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Journal of Global Economics, Management and Business Research

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ANALYSIS OF THE IMPACT OF OIL PRICES, MONEY SUPPLY, INFLATION, INTEREST RATES AND EXCHANGE RATE AGAINST STOCK TRADING VOLUME ON THE INDONESIA STOCK EXCHANGE

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AUTHORS' CONTRIBUTIONS
This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Received: 16th October 2017
Accepted: 12th November 2017
Published: 24th November 2017

Original Research Article

ABSTRACT

This research explanatory the Impact of Oil Price, Money Supply, Inflation, Interest Rate and Exchange Rate. Against Stock Trading Volume at Indonesia Stock Exchange. Population in this research all companies go public in BEI, monthly data taken by time series during period of July 2005 until December 2015. Analysis used to test the hypothesis in this research is Analysis Multiple correlations. The results prove that oil price and money supply, have a significant positive impact on changes in trading volume of shares Inflation did not have a significant negative impact on changes in trading volume of shares While interest rates and Exchange Rate have a significant negative impact on stock trading volumes on the Indonesia Stock Exchange.

Keywords: Oil price; money supply; inflation; interest rate; exchange rate; stock trading volume.

1. INTRODUCTION

Capital market is one indicator to assess the economy of a country running well or not. The development of capital markets can be reflected in the fluctuations in the volume of stock trading. Stock trading volume is the number of shares traded on the capital market. The high volume of trade indicates that the stock is in demand by many investors [1,2].

According to Samsul [3] there are seven factors which affect the volume of stock trading (1) Gross domestic product, (2) Inflation; (3)unemployment rate (4) interest rate, (5) exchange rate, (6) current account, (7) budget deficit but not all of these factors can be used as research variables:

Gross domestic product, unemployment rate, current account and budget deficit According to Ebert and Griffin [4] GDP is the value of all goods and services produced within a year by the economy of a nation using domestic factors and the current account is also ignored because it is included in the exchange rate as disclosed by Samuelson [5] that the movement of exchange rate will continue until the capital balance and the balance sheet runs again in equilibrium position while the use of budget deficit as research variable budget deficit occurs when government

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spending is greater than tax revenue. When the budget deficit is closed by way of issuing bonds on the capital market then automatically stock prices will be affected. However, the budget deficit occurring in Indonesia is covered with foreign debt so there is no direct impact on the volume of stock trading. Based on the above description, the factors that influence the change in trading volume of stock are (1) inflation; (2) interest rates; (3) exchange rate. Pramudaya [6] examines the effect of interest rate (SBI), US $ exchange rate and inflation on stock trading volume. The results showed that all three variables had an effect on stock trading volume. Widyastuti, Dewantoro and Panjaitan [7] examines the effect of interest rate (SBI), exchange rate and inflation on stock trading volume. The results of the study found only interest rates that affect the volume of stock trading.

Yuliana, Wijaya and Haryati [8] examines the effect of interest rates, inflation, exchange rate and money supply on stock trading volume. LQ45. The results of the study found that interest rates and inflation did not significantly affect the volume of stock trading LQ45. While the Exchange Rate and the Money Supply have a significant effect on LQ45 stock trading volume. Pradana [9] examines the effect of oil prices on trading volume, oil price research results do not affect the volume of stock trading.

Furthermore Pradana's [9] study on factors affecting Indonesia's economic growth, concluded that oil prices have a broad impact both in terms of economic growth and investment climate.

The results of Widyastuti, Dewantoro and Panjaitan [7] show that money supply, interest rate, exchange rate have a significant effect on stock price, while inflation has no effect.

1.1 Formulation of the Problem

Based on the facts above where still find difference of research result, then the problems in this research are:

Is the price of oil, money supply, inflation, interest rate and exchange rate affecting the change of trading volume of shares in Indonesia Stock Exchange?

1.2 Research Purposes

Based on the above problem formulation, the goals to be achieved are:

To analyze the impact of oil price, money supply, inflation, interest rate and exchange rate against changes in trading volume of shares in Indonesia Stock Exchange.

2. LITERATURE REVIEW

2.1 Oil Price

The ups and downs of world oil prices are affected by the ability of OPEC member countries to meet quotas [10] basically OPEC sets prices ahead of the coms and traders determine behind it [3]. World oil prices can affect stock prices as much as 60% of oil prices and currently is pure speculation, then stock prices will affect the volume of stock trading [3].

2.2 Currency Money

Broad money supply (M2) is the sum of M1 (currency plus deposits in the form of a current account or demand deposit) which incorporates time deposits and savings as well as domestic foreign currency accounts as part of the provision of money or quasi money (quasi money) measurements used are in units of trillions of rupiah. The formula for calculating the amount of money in circulation is as follows [11],

M2: (C+D) + TD

Remarks:

M2 : The amount of money in circulation is broad
C : Currency (Bank notes and coins)
D : Demand and checks
TD : Time deposit

2.3 Inflation

Inflation is defined as a phenomenon in which the general price level increases continuously [12]. Inflation shows a general rise in prices [5]. According to Agustina and Sumartio [13] Inflation can be interpreted as a long-term price increase. Inflation rate is the percentage of continuous increase in prices that prevail in an economy. According to Tandelilin [14] inflation increases the revenue and expenses of the company. If the increase in production costs is higher than the price increase that can be enjoyed by the company then the profitability of the company will go down which further affects the volume of trading shares. Indicator that is often used by the government to measure the level of Inflation in Indonesia is the Consumer Price Index (CPI). Changes in CPI from time to time indicate price movements of packages of goods and services consumed by the community.

