate that the prospects for stocks are not good, then investors will tend to release their shares faster,

which is indicated by a short holding period of stocks. Therefore, research related to *the holding period* is an interesting topic to research because it is one of the indicators related to the prospects of a company in providing benefits for shareholders.

Several studies that have been conducted before have shown mixed results. Research conducted by Shanchez and Wei (2010), Maulina (2010), Perangin-angin and Fauzi (2013), Wisayang (2011) shows that *bid-ask spreads* have a significant positive effect on the *stock holding period.* Research conducted by Arma (2013) and Kusumayanti (2015) shows the opposite result, where *the bid-ask spread* has a significant negative effect on the *stock holding period*. Margareta and Diantini (2015), Ernawati et al. (2016), showed that *bid-ask spreads* have a negative effect on *the holding period*, but do not affect significantly. The gap and inconsistency in the results of previous studies made researchers interested in re-examining the relationship of *bid-ask spread* variables to *holding periods* in different samples, periods, and research places from previous studies and comparing them between Indonesia and Malaysia.

Research conducted by Ratnasari and Astuti (2014), Murniati (2015), and Sari and Abundanti (2015) showed that *market value* had a significant positive effect on *the holding period*, while research by Perangin-angin and Fauzie (2013) found that the positive influence of *market value* on the *holding period* insignificant. On the other hand, research by Maulina (2010) and Utami and Sedana (2016) shows that the *market value* variable has a negative effect on *the holding period*. The gap in the results of this study makes this variable still need to be further researched for its effect on *the holding period* on stocks held by Indonesia and Malaysia investors.

Research related to the effect of *variance return* on *the holding period* that has been carried out previously also shows mixed results. Research conducted by Maulina (2010) and Widiastuti (2016) shows that there is a *negative and significant* effect of risk of return on *the holding period*. On the other hand, research conducted by Margareta and Diantini (2015) shows that the risk of stock volatility has no effect on *the holding period*, research conducted by Nurwani (2012) and Murniati (2015) also shows that *risk of return* does not have a significant effect on *the holding period.* The inconsistency in the results of previous studies makes it still necessary to conduct further research related to the effect of *variance return* on *the holding period*.

Research related to *the dividend payout ratio* to *the holding period* has been conducted before and shows mixed results. Research conducted by Nurwani (2012) showed a significant positive influence *of dividend payout ratio* on the *holding period*, on the other hand, research conducted by Maulina (2010) showed a significant negative influence *of dividend payout ratio* on *the holding period*. The gap in the results of this study makes this variable still need to be further researched for its effect on *the holding period* on stocks held by Indonesia and Malaysia investors. Nowadays, along with the development of technology in the era of globalization, investors do not only see investment opportunities in one country, but in various countries. Investors will certainly choose to invest in the most profitable country and in the company. One of the investors' options for investing is in manufacturing companies.

Manufacturing companies are companies engaged in the real sector and have a larger number of companies compared to other types of companies. Therefore, the researcher decided to use a manufacturing company as the object of research. Quoted from the Indonesian *Commercial Newsletter* (December 2011), 2011 was marked by the revival of the manufacturing sector, as seen from the performance of exports and its contribution to increasing national economic growth. Furthermore, it was also explained that the manufacturing industry sector began to show a revival, which was shown by GDP growth of 6.2% which previously averaged less than 5% per year and export growth which reached 24.6%. As two neighboring countries, often called cognate countries, Indonesia and Malaysia are countries in ASEAN that are considered investment destination countries. This is seen from the number of investors from Malaysia and other countries who invest in Indonesia and vice versa.

## LITERATURE REVIEW

### 1. Behaviour Finance

Financial behavior is a model that emphasizes the potential implications of psychological factors that affect investor behavior. Its emergence is driven by the allegation that conventional financial theory pays less attention to how investors actually make investment decisions. Various financial theories and models assume that investors always behave rationally in the investment decision-making process. The investor is assumed to be willing and able to accept and analyze all available information based on his rational thinking. However, in reality, investors often show irrational behavior (tends to be judgmental), so this situation deviates from the assumption of rationality and has a tendency to be biased.

