Is an Indonesia the right investment environment after Covid-19?

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Abstract. Covid-19 has influenced the investment environment throughout the world, including in Indonesia, by influencing the financial cycle (interest rates and exchange rates). This research aims to determine changes in the investment environment influenced by changes in interest rates and exchange rates in Indonesia. The novelty of this research is because there is relevance to economic conditions around the world, measurement techniques use several methods of measuring the financial waves to determine accurately changes in the investment environment, the measurement results are presented using a quantitative approach. The type of data used is secondary data obtained from the official website of Bank Indonesia and several related agencies such as interest rates, exchange rates and investments from 2019-2020Q2. This research uses multiple linear regression, using IBM SPSS 23, for significant results through variable relationships. The results of this research indicate that partially the interest rate and exchange rate has a positive and significant effect, while the interest rate and the exchange rate simultaneously have a significant effect on investment. The implications of this research show that Indonesia is a good investment environment, despite financial fluctuations due to the Covid-19 pandemic.

1. Introduction

Covid-19 has been established by the World Health Organization as a global pandemic, has affected nearly 159 countries, the migration of the Covid-19 virus occurs very quickly and significantly, and has an impact on economic changes in the United States and Europe, including economies in Asia such as in Indonesia. The slowing level of investment was directly affected by declining levels of construction activity, disruption of export production and state production activities, this was obtained through slowing investment indicators such as declining cement sales, sales of construction goods, and imports of capital goods which also declined [1]. Investment indicators show that the Covid-19 pressure gave an economic contraction, seen in late January 2020, and as a country that has trade correlations with developed countries (America, Europe and China), and its short-term effects on investment in Indonesia are very difficult due by the Covid-19 pandemic.

On the other hand, the development of the Indonesian economy through employment opportunities has decreased in 2020, employment opportunities in the investment sector experienced a contraction, such as the mining, agriculture, and manufacturing industries also declined, this condition is influenced by investment performance and exports experienced a contraction [2,3] including the Indonesian
currency, and also causes many investors to leave Indonesia to place their funds in other countries on the basis of safety in investing. Other influences from Covid-19, occur at the level of investment influenced by changes in interest rates [4], as an effort to maintain the level of economic liquidity, but these factors are a concern because the impact of this interest rate policy can impact on the health of banks in particular and economic growth in general. The interrelation between the two variables has an influence on the behavior of investment movements in Indonesia [5] so that the research will examine both aspects partially or simultaneously related to investment in Indonesia, to restore a good investment environment in the new normal period after the Indonesian Covid-19 pandemic.

2. Methodology
Measurement of interest rates and exchange rates on investments is done by analyzing changes occurring on each variable, starting at the time of the Covid-19 pandemic, but for data samples carried out since the financial crisis in 2009, this is important because by measuring variable activity in length period, the regression calculation results will be closer to perfection. This comprehensive depiction of data was obtained from 2009 to 2020 Q2 in time series that occurred in Indonesia, where the focus of the research was at the beginning of 2020, with different measurement units, units of measurement for interest rates are percentages, and units of measurement of exchange rates and investment using logarithmic results. Data collection is processed using secondary data, obtained on Bank Indonesia's website, and is supported by several other materials, which explain the condition of the global economy in dealing with the Covid-19 pandemic case. Furthermore, the three variables, both independent variables namely interest rates and exchange rates, and the dependent variable namely investment, will be analyzed by multiple linear regression, using the SPSS Version 23 program, then the potential trend for investment changes based on interest rates and exchange rates during the Covid-19 pandemic. Changes in investment levels are measured based on the activity of interest rates and exchange rates to determine the amount of pressure that has an impact on the value of investment in Indonesia during the Covid-19 pandemic. These variables are described statistically through the regression function as follows:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \mu \]  

(1)

Where, \( X_1 \) is the interest rate variable, while \( X_2 \) is the Exchange Rate variable and the \( Y \) variable is Investment, where the \( Y \) variable is the variable to be achieved, which is to see the potential change in investment value during the Covid-19 pandemic. The \( \alpha \) value is a constant value, while \( \beta \) is the measured variable parameter, and \( \mu \) is a random error.

