# THE EFFECT OF *WORKING CAPITAL*, INTEREST RATE, INFLATION & RUPIAH EXCHANGE RATE ON JCI ON *REAL ESTATE* AND PROPERTY SUBSECTOR COMPANIES ON IDX

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#### ABSTRACT

This study aims to determine the effect of macroeconomics on the Composite Stock Price Index so that investors get maximum profit with small risk when investing in the Indonesia Stock Exchange. The variables used in this study are working capital, interest rates, inflation, and the rupiah exchange rate. This study uses a quantitative approach. This study uses a period of quarter 1 2020 - quarter 1 2021. The sampling method used is purposive sampling and obtains a total sample of 19 companies. This study uses multiple linear regression analysis method performed with IBM SPSS version 26 which is supported by the classical assumption test. In addition, the F test, t test and coefficient of determination were carried out.

Based on the results of the t test, working capital has a positive and significant effect on the JCI for the Real Estate & Property Sector, interest rates have a negative and significant effect on the JCI for the Real Estate & Property Sector, inflation has a positive and significant effect on the JCI in the Real Estate & Property Sector, and the value of The Rupiah exchange rate has a positive and insignificant effect on the JCI in the Real Estate & Property Sector.

#### Keywords: Working Capital, Interest Rate, Inflation, Exchange Rate, Composite Stock Price Independent

#### **INTRODUCTION**

Indonesia is the largest economy in ASEAN and the fourth largest population in the world (Badan Koordinasi Penanaman

Modal, 2017). Currently, Indonesia is transforming from a traditional economy to

a digital economy in support of the 4.0 industrial revolution. In the midst of this economic transformation effort, there are

many challenges faced and the most impactful at this time is the Covid 19 virus.

At the end of 2019 the world was shocked by an outbreak of a disease that appeared in Wuhan, China, which is now known as the Covid 19 virus. This epidemic

spread so quickly to several countries, including Indonesia. In early March 2020, the Indonesian government stated that two

positive cases of COVID-19 had been found in Indonesia (Kompas, 2020).

As a result of the Covid-19 pandemic, there is inequality in various sectors. One

sector that is greatly affected is the economic sector. Indonesia's economic sector experienced instability, both financial markets and capital markets.

*the* Covid 19 pandemic has greatly affected the financial sector including the capital market, resulting in turmoil and fluctuations in the capital market at this time . *trading halt* limits to trading session adjustments at *pre-opening* to maintain stability in the capital market (Liputan 6, 2020).

During the Covid-19 pandemic, the *Real Estate* and property sector was one of the sub-sectors that was deeply affected. How not, at the end of 2019 companies in this sector began to give more promising sentiments to both the commercial and residential property sectors. However, in early 2020 this sector experienced a significant decline(CBC Indonesia, 2020)

The apartment market in Indonesia experienced a slowdown in demand during the first quarter of 2020. In the city of Surabaya alone, demand for apartments was -62.4% . Meanwhile, the hotel occupancy rate decreased by around 16.6% to 22.5%. This happened during the early days of the Covid-19 pandemic in Indonesia. It can be seen how big the influence of environmental health on the economy, especially in the field *of Real Estate* and property (CBC Indonesia, 2020).

With this decline in market demand, the company's profits have reduced, and not even a few companies have suffered losses. Not only that, this will also affect the stock price index of *real estate* and property companies. Considering that investors invest to earn profits, not losses. If market demand weakens, this will indirectly affect the company's stock price.

real estate and property sector stock index experienced a significant decline of 19.69% year to date (Kontan.co.id, 2020). With this sizeable decline, it became an issue that was raised in the REI National Working Meeting which was held in early December 2020 in Jakarta. In the meeting the theme was "Property Business Strategy in Facing the Impact of the Covid-19 Pandemic and the Implementation of the Ciptaker Law", according to the general chairman of REI's DPP, Totok Lusida, the government's decision to issue the Job Creation Law is a fairly appropriate decision, which is expected with this regulation will To facilitate investment, especially in the property sector, the REI National Working Meeting is expected to be a good momentum to review various ideas that can be submitted as input to the government related to the arrangement of the provisions of the UUCK derivative (Renaldi, 2020).