### 2. Holding Period

In making investments, an investor is given the freedom to determine the type of stock to invest in. According to Halim (2005), the decision to buy or sell stocks is determined by the comparison between the estimated intrinsic value and the market price, with the following criteria:

a. If the market price of the stock is lower than its intrinsic value, then the stock should be bought and temporarily held with the aim of obtaining capital gains if then the price rises again.
b. If the stock market price is the same as its intrinsic value, then do not make a transaction. Because the shares are balanced, so there is no profit obtained from the transaction of buying or selling the shares.
c. If the market price of a stock is higher than its intrinsic value, then the stock should be sold to avoid losses. Because of course the price then drops according to the value.

### 3. Bid Ask Spread

According to Jones (2010) Bid price is the highest price offered by the dialer while ask price is the lowest price at which the dialer is willing to sell the stock)". Bid Ask Spread is the size of the difference between the bid price and the ask price. Bid price is the price of shares offered by a public investor when buying shares while ask price is the price of shares offered by investors to sell (Simatupang, 2010: 118).

### 4. Market Value

Market value is the price of stocks that occur in the stock market at a certain time due to transaction activities in the stock market (market mechanism) (Santos and Veronesi, 2010). This is in accordance with the Efficient Market Hypothesis (EMH) theory, which states that it is impossible to "beat the market" because the efficiency of the stock market causes the existing stock price to always combine and reflect all relevant information. EMH stocks are always traded at their fair value on the stock exchange, making it impossible for investors to buy undervalued shares or sell shares at an increased price.

### 5. Variance Return

Santoso (2008) stated that stock return variance is a parameter of stock price movements which is a reflection of the company's risk. In theory, a high variance return value of shares will result in a shorter stock holding period. This is in accordance with (Atkins and Dly 1997) which states that the greater the risk of a stock, the faster investors will release their shares, as well as vice versa, stocks that have low risk will be held by investors for a longer period of time. Jones (2010) states that risk is the deviation between the expected rate of return and the actual rate of return. Risk of return is the level of risk that occurs from an investment activity (Yuniningsih, 2008).

### 6. Dividend Payout Ratio

According to Rudianto (2012:290), dividends are part of the operating profit earned by the company and given by the company to its shareholders in exchange for their willingness to

invest their assets in the company. The above theory reinforces the statement that the Dividend Payout Ratio is a percentage of the dividends paid by the company to shareholders as a "cash dividend".

Based on the theoretical basis and the results of previous research, the conceptual framework in this study can be described as follows:

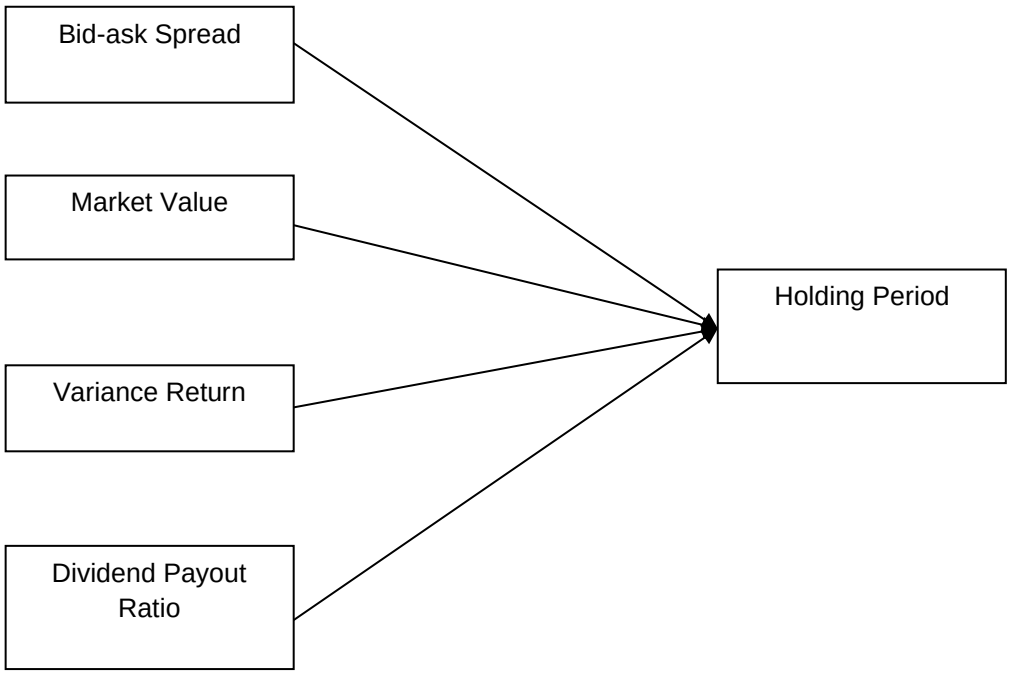


**Figure 1.** Conceptual Framework

## METHODS

### Type of Research

The research approach used in this study is to use a descriptive approach. Sukaria (2016) explained that descriptive cholerasive research is a research that is carried out with the aim of detecting the extent of variations in a related factor (correlation) with one or more other factors based on the correlation coefficient. In correlational research, researchers are only interested in getting answers about whether there is a relationship between one factor and another.

### Population and Sample

According to Silalahi (2012:253), population is the total number of all units or elements that the researcher is interested in. The population used in this study is public companies listed on the Indonesia Stock Exchange and public companies listed on Bursa Malaysia. The sample in this study is manufacturing companies listed on the Indonesia Stock Exchange and manufacturing companies listed on the Malaysia Exchange for the 2016 period.

The sampling technique is purposive sampling, sample selection based on the company's sector, namely the manufacturing sector with the following criteria:

a. The company includes a type of manufacturing industry listed on the Indonesia Stock Exchange and a manufacturing company listed on the Malaysia Stock Exchange.
b. The company has published its annual financial statements for the period 2016-2019
c. The auditor has published an audit report for the period 2016-2019
d. Companies whose financial statements present the data needed to calculate the research variables include: Bid ask spread, Market value, variance return, dividend payout ratio and Interest rate

A total of 148 manufacturing companies are listed on the Indonesia Stock Exchange, so 55 companies were obtained as research samples in accordance with the sample selection criteria. A total of 340 manufacturing companies are listed on Bursa Malaysia, so 39 companies were obtained as research samples according to the sample selection criteria.

**Data Analysis Methods**

The data analysis method used in this study is multiple linear regression analysis using the Eviews program. This analysis is to find out the direction of the relationship between the independent variable and the bound variable whether each independent variable is positively or negatively related and to predict the value of the bound variable if the value of the independent variable increases or decreases.

## RESULTS AND DISCUSSION

**Description of the Research Object**

Descriptive statistical analysis is used to find out the description of a data seen from the maximum value, minimum value, mean value, and standard deviation value. In this study, the variables used in the calculation of descriptive statistics are *bid ask spread, market value, variance return, dividend payout ratio, holding period*. Based on descriptive statistical analysis, a sample description was obtained as follows.