3. Results and discussion
This research will describe investment in Indonesia, influenced by the Covid-19 pandemic by analyzing the movement of interest rate and exchange rate indicators. This research will answer about economic conditions through investment activities in Indonesia, because almost all countries in the world have experienced economic weakness since the Covid-19 pandemic that occurred in 159 countries in the world including Indonesia. Investment becomes important for measuring economic growth, because investment is the basis of the level of trust of foreign and domestic investors [6], the higher the trust the greater the level of investment for a country and the faster economic growth. The results of the measurement of independent variables namely investment and the dependent variable namely the interest rate and exchange rate show a significant relationship, as shown by the regression results in Table 1.
The regression results in Table 1 show that the influence of the variable interest rate and exchange rate on investment during the Covid-19 pandemic, shows fairly good test results, from the results of the t test (partial), there is a significant relationship, with a confidence level of 95%. t value <0.05, this indicates that the interest rate partially has a significant effect on the level of investment in Indonesia. A similar relationship between the exchange rate to investment partially shows a significant relationship with a confidence level of 95% by showing the results of t test <0.05, this shows that the exchange rate has a significant effect on investment levels in Indonesia. This condition shows that investment in Indonesia will experience changes depending on changes in interest rates and exchange rates, therefore to increase the level of investment handling the interest rate and exchange rate of the epidemic Covid-19 becomes important, and this handling must be permanent and sustainable. Overall, these conditions indicate that a 1% decrease in interest rates will result in investments experiencing a decrease of 0.002%. As for the exchange rate variable, it shows that if the rupiah depreciates by 1%, the investment level will decrease by 3.331% during the Covid-19 pandemic.

### Table 1. t test results.

| Model   | Unstandardized Coefficients | Std. Error | Beta | t    | Sig. |
|---------|-----------------------------|------------|------|------|------|
| (Constant) | 30,757                      | 6,188      |      | 4.971| .000 |
| 1 Interest Rate | 0.392                 | 0.129      | 0.519| 3.031| .004 |
| Exchange Rate | 3.331                 | 0.618      | 0.663| 5.392| .000 |

a. Dependent Variable: Investment

The F test results from Table 2, show that there is a good relationship, with a confidence level of 95% F value <0.05, this indicates that together of all the variables, both interest rates and exchange rates affect the level of investment in Indonesia, even though the R value is 0.63%, this condition can be interpreted that there is a significant relationship between the exchange rate and interest rates on investment. The results of this analysis explain that if there is pressure on interest rates and exchange rates it will affect investment. These results indicate that the impact of Covid-19 will affect the operation of macroeconomic policies in creating an investment environment. Therefore, this research shows that the prevention of the Covid-19 pandemic is important for sustained economic growth. The measurement results of this research indicate the existence of variable behavior through the relationship between exchange rates and interest rates on investment, characterized by a significant decrease in investment levels during the Covid-19 pandemic, this can be shown through Figure 1.

### Table 2. F test results.

| Model | Sum of Squares | df | Mean Square | F     | Sig. |
|-------|----------------|----|-------------|-------|------|
| 1 Regression | 43,756       | 2  | 21,878      | 15,272| .000 |
| Residual | 64,467       | 45 | 1,433       |       |      |
| Total  | 108,223       | 47 |             |       |      |

a. Dependent Variable: Investment  b. Predictors: (Constant), Exchange Rate, Interest Rate
The level of investment at the beginning of 2020, to be precise in February, the world was shocked by the Covid-19 virus, which was found in the city of Wuhan, which appeared to be a pandemic that damaged the financial activities of several countries, even some countries were indicated as symptoms of a new financial crisis. The results of measurements carried out show that the level of investment has decreased beyond the financial crisis conditions in 2009. Even has exceeded the critical point with pressure below the critical line (-0.02). This condition is still proceeding considering the difficulty of predicting the end of the Covid-19 pandemic. This condition occurred because the interbank money market interest rate decreased to 4.58%, this was to prevent a liquidity drought, the impact of this decline resulted in banking policies must follow changes in interest rates in force (Figure 2).

The impact of this policy was the lowering of deposit interest rates by 6.16% and lending rates by 10.07%. During the Covid-19 pandemic, through the policy of reducing interest rates, the bank's performance was disrupted, so this needs to be examined carefully, because when financial instability in the banking sector will cause a financial crisis as happened in 2009. Banking health is an important indicator to measure investment changes through financial activities [7], where banking health indicators such as the level of capital adequacy and the level of Non-Performing Loans need to be considered in maintaining financial stability during the Covid-19 pandemic. At the beginning of 2020, banks had a Capital Adequacy Ratio of 22.74% and Non-Performing Loans of 2.77% which were still considered low, credit conditions were not optimal due to caution to consumers and economic uncertainty. This is in line with the bank's prudent policy in providing credit during the pandemic, so that the Non-Performing Loan does not affect the condition of banking health. Other conditions, the ability of banks to collect savings has reached a maximum of 6.80% at the beginning of January 2020, this condition is not in line with the ability of banks to extend credit, because the business sector is experiencing a slowdown and entrepreneurs are limiting credit applications to banks. The impact of this pandemic affects the main tasks of the banking sector, as banks must raise funds to be distributed to the business sector, but these conditions have not been maximized. On the other hand, this condition occurs because the exchange rate fluctuations since the beginning of 2020 have depreciated and in February 2020 depreciation of 0.38% pressures occur because several countries in the world experience the same thing, so this condition is purely due to external global economic pressures (Figure 3).