Every company needs working capital to meet its operational needs (Arifin, 2018). So in other words, *working capital* has a very important role in the company, especially in relation to the quality of the company(Priharto, 2020)

According to the results of Senja and Wahyuni's research (2017), working capital as measured by Woking Capital Turn over (WTC) has a negative effect on firm value, in other words WCT can be used as a determinant of the company's income . Good working capital turnover will the company's profitability, increase healthy financial conditions will affect the stock price of a company (Andriawan & Salean, 2016). This is not in accordance with the results of research by Warouw et al., (2016) that working capital turnover or (WCT) has no effect on the value of a company as well as the results of research by Felicia et al., (2020) where working capital turnover does not have significant influence on the value of a company

The existence of economic instability in these several periods caused the government and BI to establish policies to maintain economic stability. One of them is the determination of the benchmark interest rate as an effort to recover the economy in Indonesia. Based on the BI Board of Governors Meeting, currently the BI-7DRR of 3.50% is still being maintained (Bank Indonesia, 2021). Interest rates affect the stock price index of the *Real Estate* and property sector (Rohmanda, 2014).

A decrease in interest rates will cause stock prices to increase and vice versa. An increase in interest rates will result in a decrease in company profits due to an increase in credit interest expenses. According to research by Saputro & Gustyana (2021), an increase in interest rates causes investors to be more interested in investing in bank deposits. Conversely, a decrease in interest rates will be a consideration for investors to shift their funds to the capital market because the profits are greater than investing in bank deposits.

In addition to the interest rate, another indicator that is thought to have an effect on the stock price index is the inflation rate. Increasing inflation will affect the level of company profitability. High price increases can reduce demand for goods produced by the company. Fluctuations in company profits can affect investors' decisions to invest. If profits decline, this will have an impact on the company's stock price.

This is in accordance with the results of research by Sunardi & Ula (2017) which states that inflation has a negative and significant effect on the JCI. However, in recent years, Indonesia's inflation rate has weakened, causing deflation in several regions, coupled with the Covid-19 pandemic, causing inflation to slow down. Based on BPS data, Indonesia's inflation in 2020 was 1.68% and decreased from 2018 respectively at 3.17% and 2.72% in 2019(BPS, 2021)

Based on the phenomena that have been described in the previous background, the research problems can be formulated, namely:

Is there a partial and simultaneous influence of working capital, interest rates, inflation and the rupiah exchange rate against the JCI of real estate and property sector companies during the Covid 19 pandemic?

The objectives of this research are: To analyze so as to determine the effect of working capital , interest rates, inflation, the rupiah exchange rate on the JCI of real estate and property sector companies during the Covid 19 pandemic.

## THEORETICAL BASIS Arbitrage Pricing Theory (APT)

Arbitrage pricing theory was developed by economist Stephen Ross in 1976, as an alternative to the capital asset pricing model (CAPM). According to this theory the price of an asset can be influenced by several factors. In contrast to the CAPM theory where prices are only influenced by one factor, namely the market portfolio. APT is an alternative model to answer the problem of the relationship between earnings and stock risk (Fahmi, 2015).

# **Capital Market**

According to the Law of the Republic of Indonesia No. 8 of 1995 concerning Capital Markets, Capital Markets are activities related to the public offering and trading of securities, public companies related to securities issued, as well as institutions and professions related to securities.

## **Composite Stock Price Index (JCI)**

Is an indicator that shows the movement of stock prices in a period (Sudirman, 2018)

Composite Stock Price Index or abbreviated JCI is defined as an indicator of stock prices that show trends in the stock market (BEI, 2021). The JCI is a complex summary of the simultaneous impact of various influencing factors such as economic phenomena that serve as a barometer of the country's economic health and serve as a reference or basis for statistical analysis of recent market conditions (Fuadi, 2020).

#### Working Capital

Working capital is the company's ownership assets that are used for company operations, either running a business or financing company expenses without sacrificing other assets with the aim of obtaining maximum profit.(Arifin, 2018) Working capital affects many aspects of a business, from paying employees and vendors to company operations such as paying electricity and telephone bills to planning for long-term sustainable growth.(Bank of America, 2021) The factors that affect the amount of working capital are as follows: Nature/type of company, Time required, Method/terms of purchase and sale, Inventory turnover rate, Accounts receivable turnover rate, Business cycle, Risk of possible decline in current asset prices, Season (Arifin, 2018). **Interest Rate** 

The interest rate is the annual interest payment on a loan, in the form of a percentage of the loan obtained and the amount of interest received each year divided by the number of loans in Indonesia. (Nardi Sunardi I. N., 2017), and the loan amount is controlled by Bank Indonesia (Nardi Sunardi 1. N., 2017). Interest rates can be interpreted as the price or rent of the use of a money at a certain

time or the price of borrowing money which is then used for purchasing power in the form of a percent (%)(Andrianto, 2019)

