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The impact of inflation, interest rate and exchange value on banking companies' performances during the 2017 – 2020 period

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Abstract. This study is aimed at identifying the impact of banking companies' performances on inflation, interest rate, and exchange value during the 2017 until 2020. In 2020, also when the world was hit by the COVID-19 pandemic, the balance of payments in Indonesia were in surplus which was influenced by the decline of the proceeding trade deficit along with the capital and financial trade surplus. This research was designed to run a hypothesis testing through statistical measure, testing the impact of the variable X on the variable Y. Descriptive method would be used to explain the variables which were analyzed, which was the performance development of company, observed through stock price. Meanwhile, the verificative method determined a theory, if it was indisputable, through hypothesis examination. The data analysis used the data panel regression, a mixture of data cross and data time series, by which the unit cross section was measured in different times. The variable results of inflation and interest rate did not significantly influence the banking companies' performances, whilst the exchange values influenced the banking companies' performances.

Keywords. Inflation, Interest Rates, Exchange Value and Company Performance

1. Introduction

In line with the increase in the Covid-19 case, Indonesia's balance of payments in the second quarter of 2020 experienced a surplus driven by a decrease in the current account deficit and a surplus in the capital and financial account. Overall, Indonesia's balance of payments indicators still show good external sustainability. The economic growth of the majority of countries in the world is experiencing a deeper contraction. International commodity prices have generally fallen due to falling global demand. The Indonesian economy in the second quarter of 2020 contracted by 5.3 percent. Contraction occurs in all components, government spending which is expected to be an obstacle to contraction is actually a downward economic cycle in which lending must be low. Meanwhile, there are several sectors that are still growing positively, namely agriculture, information and communication, water supply, real estate, health services, education and financial services. During the second quarter of 2020, the monetary authority lowered the BI 7 Days Repo Rate to 4.25 percent in June. The rupiah exchange rate tended to strengthen throughout the quarter as panic eased on global financial markets.

Indonesian general banking indicates that the new credit quarterly growth in the second quarter of 2020 decreased from the previous period, as seen from the Weighted Net Balance

(WNB) new loan requests in the second quarter of 2020 of minus 33.9 percent, 23.7 percent lower in the previous quarter and 78, 3 percent in the second quarter of 2019. Based on the type of use, the decline in new credit growth occurred in all types of credit, with the largest decline being the type of investment credit. Since the last few years, the development of the bank's business has begun to fade. Growth of Third Party Funds (DPK) and lending began to slow down. However, this hope to boost the performance of banking institutions is still difficult to achieve. As of October 2019, credit growth of banking institutions only reached 6.43 percent, while growth in deposits only reached 6.29 percent. Banking institutions in almost all of their business bases, starting from the main business (distributing loans) to secondary businesses (providers of payment instruments), are facing increasing threats in line with slowing economic growth and potential sectors for banking institutions. The manufacturing sector for Indonesia's economic growth is already below 20 percent.

One of the factors causing the 'chaos' of Indonesia's economic growth so far is the inflation factor. In Indonesia, the problem of inflation is very complex, sometimes high and unstable. The following is a graph of inflation on the performance of companies in the banking sector from 2017 to August 2020

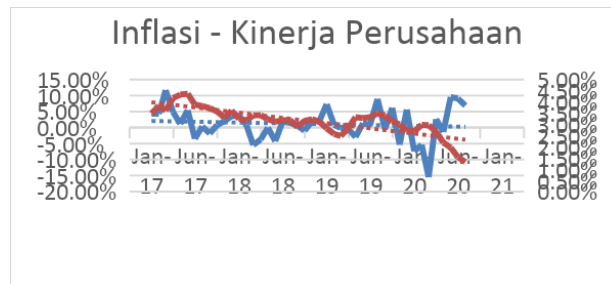


Figure 1. Graph of Inflation on Company Performance in the Banking Sector
Source: Processed data, 2020

With the discovery of short-term interest rate spreads that have a direct and significant movement compared to the long term so that they can used as a yardstick for inflation expectations. The following is a graph of interest rates on the performance of banking sector companies from 2017 to August 2020.