This condition is due to financial uncertainty in the global market because it is difficult to control the movement of the Covid-19 pandemic that is spreading throughout the world, from data obtained by currency depreciation in the first quarter of 2020 continues to decline by 5.18%, due to anxiety of economic actors in the financial market increased, and the Covid-19 pandemic has increased significantly. The impact of the Covid-19 uncertainty caused a wave of investment to decline, causing investors to brick down their investments on the Financial Markets globally, this has a direct influence on investor behavior in Indonesia. Adjustment of global economic conditions to developing countries, including in Indonesia, results in investors investing in financial assets, can provide large profits and depress exchange rates. The pressures occur until the end of March 2020, because the Covid-19 issue puts pressure on the global financial market and impacts on the Indonesian economy.
Overall, investment behavior through an investment wave shows that there was a significant decline in early 2020, while the pandemic period has not yet been resolved, under conditions of uncertainty so that economic actors must monitor and guard in making decisions to invest in an uncertain period. This change in investment symptoms is consistent with the research of Haryanto [8] and Kandili [9] who found that changes in interest rates and exchange rates have a positive influence on investment and will broadly influence the economic growth of a country.

Prevention of the spread of covid-19 there are several stages, the first stage in early February 2020, in the financial sector, through the distribution of funds aimed at the social sector, state spending, and basic needs, this is to support the weakness of the financial sector, because the business sector and trade sector slowed due to the Covid-19 pandemic. The next stage is to maintain economic growth and investment to be maintained, through the ease of policies in important sectors, such as in the taxation sector [10] with the aim that the purchasing power and the process of creating trade transactions can be increased, and the non-fiscal [11] sector which aims to prevent congestion in activities trade, and the sector of basic needs which are the most important sectors in social activities in Indonesia. In creating a better investment during this era, the government made improvements related to Cipta Karja regulations, and for state revenue, the government improved the performance of the tax sector in order to improve the economy in Indonesia. Policies in the banking sector, related to interest rates, the government is trying to make banking credit growth to a maximum of around 9-11%, which had dropped 6-8% in the pandemic, but still maintaining the level of health so that stability and the economy increased, the concept other financial growth is measured through the ability of banks to collect deposits, this ability is expected to experience an increase in the Covid-19 period, because macro prudential policies from Bank Indonesia are seen as providing financial stimulus that strengthens relations with other financial institutions to have a positive impact in maintaining financial stability and functions finance in the banking sector.

Exchange rate policy objectives can maintain stable exchange rate movements and an appropriate balance between supply and demand [12], and the government provides domestic sector financial assistance and continues to monitor financial performance in the Financial Markets and Foreign Exchange Market during the Covid-19 pandemic. Preventive action taken in dealing with the economic changes due to the Covid-19 pandemic which resulted in changes in the investment environment in Indonesia, giving investors’ confidence through several things such as maintaining exchange rate activity on the financial market for the movement of the Rupiah exchange rate on the dollar is not too active, and provide certainty to investors, especially foreign investors who have placed their funds so that the investment value can continue to be protected [13]. Overall, based on the results of research and various policies carried out by the government regarding the level of interest rates and exchange rates shows that Indonesia is a country that can still provide a fairly good investment environment [14,15], a decline in the wave of investment into a critical path caused by global economic changes. However, the weakening is overcome by various policies that have been prepared by the Indonesian government through the financial sector and other agencies that are also directly related, for the next few years.
Indonesia will be able to increase its growth back to normal through better investment activities, supported by facilities and infrastructure and policies which supports.

4. Conclusion
At the beginning of February 2020 there was a significant decrease in investment in Indonesia during the Covid-19 period, although the Indonesian economy had been slowing down in the previous few months, but to mitigate the prevention of the Covid-19 outbreak in various sectors, such as the investment sector, the government reviewed the Cipta Karja Regulations to improve investment, and easing of taxes for the sustainability of economic activity. In the banking sector, the interest rate policy is doing by increasing bank credit, and promoting non-cash transactions, to maintain banking functions and financial stability in Indonesia. On the other hand, the government also maintains the exchange rate is not too active in the Financial Market and Foreign Exchange Market, to provide security certainty for foreign investors who invest in Indonesia, to create a safe investment environment and increase economic growth in Indonesia.

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