As a whole, here are some types of bank interest rates in Indonesia:

- 1. Fixed interest rate (*fixed*) is an interest rate that is fixed for a certain period or within a certain period of time. Example of a motor vehicle loan.
- 2. Floating interest rates *are* interest rates that follow market rates. Example of mortgage interest rates.
- 3. The *flat* interest rate is the interest rate calculated from the initial loan principal amount for each installment.
- 4. The effective interest rate is the interest rate calculated from the remaining principal amount of the loan, the fewer loans that have not been paid, the smaller the amount of interest that must be paid.
- 5. annuity interest rate is the effective interest rate applied so that the number of installments each month is the same without taking into account the remaining loan. Examples of investment loans and loans with collateral.

The factors that influence bank interest rates are as follows:

- 1. The need for bank funds is quite large
- 2. The profit targeted by the bank is quite high
- 3. government policy
- 4. Guaranteed collateral
- 5. Loan period
- 6. Products with certain programs
- 7. Customer reputation

## Inflation

Definition of inflation: Symptoms of a continuous increase in the price of basic necessities. (Pribadi, 2016). Meanwhile , according to Ahmad Mukri Aji (2020: 9) inflation is a condition when general prices increase for a long period of time and occur continuously, causing the value of money to fall.

#### Rupiah exchange rate

In the global environment, every country that enters it will be faced with *exchange rate conditions* that fluctuate every time. Exchange rate can be interpreted as the price of one unit of domestic currency in foreign currency or vice versa(Kompas, 2020)

The factors causing the weakening of the rupiah exchange rate are as follows:

- 1. The rising US economy
- 2. Decline in export commodity prices
- 3. High level of imports

In its application, the exchange rate has several different policies (Masno, 2020), including the following:

- 1. *Fixed Exchange Rate* is an exchange rate system where *the central bank* becomes the highest controller of a country by setting the exchange rate against other countries.
- 2. *Floating Exchange Rate* is an exchange rate system where the determination of the exchange rate is seen from the market power between supply and demand.
- 3. *Managed floating Exchange Rate* is an exchange rate policy system where the central bank allows the exchange rate to move according to supply and demand in the market but with active intervention from the bank.
- 4. *Multiple Exchange Rate* is an exchange rate policy system that moves freely without any government intervention.

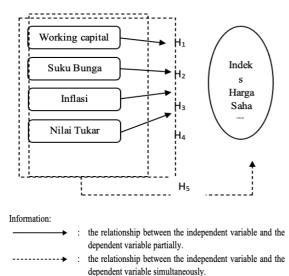
## **Previous Researchers**

- 1. Sofyani & Wahyudi (2015) in their research entitled "Analysis of the Effect of Global Macroeconomic Variables and Domestic Macroeconomics on the Property and *Real Estate Sector Stock Price Index*
- 2. Ayudya et al., (2017) with the research title The impacts of fundamental and macroeconomic factors on the stock price of oil palm plantation companies in Indonesia Stock Exchange (IDX)

 Handara, & Purbawangsa (2017) in their research entitled "The Effect of Financial Ratios, Capital Market Conditions, and Changes in Exchange Rates on Stock Returns"

#### **Conceptual Framework**

The level of a company's stock price can be influenced by several factors, both internal and external factors. In terms of making a decision to invest, it is hoped that investors or potential investors can consider some of these factors as a basis for selecting what sector to choose as a place to channel their excess funds. Many studies have been conducted relating to the stock market with details of internal and external factors. This study uses one variable from internal factors that are thought to affect the JCI on the Indonesia Stock Exchange and three variables from external factors. Where the predicted variables are working capital, interest rates, inflation, and the exchange rate of the rupiah against the dollar.



Working Capital Relationship against the Joint Stock Price Index (IHSG) in sub-sector companies Real Estate and Property on the IDX During the Covid 19 Pandemic

Companies with good performance have good working capital turnover as well. Working capital turnover has a significant effect on the company's performance (Widyastuti, Oetomo, & Riduwan, 2017). This can be seen from its ability to finance the company's operational activities smoothly

In line with the theory of rational expectations, working capital will have a positive effect on the value of the company and the company's stock price, where investors will be interested in buying company shares because of the company's ability to finance its operational activities properly.