**Table 1.** Descriptive Statistics Based on Variables BAS, MV, RR, DPR, HP

| Variable | Min | Max | Mean | Standard Deviation (sd) |
|---|---|---|---|---|
| BAS | -3.02 | 4.14 | 1.7795 | 1.02762 |
| MV | 0.21 | 52.10 | 4.4398 | 4.74870 |
| VR | -0.70 | 0.50 | 0.0104 | 0.09752 |
| HOUSE | -1.67 | 3.50 | 0.3720 | 0.39893 |
| HP | 0.24 | 3.80 | 1.9789 | 0.628423 |

Source: EViews 12 Software Processing Results

Based on Table 1, it is known that the minimum value of the *bid ask spread* is -3.0200, while the maximum value of the *bid ask spread* is 4.1400. The average value of the *bid ask spread* is 1.7795, while the standard deviation value of the *bid ask spread* is 1.02762. It is known that the minimum value of the *market value* is 0.2100 (in billions), while the maximum value of the *market value* is 52.1000 (in billions). The average value of the *market value* is 4.4398 (in billions), while the standard deviation value of the *market value* is 4.74870. It is known that the minimum value of variance *return* is -0.7000, while the maximum value of variance *return* is 0.5000. The average value of *variance return* is 0.0104, while the standard deviation value of variance *return* is 0.09752. It is known that the minimum value of the *dividend payout ratio* is -1.6700, while the maximum value of the *dividend payout ratio* is 3.5000. The average value of *the dividend payout ratio* is 0.3720, while the standard deviation value of the *dividend payout ratio* is 0.39893. It is known that the minimum value of the *holding period* is 0.24000, while the maximum value of the *holding period* is 3.8000.

**Coefficient of Determination Analysis (Indonesia and Malaysia)**

**Table 2.** Statistical values of Coefficient of Determination, Test F, and Test t (Indonesia & Malaysia)

Dependent Variable: HP
Method: Panel Least Squares
Date: 01/15/22 Time: 21:35
Sample: 2016 2019
Periods included: 4
Cross-sections included: 94

Total panel (balanced) observations: 376

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1.773599 | 0.081006 | 21.89464 | 0.0000 |
| BAS | 0.076680 | 0.035484 | 2.160965 | 0.0316 |
| MV | 0.004304 | 0.008454 | 0.509141 | 0.0412 |
| VR | 0.400385 | 0.368177 | 1.087478 | 0.0211 |
| HOUSE | 0.089608 | 0.101096 | 0.886366 | 0.0002 |

Effects Specification

Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| Root MSE | 0.420144 | R-squared | 0.551825 |
| Mean dependent var | 1.978910 | Adjusted R-squared | 0.393265 |
| S.D. dependent var | 0.628423 | S.E. of regression | 0.489499 |
| Akaike info criterion | 1.630155 | Sum squared resid | 66.37176 |
| Schwarz criterion | 2.664808 | Log likelihood | -207.4692 |
| Hannan-Quinn criter. | 2.040876 | F-statistic | 3.480228 |
| Durbin-Watson stat | 2.040771 | Prob(F-statistic) | 0.000000 |

Source: EViews 12 Software Processing Results

Based on Table 2, it is known that the value of the determination coefficient (*R-squared*) is . This value can be interpreted as $R^2 = 0.5518$*bid ask spread, market value, variance return, dividend payout ratio* simultaneously or together affecting the *holding period* by 55.18%, the remaining 44.82% is influenced by other factors.

**Simultaneous Influence Significance Test (Test F) (Indonesia and Malaysia)**

The test aims to test the influence of independent variables together or simultaneously on non-independent variables. Based on Table 2, it is known that the value of $FProb.$ *(F-statistics)*, namely 0.00000 0.05, then it can be concluded that all independent variables, namely <*bid ask spread, market value, variance return, dividend payout ratio* simultaneously, have a significant effect on the holding *period* variables.

**Panel Data Regression Equation and Partial Influence Significance Test (t-Test) (Indonesia and Malaysia)**

Based on Table 2, the regression equation is obtained as follows.