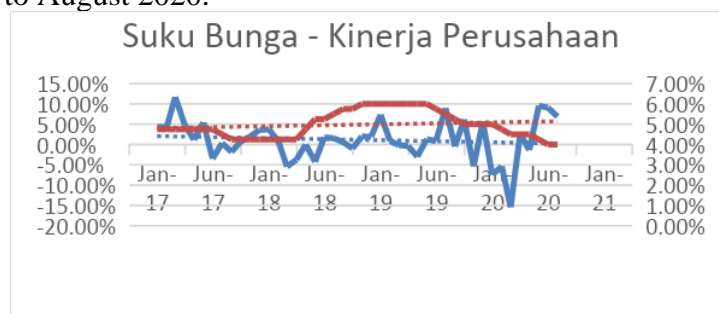


Figure 2. Graph of Interest Rates on Company Performance in the Banking Sector
Source: Data processed in 2020

Changes in one macroeconomic variable have a different impact on company performance. The exchange rate used in this study is the rupiah exchange rate against the United States dollar. The exchange rate of one currency affects the economy when the exchange rate

of that currency appreciates or depreciates. The following is a graph of the exchange rate on the performance of banking sector companies from 2017 to August 2020.

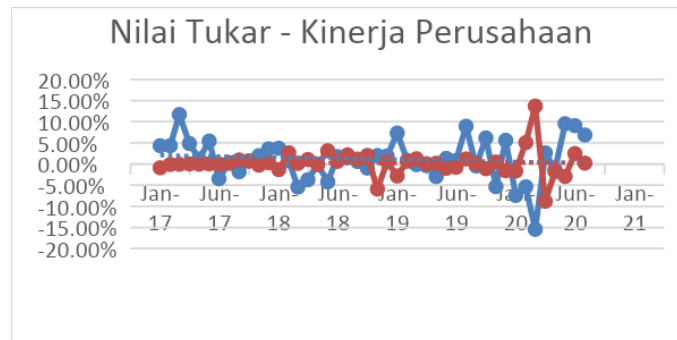


Figure 3. Graph of Exchange Rates on Company Performance in the Banking Sector

Source: Data processed, 2020

Based on the above introduction, the problems examined in this study are formulated as follows:

1. Does inflation affect on the performance of banking sector companies in Indonesia
2. Does Interest Rates affect the performance of banking sector companies in Indonesia
3. Does Exchange Rate affect the performance of banking sector companies in Indonesia

2. Theoretical framework

2.1 Inflation

Natsir (2014: 253) states that the definition of inflation is as follows "Inflation is the trend of increasing prices for goods and services in general and continuously". Inflation is a macroeconomic indicator that can be interpreted as a symptom of a general and continuous increase in the price of goods and services in society. In theory, inflation is basically related to the interaction phenomenon between supply and demand. But in reality, inflation is inseparable from other factors such as the trade system and the smooth flow of goods (distribution) and services as well as the role of government policies. Bank Indonesia defines inflation, namely the increase in prices in general and continuously. An increase in just one or two goods cannot be called inflation unless it extends (or results in an increase in price) to other goods. The opposite of inflation is called deflation. In general and simply, inflation can be caused by two things, namely inflation that arises because of excessive public demand and inflation that occurs due to an increase in production costs. That high inflation will drop stock prices in the market, while very low inflation will result in very slow economic growth, and in the end share prices will also move slowly. A difficult job is to create an inflation rate that can move the business world to life, economic growth will be able to cover unemployment, companies make adequate profits, and stock prices in the market move normally.

2.2 Interest rate

The interest rate is the price of the use of money expressed in percent for a certain period of time. Here are some definitions of the interest rate. According to Boediono (2014: 76) the interest rate is: "The price of the use of investment funds (loanable funds). The interest rate is an indicator in determining whether a person will invest or save". According to Natsir (2014: 104) states that the definition of the BI Rate is as follows: "The BI rate is a signal in the form of a number in the transmission of monetary policy that shows the current economic situation, including a description of the challenges in achieving the inflation target". Meanwhile, Bank

Indonesia defined the BI Rate as a policy interest rate that reflects the monetary policy stance or stance set by Bank Indonesia and announced to the public. The BI Rate is announced by the Board of Governors of Bank Indonesia at every monthly governor board meeting and implemented in the monetary operations conducted by Bank Indonesia through liquidity management in the money market to achieve the operational targets of monetary policy

2.3 Exchange rate

International trade will encourage the exchange of two or more different currencies . This transaction will result in a supply and demand for a particular currency, here are some definitions of exchange rates. According to Ekananda (2014: 168) exchange rates are: "Exchange rate is the price of a currency relative to the currencies of other countries. The exchange rate plays an important role in spending decisions, because it allows us to translate prices from various countries into the same language ". According to Pradesyah (2016) Economic relations between countries that cross the borders of a country require a currency that can be used as a general benchmark. This is often referred to as the exchange rate or exchange rate. Currency exchange rate is the value of a particular country's currency that is measured, compared, or expressed in the currency of another country. For example, the rupiah exchange rate against the US dollar shows how many rupiahs are needed to be exchanged for one US dollar. The exchange of the two currencies between these countries is also referred to as the Foreign exchange rate, is the exchange between two different currencies, which is a comparison of the value or price between the two currencies. In the currency exchange rate system, the foreign exchange rate concept is divided into two types, namely the concept of hard currencies (strong currencies) and soft currencies (weak currencies). The characteristics that are classified as hard currencies are that the currency is widely accepted throughout the world, the currency is free and active, and there are relatively few restrictions or obstacles. While the characteristics of soft currencies are that this currency is not widely accepted as the world's 17th currency, does not have a free and active foreign exchange market, it is not easy to obtain.