This is in accordance with the research of Shindy & Mulyo (2015) which results that working capital has a positive and significant effect on stock prices. The results that are different from the research conducted by Julianto (2018) conclude that WCT has no significant effect. This is also supported by the results of research Felicia et al., (2020).

Meanwhile, according to the results of Senja and Wahyuni's research (2017), working capital as measured by working capital turnover has a negative effect on firm value, in other words WCT can be used as a determinant of the company's income.

H<sub>1</sub> = *it is suspected that working capital has a positive effect on the JCI of real estate and property sub- sector companies on the IDX during the covid 19 pandemic* 

Relationship of Interest Rates to Stock Price Index Composite (JCI) in Real Estate and Property sub-sector companies on the IDX during the Covid-19 Pandemic

The interest rate is a proxy for investors to determine the rate of return on an investment. Investor decisions are more dominantly influenced by interest rates. Where high interest rates will influence investors to shift their investments to banking investments, bonds and others. Because the banking sector is more promising than stocks. This is in accordance with research conducted by Asih & Akbar (2016), Saripudin & Lutfi (2017), Anggraeni & Sulasmiyati (2019) which showed that interest rates had a negative effect on the JCI. Which means

that if interest rates are high, the stock price will decrease and vice versa.

The results of this study contradict the research of Andriyani & Armereo (2016) which states that interest rates have a positive effect on stock prices. The research from Pardede et al., (2016) and research by Ningsih & Waspada (2018) results that interest rates have no significant effect on the JCI.

H2 = it is suspected that interest rates have a negative effect on the JCI of real estate and property sub- sector companies on the IDX during the covid 19 pandemic.

## Relationship of Inflation to Composite Stock Price Index (JCI) in Real Estate and Property Sub-sector companies on the IDX During the Covid-19 Pandemic

Inflation is an event where the currency weakens and the price of goods increases, which if it occurs continuously will have a negative impact on the economic condition of a country. The effect of inflation on macroeconomic conditions is a decrease in incoming investment in a country. This can happen because the inflation will increase the price of raw materials which then affects the increased production costs thereby reducing the level of profit earned by the company. So that this decrease in profit will affect the amount of return that will be distributed to investors. This decline in the level of profit will affect investors in deciding their investment where the expectation when investing is a high return. When there is a high inflation rate, this affects the interest in investing among investors and the purchasing power of the public.

This is in accordance with the research conducted by Wijaya & Agustin (2015) which concluded that the inflation rate had a significant effect on the JCI and in line with the results of research conducted by Sunardi & Ula (2017) and research by Harsono & Worokinasih (2018) in their research concluded that the level of inflation has a negative effect on the JCI. Meanwhile, according to Wiyanti &

Wiagustini (2018) concluded that the inflation rate does not have a significant effect on the JCI. The results of this study are supported by Desfiandi & Marantika (2015), Sofyani & Wahyudi (2016) and the research of Savira et al., (2020). The different results from Fatihudin & Firmansyah's research (2018) show that inflation has a positive and significant effect on the JCI.

H  $_3$  = It is suspected that the inflation rate has a negative effect on the JCI of real estate and property sub- sector companies on the IDX during the covid 19 pandemic

The Relationship of the Rupiah Exchange Rate to the Composite Stock Price Index (IHSG) in Real Estate and Property sub-sector companies on the IDX during the Covid 19 Pandemic

Every country that enters the global environment must deal with conditions of changes in currency exchange rates ( exchange rates ) which fluctuate at any time. Countries that do not have a strong currency exchange rate construction will be left behind and will be affected by the crisis and foreign exchange rate risk. In addition, the exchange rate is an indicator to see the economic condition of a country. The stability of a country's exchange rate indicates a positive signal in its economic activities in both the stock market and the money market. So that investors are interested in investing in a country. The weakening of the exchange rate can be a negative signal for investors in making investment decisions. The weakening of the rupiah exchange rate will of course make investors tend to withdraw their funds from the stock market and shift them to other, more promising sectors. Because when investing, of course, consider the risk and return obtained. So this will affect the composite stock price index. This is in line with research conducted by Pardede et al., (2016) that partially the exchange rate has an influence on the composite stock price index.

According to the results of Haryanto's research (2020) the depreciation of the rupiah can increase the income of exportoriented companies so that the JCI will increase. This happens because in the export sales transaction process, the income earned will be exchanged into rupiah currency so that it can be used as capital for purchasing materials and other operational costs.