HP = 1.773599+0.076680(BAS)+0.04304(MV)+0.400385(VR)+0.089608(DPR)+e

1. It is known that *the bid ask spread* has a negative effect on *the holding period*, with a regression coefficient value of 0.076680 and significant, with a probability value (Prob) = 0.0316 < 0.05.
2. It is known *that market value* has a positive effect on *the holding period*, with a regression coefficient value of 0.004304 and significant, with a probability value (Prob) = 0.0412 < 0.05.
3. It is known *that variance return* has a positive effect on *the holding period*, with a regression coefficient value of 0.400385 and significant, with a probability value (Prob) = 0.0211 < 0.05.
4. It is known that *the dividend payout ratio* has a negative effect on the *holding period*, with a regression coefficient value of -0.089608 and significant, with a probability value (Prob) = 0.0002 < 0.05.

**Hypothesis Testing (Indonesia)**

In hypothesis testing, determination coefficient analysis, simultaneous influence testing (F test), and partial influence testing (t test) will be carried out. The statistical values of the determination coefficient, the F test, and the t-test are presented in Table 3.

**Table 3.** Statistical values of the Coefficient of Determination, Test F, and Test t (Indonesia)

Dependent Variable: HP
Method: Panel Least Squares
Date: 01/16/22 Time: 06:40
Sample: 2016 2019
Periods included: 4
Cross-sections included: 55
Total panel (balanced) observations: 220

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.939506 | 0.133449 | 7.040204 | 0.0000 |
| BAS | 0.449509 | 0.053728 | 8.366331 | 0.0000 |
| MV | -0.002334 | 0.012388 | -0.188451 | 0.8507 |
| VR | 0.079153 | 0.338173 | 0.234061 | 0.0002 |
| HOUSE | 0.066414 | 0.100455 | 0.661131 | 0.0001 |

| | | | |
|---|---|---|---|
| Root MSE | 0.480128 | R-squared | 0.266604 |
| Mean dependent var | 1.842318 | Adjusted R-squared | 0.249469 |
| S.D. dependent var | 0.561923 | S.E. of regression | 0.486812 |
| Akaike info criterion | 1.425016 | Sum squared resid | 50.71498 |
| Schwarz criterion | 1.517570 | Log likelihood | -150.7518 |
| Hannan-Quinn criter. | 1.462392 | F-statistic | 15.55868 |
| Durbin-Watson stat | 1.545016 | Prob(F-statistic) | 0.000000 |

Source: *EViews 12* Software Processing Results

**Coefficient of Determination Analysis (Indonesia)**
Based on Table 3, it is known that the value of the determination coefficient (*R-squared*) is . This value can be interpreted as $R^2 = 0.2666$*bid ask spread, market value, variance return, dividend payout ratio* simultaneously or together affecting the *holding period* by 26.66%, the remaining 73.34% is influenced by other factors.

**Simultaneous Influence Significance Test (Test F) (Indonesia)**
The test aims to test the influence of independent variables together or simultaneously on non-independent variables. Based on Table 3, it is known that the value of $F$*Prob. (F-statistics)*, namely 0.000000 0.05, then it can be concluded that all independent variables, namely <*bid ask spread, market value, variance return, dividend payout ratio, interest rate* simultaneously, have a significant effect on the holding period variable.

**Panel Data Regression Equation and Partial Influence Significance Test (t-Test) (Indonesia)**
Based on Table 3, the regression equation is obtained as follows.
HP = 0.939506 + 0.449509BAS - 0.002334MV + 0.079153VR + 0.006414DPR + e

1. It is known that *the bid ask spread* has a positive effect on the *holding period*, with a regression coefficient value of 0.4495 and significant, with a probability value (Prob) = 0.000 < 0.05.
2. It is known *that market value* has a negative effect on *the holding period*, with a regression coefficient value of -0.0023 and is insignificant, with a probability value (Prob) = 0.8507 > 0.05.

3. It is known *that variance return* has a positive effect on *the holding period*, with a regression coefficient value of 0.07915 and significant, with a probability value (Prob) = 0.0002 < 0.05.
4. It is known that *the dividend payout ratio* has a positive effect on the *holding period*, with a regression coefficient value of 0.0664 and significant, with a probability value (Prob) = 0.0001 < 0.05.