2.4 Company performance

The company's performance is a description of the financial condition in a certain period of both the collection and distribution of funds as measured by indicators of capital adequacy, profitability and liquidity. A complete display of the state of the company during a certain period of time is the result or achievement that is influenced by the company's operational activities in utilizing its resources. Performance is a general term used for part or all of the actions or activities of an organization in a period with reference to standard amounts such as past or projected costs, on the basis of efficiency, responsibility or management accountability and the like (Srimindarti, 2004). The measurement of banking performance is carried out by observing the results achieved by the bank with the standards set by Bank Indonesia, or the results of the average calculation.

3. Research method

This study is intended to test the hypothesis by using statistical calculations. This study was used to examine the effect of the variable X on Y under study. In the descriptive method will be used to explain the variables studied, the company's performance growth seen through the stock price. While the verification method means testing the theory by testing a hypothesis whether it is accepted or rejected.

This research was conducted to see the effect of the independent variable on the dependent variable. Multiple data regression analysis is used to see whether the hypothesis that

has been made will be accepted or rejected. Multiple data regression according to time series is used because the author uses the basis of calculating the month for each calculation where the research period is known from 2017 to August 2020, so that the resulting 44 months of the observation period are produced.

4. Discussion and discussion

After tabulating the data, the authors selected a model consisting of the Chow Test, Hausman Test, and Lagrange Multiplier, where the best model is the common effect model. After knowing the best model, the writer conducted a classical assumption test where the data obtained had passed the test, which means that the data tabulation was feasible to continue to answer the hypothesis.

Table 1
Common Effect Model

Dependent Variable: KINERJA_PERUSAHAAN
Method: Least Squares
Date: 11/24/20 Time: 19:20
Sample: 2017M01 2020M08
Included observations: 44

Variable	Coefficien t	Std. Error	t-Statistic	Prob.
	1.082714			-
INFLATION	-0.513689			0.55617
	0.6103			8
	1.024185			-
SUKU_BUNGA	-0.856019			0.87672
	0.3971			2
	0.224895			-
NILAI_TUKAR	-3.651437			0.82119
	0.0007			0
	6.103622			
C	1.258158			7.67932
	0.2156			2
R-squared	0.259363	dependent varMean		1.37954
Adjusted R-squared	0.203816	SD dependent var		5
SE of regression	4.437682	Akaike information criterion		4.97335
Sum squared resid	787.7208	Schwarz criterion		3
Log likelihood	-125.9023	Hannan-Quinn criter.		5.90464
F-statistic	4.669194	Durbin-Watson stat		9
Prob (F-statistic)	0.006872			6.06684
				8
				5.96480
				1
				1.67915
				9

Source: Data processing through Eviews

Based on the table above it can be seen that the best model has the following equation:

$$Y = 7,679 - 0.556_{\text{inflation}} - 0.877_{\text{interest}_{\text{rate}}} - 0.821_{\text{exchange rate}} + \varepsilon$$

Where that the equation is good, evidenced by the probability of F-statistic $<$ alpha value (0.007 $<$ 0.05), and the variable company performance can be explained by inflation, interest rates and exchange rates of 25.93% while the remaining 74.07% is not included in the variable researched. Furthermore, to answer the hypothesis put forward, it can be seen that the first hypothesis which states that inflation has an effect on company performance cannot be accepted by using the criteria sig (0.6103) $>$ Alpha (0.05). The second hypothesis which states that interest rates have an effect on company performance cannot be accepted by using the criteria sig (0.3971) $>$ Alpha (0.05). The third hypothesis which states that Exchange Rate affects company performance can be accepted by using the criteria sig (0.0007) $<$ Alpha (0.05)

5. Conclusion

Based on the discussion conducted by the authors of the three research variables it can be analyzed that only the Exchange Rate variable has an effect on Company performance, meanwhile the inflation and interest rate variables show the opposite. These results indicate that companies that are members of the banking sector have good resilience to macroeconomic variables except exchange rates, this shows that the majority of companies in the banking sector tend to use foreign currencies, namely USD or US Dollar in their transactions compared to Rupiah currency

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