This is in line with research conducted by Kewal (2012), Rohmanda et al., (2014), and research by Saputra (2019) which concluded that the rupiah exchange rate had a negative and significant effect on the JCI. Which means that the strengthening of the rupiah exchange rate indicates good conditions for the economy of a country and gives investors confidence to invest, especially in the capital market sector.

H  $_4$  = It is suspected that the exchange rate has a negative effect on the JCI of real estate and property sub- sector companies on the IDX during the covid 19 pandemic

Relationship between Working Capital, Interest Rate, Inflation and Rupiah Exchange Rate against the Composite Stock Price Index (IHSG) in Sub Real Estate and Property companies on the IDX during the Covid 19 Pandemic.

Recently, investing in the capital market has become one of the options that can be done to take advantage of the excess funds available. The most common is to invest funds in the stock market with the aim of obtaining passive income. An important indicator that needs to be considered is the stock price index which reflect fluctuations in the stock price of a company.

The unstable stock price can be influenced by the company's internal factors and the company's external factors. The company's internal factors can be seen from the company's performance, company efficiency and company value which can be measured and seen from the *working capital of* a company. Meanwhile, the company's external factors can be influenced by macroeconomic factors, namely interest rates, inflation, and the exchange rate of the rupiah against the dollar.

Based on previous research conducted by Yustanti & Sutrisno (2015) concluded that the company's internal and external factors simultaneously have an influence on stock prices, especially the retail trader industry on the Indonesia Stock Exchange. This is in line with the research conducted by Zulkarnaen et al., (2017) which resulted in the same conclusion where fundamental factors and external factors simultaneously affected the JCI.

H5 = It is suspected that working capital, interest rates, inflation, and the rupiah exchange rate have a simultaneous effect on the JCI of real estate and property subsector companies on the IDX during the covid 19 pandemic

## METHOD

In research, it is necessary to have clarity in taking steps to solve research problems. For this reason, the selection of the right research method is very important in conducting a research. In this study the approach used is a quantitative approach.

Wiratna According to (2018),quantitative research is one of the research approaches where the results are discoveries that are obtained or achieved using quantification methods such as statistical procedures. Quantitative research is needed to reveal objective phenomena assessment is carried out and the quantitatively.

Population is the total number of objects or subjects that have certain qualities and characteristics as determined by the researcher to be studied and then conclusions will be drawn (Sujarweni, 2018). The population in this study are all real estate sub-sector companies and Indonesian properties listed on the IDX. A total of 77 companies, in Q1 of 2020 to Q1 of 2021.

The sample is part or several items from number of qualities a or characteristics that can represent the research population and its validity can be guaranteed (Sujarweni, 2018). In the selection of samples used is purposive sampling, namely the technique of taking or determining the sample by considering certain criteria (Sujarweni, 2018), after counting there are 19 companies, so that number of observed 19 companies x 5(quarterly) = 95 financial statements

## Variable Operational Definition Dependent variable / dependent variable

The dependent variable is the dependent variable (Duli, 2019). The dependent variable referred to in this study is the Composite Stock Price Index of *real estate* and property companies listed on the Indonesia Stock Exchange. The data used is the list of stock prices during closing (*closing prices*) starting from Q1 2020 to Q1 2021.

The independent variable used in this study is the company's financial performance as seen from working capital and macroeconomic factors used in this study are interest rates, inflation, and the exchange rate of the rupiah against the USD. The following is a list of independent variables in this study:

1. Working Capital  $(X_1)$ 

Working capital, also known as net working capital (NWC), is the difference between a company's current assets and current debt . NWC is a measure of a company's liquidity and refers to the difference between operating current assets and operating current liabilities.

Working capital is a measure of a company's liquidity, operational efficiency, and short-term financial health. If a company has a sizable positive working capital, then it must have the potential to invest and grow. If a company's current assets do not exceed its current liabilities, then the company may have difficulty growing or repaying creditors, or even bankruptcy (Fernando, 2021).

Working Capital Turn over Ratio = $\frac{NetSales}{asetlancar-liabilitaslancar} \times 100\%$ 

2. Interest rate  $(X_2)$ 

The interest rate is the price that must be paid for the use of money or the price that must be received for the distribution or borrowing of money. In general, the interest rate is set annually, i.e. the amount that must be paid over the course of a year's loan. In its implementation, there is a level or reference to the interest rate that applies in Indonesia, which is in accordance with that determined by BI. to strengthen the framework for monetary operations by using the new policy interest rate and used since August 19, 2016 called the BI-7 Day Repo Rate (BI7DRR).