**Hypothesis Testing (Malaysia)**

In hypothesis testing, determination coefficient analysis, simultaneous influence testing (F test), and partial influence testing (t test) will be carried out. The statistical values of the determination coefficient, the F-test, and the t-test are presented in Table 4.

**Table 4.** Statistical values of Coefficient of Determination, Test F, and Test t (Malaysia)

Dependent Variable: HP
Method: Panel Least Squares
Date: 01/16/22 Time: 07:42
Sample: 2016 2019
Periods included: 4
Cross-sections included: 39
Total panel (balanced) observations: 156

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 2.289258 | 0.200064 | 11.44266 | 0.0000 |
| BAS | 0.139649 | 0.039765 | 3.511827 | 0.0006 |
| MV | -0.009169 | 0.007801 | -1.175355 | 0.2417 |
| VR | 0.534261 | 0.563418 | 0.948250 | 0.3445 |
| HOUSE | -0.267180 | 0.149311 | -1.789417 | 0.0756 |

| | | | |
|---|---|---|---|
| Root MSE | 0.623277 | R-squared | 0.122340 |
| Mean dependent var | 2.171538 | Adjusted R-squared | 0.093085 |
| S.D. dependent var | 0.667443 | S.E. of regression | 0.635620 |
| Akaike info criterion | 1.969270 | Sum squared resid | 60.60191 |
| Schwarz criterion | 2.086573 | Log likelihood | -147.6031 |
| Hannan-Quinn criter. | 2.016914 | F-statistic | 4.181812 |
| Durbin-Watson stat | 0.983011 | Prob(F-statistic) | 0.001382 |

Source: EViews 12 Software Processing Results

**Coefficient of Determination Analysis (Malaysia)**

Based on Table 4, it is known that the value of the determination coefficient (*R-squared*) is . This value can be interpreted as $R^2 = 0.1223$*bid ask spread, market value, variance return, dividend payout ratio, interest rate* simultaneously or together affecting *the holding period* by 12.23%, the remaining 87.77% is influenced by other factors.

**Simultaneous Influence Significance Test (Test F) (Malaysia)**

The test aims to test the influence of independent variables together or simultaneously on non-independent variables. Based on Table 4, it is known that the Prob$F$*. (F-statistics)*, namely 0.001382 0.05, then it can be concluded that all independent variables, namely <*bid ask spread, market value, variance return, dividend payout ratio, interest rate* simultaneously, have a significant effect on the holding period variable.

**Panel Data Regression Equation and Partial Influence Significance Test (t-Test) (Malaysia)**

Based on Table 4, the regression equation is obtained as follows.

HP = 2.289258 + 0.139649BAS – 0.009169MV + 0.534261VR – 0.267180DPR – e

1. It is known that *the bid ask spread* has a positive effect on the *holding period*, with a regression coefficient value of 0.1396 and significant, with a probability value (Prob) = 0.0006 < 0.05.
2. It is known that *the market value* has a negative effect on *the holding period*, with a regression coefficient value of -0.0091 and is insignificant, with a probability value (Prob) = 0.2417 > 0.05.
3. It is known *that variance return* has a positive effect on *the holding period*, with a regression coefficient value of 0.5342 but not significant, with a probability value (Prob) = 0.3445 > 0.05.
4. It is known that *the dividend payout ratio* has a negative effect on the *holding period*, with a regression coefficient value of -0.2671 and is insignificant, with a probability value (Prob) = 0.0756 > 0.05.

## CONCLUSION

1. Investors can use *the bid ask spread, market value, variance return, dividend payout ratio* as indicators in investing, because simultaneously these five variables have a significant effect on *the holding period.*
2. Further research can be carried out by increasing the number of company samples not only limited to manufacturing companies or by comparing countries in ASEAN.
3. Further research can be carried out by adding or changing other variables that are not yet present in this study.

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