3. Inflation  $(X_3)$ 

Inflation is an increase in the price of a good or service. The data used in this study is data published by Bank Indonesia where the period used is during 2019-2020. Calculation of inflation is as follows:

$$\frac{IHK_n - IHK_{n-1}}{IHK_{n-1}} \times 100\%$$

4. Rupiah exchange rate (X 4) The rupiah exchange rate is a ratio or comparison of the value of the rupiah against the dollar. The data used in this study is the middle exchange rate or the average of the selling and buying rates of the rupiah against the USD obtained from the official website of Bank Indonesia. the data taken is the average exchange rate per 2019-2020. with the following formula:

$$\frac{kurs jual + kurs beli}{2}$$

Data according to Sujarweni (2018), is research material in the form of a

collection of information obtained from the field, where this data has a fairly important role in a study. In this study, the data used is secondary data where the data is obtained from various official websites.

In this study, because secondary data is used, the methods used are as follows:

1. Literature Study Method

Where the author collects information about theories related to research from various sources such as articles, journals, official websites, and books related to the composite stock price index, working capital, interest rates, inflation, and the rupiah exchange rate.

2. Documentation Method

The second method used in this method is the documentation method, namely by collecting, recording, and reviewing secondary data related to research. In this documentation method, the collection technique is not aimed directly at the research subject but through searching documents accessed from official government websites such www.bi.go.id and as www.idx.co.id.

After the data collection process is complete, the next step is to analyze and process the data that has been collected so that the research problem can be answered with a conclusion.

## **RESULTS AND DISCUSSION**

Normality test is used to test whether the regression model in this study is a good regression model or not. A good regression model is a regression model that has a normal distribution. Testing the normality of the data in this study using *the Kolmogorov-Smirnovtest*. The data can be said to be normally distributed if the significance value is more than 0.05 (Sujarweni, 2018).

Based on the results of the tests that have been carried out, the level of significance is 0.071 where this number exceeds the amount of the test criteria, namely 0.05. Thus the data in this study is declared to be normally distributed . and shows that the regression model is feasible because it meets the assumptions of the data normality test.

The multicollinearity test is used to test or find out whether there are similarities in the data of the independent variables in the study which can cause a very strong correlation. Data with a good regression model is data that has a VIF value between 1-10 (Sujarweni, 2018). The following are the results of the multicollinearity test from this study.

Based on the results of the multicollinearity test, it can be concluded that the VIF value ranges from 1 to 10 and the tolerance value is more than 0.1 which indicates that there is no multicollinearity of the independent variables. So it can be interpreted that the regression model is feasible to use because there is no multicollinearity between independent variable.

The heteroscedasticity test is used to detect whether there is heteroscedasticity in a regression model that can be seen using the Spearman Rho test, where it can be said that there is no heteroscedasticity if the sig value is more than the alpha value 5% or 0.05 (Kurniawan, 2019).

Autocorrelation is a condition where the correlation of residuals is arranged based on the time series of observations with one another. The regression model can be said to have a good predicate if there is no autocorrelation symptom. In this study using *the Run Test Test.*, that the significance value. from the residual value is 0.062 > 0.05 so it can be said that the data is free from autocorrelation symptoms

From the results of multiple linear regression as follows:

# $Y = 0.087 + 0.379X_{1} - 27.470X_{2} + 0.311X_{3} + 0.058X_{4} + e$

- 1. A constant of 0.087 means that if the independent variable is considered constant, then the stock price index is 0.087.
- 2. Regression coefficient X<sub>1</sub> of 0.379 (positive) means that every 1 unit increase in *working capital* will increase the stock price index by 0.511.

- 3. The regression coefficient X  $_2$  is 27.470 (negative) meaning that every 1 unit increase in the interest rate will decrease the stock price index by 27.470.
- 4. The X3 regression coefficient of 0.311 (positive) means that for every 1 unit increase in the inflation rate, the stock price index will increase by 0.311. The X4 regression coefficient is 0.058 (positive) that every 1 unit increase in the rupiah exchange rate will increase the stock price index by 0.058.

Based on the results of the t test, conclusions can be drawn by comparing the significance value and the calculated t value obtained with a significant level and the t table values used are 5% (0.05) and 1.98667 respectively, as seen from the t table with df = nk, df = 95-5 = 90.

1) Hypothesis Testing 1

 $Y = a + b_1 X_1 + e_1$ 

 $Y_1 = 0.087 + 0.379X_1 + e$ 

H<sub>0</sub>: b<sub>1</sub> = 0 means that *working capital* has no partial effect on the Property & *Real Estate JCI*.

H<sub>1</sub>: b<sub>1</sub> = 0.379 (positive value) means that *working capital* has a partial positive effect on the Property & *Real Estate* JCI of 0.379.

Then to see whether the level of influence is significant or not, it can be determined by comparing the significance value with the alpha value and the t-count value with the table. that the significance value *working capital* is 0.00 < 0.05 and the arithmetic value is 3.659 > 1.98667 (t table value) which means H<sub>1</sub> is accepted and H<sub>0</sub> is rejected. This shows that *working capital* has a significant effect on the Property and *Real Estate JCI*.

2) Hypothesis Testing 2

 $\mathbf{Y} = \mathbf{a} + \mathbf{b}_2 \mathbf{X}_2 + \mathbf{e}$ 

 $Y = 0.087 - 27.470 X_2 + e$ 

H<sub>0</sub>: b<sub>2</sub> = 0 means that the interest rate has no partial effect on the Property & *Real Estate JCI*.

H  $_2$ : b  $_2$  = -27,470 (negative value) interest rates have a partially negative effect on the Property & *Real Estate* JCI of -27,470. that the significance value of the interest rate is 0.00 < 0.05 and the t value is - 4.267 > -1.98667, which means H <sub>2 is</sub> accepted and H <sub>0 is</sub> rejected. This shows that interest rates have a significant effect on the Property and *Real Estate JCI*.

3) Hypothesis Testing 3

 $Y = a + b_{3} X_{3} + e_{3}$ 

 $Y = 0.087 + 0.311X_{3} + e$ 

H<sub>0</sub>: b<sub>3</sub> = 0 means that inflation has no partial effect on the Property & *Real JCI* estates.

H<sub>3</sub>: b<sub>3</sub>=0.311 (positive value) inflation has a partial positive effect on the Property & *Real Estate JCI* of 0.311. that the significance value. inflation is 0.048 < 0.05 and the t value is 2.004 >1.98667 (t table value) which means H<sub>3</sub> is accepted and H<sub>0 is</sub> rejected. This shows that inflation has a significant effect on the Property and *Real Estate JCI*.

4) Hypothesis Testing 4

 $Y = a + b_4 X_4 + e_1^2$ 

 $Y = 0.087 + 0.058X_4 + e$ 

H<sub>0</sub>: b<sub>4</sub>=0 the rupiah exchange rate has no partial effect on the Property & *Real Estate JCI*.

H  $_4$ : b  $_4 = 0,058$  (positive value) the rupiah exchange rate has a partial positive effect on the Property & *Real Estate JCI*.

that the significance value of inflation is 0.437 > 0.05 and the t value is 0.780 < 1.98667 (t table value) which means H<sub>0</sub> is accepted and H<sub>4 is</sub> rejected. This shows that the rupiah exchange rate has no significant effect on the Property and *Real Estate JCI* because the significance value is greater than 0.05 and the t value is smaller than the t table.

Based on Test F above can be concluded by comparing significance value and calculated F value obtained with a significance level of and the table F values used are 5% (0.05) and 2.47, respectively, as seen from the F table with df1= k-1=5-1=4 and df2=nk=95-5=90.

Based on the results of the F test in the table above, a significance level of 0.000 <0.05 is obtained and the calculated F value is 12.581> 2.47 (F table) which means H0 is rejected and Ha is accepted. This shows that working capital, interest rates, inflation, and the rupiah exchange rate together significant effect on the JCI Properti & *Real Estate*.

Based on the calculation results, it is found that hypothesis 1 is proven. This shows that *working capital* has a positive and significant effect on the Property and *Real Estate JCI* during the covid 19 pandemic, where it can be concluded that *working capital* is one of the determinants of the increase or decrease in the value of the Property & *Real Estate JCI*.

The results of this study are in accordance with research conducted by Shindy & Mulyo (2015) which results that working *capital* has a positive effect on stock prices. This shows that working capital is one of the indicators chosen by investors in making decisions to invest and investors will tend to consider risk when investing. With reference to working capital, if the working capital value is good, then the possible risk if the company fails or goes bankrupt can still be handled with the assets owned by the company. So that working capital can be used as an indicator of safe decision-making in investing activities, keeping in mind the unstable economic conditions due to the pandemic.

Based on the calculation results, it is found that hypothesis 2 is proven. This shows that the interest rate has a negative and significant effect on the Property and *Real Estate JCI* where it can be concluded that the interest rate is one of the determinants of the increase or decrease in the value of the Property & *Real Estate JCI*.

The results of this study are in accordance with research conducted by Nurin Widyastuti Sofyani & Sugeng

Wahyudi (2016) which results in that interest rates have a negative and significant effect on the JCI. Other studies that support this result are Ni Wayan Sri Asih & Masithah Akbar (2016), Saripudin & Lutfi (2017), and Anggraeni & Sulasmiyati (2019).

This shows that the interest rate becomes a proxy for investors in

determining the rate of return on an investment. Interest rates are quite dominant in investing activities because the

main purpose of investing is to get the maximum profit possible with minimal risk. If the interest rate is high, investors will divert their investment in the banking sector and vice versa, but investors will still consider the economy during the pandemic.

Based on the calculation results obtained that hypothesis 3 is not proven. This shows that inflation has no negative

(positive) and significant effect on the Property and *Real Estate JCI* where it can be concluded that if inflation increases, the stock price index will also increase and vice versa. This is because investors react more

quickly to changes in economic factors, especially inflation, plus uncertain economic conditions during the pandemic.

When this change occurs, investors will calculate the impact, both positive and negative, on the company's performance in the next few years. The increase in prices

due to inflation is a consideration for investors. With the increase in inflation, investors will have two options whether to buy or sell the shares of the company in question.

The results of this study are in accordance with research conducted by Sunardi & Ula (2017) and research conducted by Fatihudin and Firmansyah (2018) which results in that inflation has a positive and significant effect on the JCI.

Based on the calculation results obtained that hypothesis 4 is not proven. This shows that the exchange rate has no negative and insignificant effect on the Property and *Real Estate JCI* where it can be concluded that if the exchange rate increases, the stock price index will also increase and vice versa.

This occurs as a result of exchange rate fluctuations that affect the investment climate in the country, especially the capital market and is exacerbated by the covid 19 pandemic. For companies whose raw materials are mostly imported materials will be affected by the effects of these exchange rate fluctuations. If the exchange rate weakens, the company will incur more costs for its operational activities, so that it will reduce the profit that will be received by the company. As a result, the return distributed to investors is not optimal. This encourages investors to sell their shares, causing the stock price index to decline as well.

The results of this study are in accordance with research conducted by Sunardi & Ula (2017) and research conducted by Nurwani (2015) and Fatihudin and Firmansyah 56 (2018) which results in inflation having a positive effect on the JCI.

Based on the calculation results, it is found that hypothesis 5 is proven. This shows that *Working Capital*, Interest Rates, Inflation, and Rupiah Exchange Rates have a simultaneous effect on the Property and *Real Estate JCI*.

The results of this study are in accordance with research conducted by Pardede et al., (2016), Asih Akbar (2016), Fatihudin and Firmansyah (2018), and Harsono & Worokinasih (2018).

# CONCLUSION

- 1. That working *capital* is an indicator chosen by investors in making decisions to invest, and investors will tend to consider risk when investing, If the *working capital* value is good, then the possible risk if the company fails or goes bankrupt can still be overcome with the assets owned by the company. So that *working capital* can be used as an indicator of safe decision making in investing activities, especially during the pandemic.
- 2. That the interest rate can determine the rate of return on an investment because the main purpose of investing is to get the maximum profit with minimal risk. If the interest rate is high, investors will

divert their investment in the banking sector and vice versa.

- 3. That the price increase due to inflation is a consideration for investors. With the increase in inflation, investors will have two options whether to buy or sell the shares of the company in question.
- exchange rate fluctuations that affect 4. the investment climate in the country, especially the capital market and are exacerbated by the covid 19 pandemic. For companies whose raw materials are mostly imported materials will be affected by the effects of exchange rate fluctuations. If the exchange rate weakens, the company will incur more costs for its operational activities, so that it will reduce the profit that will be received by the company. As a result, the return distributed to investors is not optimal. This encourages investors to sell their shares, causing the stock price index to decline as well.
- 5. That Working *Capital*, Interest Rates, Inflation, and Rupiah Exchange Rates have a simultaneous or joint effect on the Property and *Real Estate* JCI.

# SUGGESTION

- 1. Efforts are made for the company's Workong Captal condition to be stable, especially during the pandemic period with the uncertain capital market situation
- 2. Every investment is to see and analyze market conditions (interest rates, inflation and rupiah exchange), so that they can make decisions.
- 3. To add independent variables

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