2.4 Interest Rate

According to Reilly and Brown [15] states the interest rate is the price of borrowed funds. According to Tandelilin [14], increased interest rates will lead to an

increase in interest rates required on investment in a stock. Interest rate is income (for creditor) or expense (for debtor) received or paid by creditors or debtor [16]. In addition, an increasing interest rate causes investors to withdraw their investments in stocks and transfer them to investments in the form of savings or deposits.

2.5 Exchange Rate

According to Puspopranoto [1], Dombusch, Fischer and Starz [17], the exchange rate is the currency price of a country that is exchanged with other currencies. The exchange rate is the price of a country's money which is expressed in the currency of the other country [16]. According to Tandelilin [14] the strengthening of the rupiah against foreign currencies will lower the cost of imported materials for production and will reduce the interest rate applicable.

2.6 Volume Stock Trading

Stock trading volumes are used to measure whether individual investors know the information the company is issuing and use in the buying or selling of shares so that it will get a profit above normal. The shares in question are ordinary shares traded on the individual stock market Zulhawati [18], trading volume is an accepted part of technical analysis, trading activities in very high volumes, in a stock will be assessed as a sign of a better market (bullish). Increased trade volume offset by rising prices is an increasing strong symptom of a bullish condition [19].

2.7 Impact of Oil Price Variable on Change of Stock Trading Volume

The rise and fall of world oil prices is influenced by the ability of OPEC member countries to meet the quota [10] basically OPEC determines the price in front of the coms and the traders determine behind it. World oil prices can affect the stock price as much as 60% of the current oil price is purely speculation, then the stock price will affect the volume of stock trading [3].

H1: Oil prices have a significant positive impact on stock trading volumes on the Indonesia Stock Exchange.

2.8 Impact of Variable of Money Circulating to Change of Stock Trading Volume

Broad money circulating or Broad money (M2) is the sum of M1 (currency plus deposit in the form of a current account or demand deposit) which includes domestic time deposits and savings deposits and domestic private currency accounts as part of the provision of money or quasi money measurement that used is in units of trillions of rupiah [20].

H2: The money supply has a significant positive impact on changes in the trading volume of shares in the Indonesia Stock Exchange.

2.9 Impact of Inflation Variables on Change of Stock Trading Volume

Inflation is defined as a phenomenon in which the general price level increases continuously [12]. Inflation shows a general rise in prices [5].

According to Agustina and Sumartio [13] Inflation can be interpreted as a long-term price increase. Inflation rate is the percentage of continuous increase in prices that prevail in an economy. According to Tandelilin [14] Inflation increases the revenue and expenses of the company. If the increase in production costs is higher than the price increase that can be enjoyed by the company then the profitability of the company will decrease will further affect the stock trading volume.

H3: Inflation has a significant negative impact on stock trading volumes on the Indonesia Stock Exchange.

2.10 Impact of Interest Rate Variable on Change of Stock Trading Volume

Considering the advantages of investing in uncertain capital markets, which are heavily dependent on market mechanisms, investors prefer to invest in government secured funds when the SBI rate is very high. So the size of the SBI interest rate affects stock trading volume because high interest rates will influence investors to prefer investing in deposits rather than in stocks and vice versa. This is because investors prefer the maximum profit on the funds invested [21].

H4: Interest rates have a significant negative impact on changes in trading volume of shares in the Indonesia Stock Exchange.

2.11 Impact of Variable Rupiah Exchange Rate on Change of Stock Trading Volume

The exchange rate of US $ is one of the options of various options in investment, the ease offered to investors to the investor with the fulfillment of money

changer facility that allows investors to invest funds and withdraw funds [21]. Investing in US $ does not require an intermediary and is easily transferable. This case will affect investors to choose to invest in US $ instead of investing in stocks, especially when the exchange rate is high, but when the exchange rate is low US investors will prefer to invest in stocks, as investors prefer profits over funds. This will affect the volume of stock trading because if the exchange rate rises, many investors make the purchase of shares so vice versa.

H5: Exchange rate has a significant negative impact on changes in trading volume of shares in the Indonesia Stock Exchange

3. RESEARCH METHODS

3.1 The Scope of Research

The problem that will be the researcher's discussion is to analyze the impact of oil price, money supply, inflation, interest rate, exchange rate, to stock trading volume in Indonesia Stock Exchange.

3.2 Research Design

This research is an explanatory research that is research that explains the impact between several variables through hypothesis testing. In this study explains the impact of oil prices, money supply, inflation, interest rates, exchange rates, on trading volume of shares on the Indonesia Stock Exchange.

3.3 Population and Samples

The population in this research is all data of crude oil price, money supply, inflation, SBI rate, Rupiah/US $ and stock trading volume, monthly data from July 2005 to December 2015. Monthly data selection is to avoid the bias that occurs due to market panic in response to an information, so with the use of monthly data is expected to obtain more accurate results. Because the data is taken secondary data and allows to obtain all the data then the sampling technique is called saturated samples.

3.4 Research Variable

The variables used in this research: dependent variable is variable that influenced or which become result because of independent variable, independent variable is variable that influence or that cause change or incidence of dependent variable. The dependent variable used in this research is stock trading volume, the free variable is oil price, money supply, inflation, interest rate and rupiah exchange rate.

3.5 Operational Definition of Variables

This study uses one dependent variable, three independent variables and one moderating variable.

3.6 Operational Definition of Each Variable in This Study as Follows

3.6.1Stock tradingvolume

Stock trading volumes are the number of shares traded at a particular time. Stock trading volumes is an instrument that can be used to see the reaction of the capital market to information through the movement of stock trading volume activity.

3.6.2Oilprices

The rise and fall of world oil prices is influenced by the ability of OPEC member countries to meet the quota [10] basically OPEC determines the price in front of the coma and the traders determine behind it. World oil prices can affect stock prices as much as60% of the current oil price is pure speculation [3]. According to Reilly and Brown [15] oil prices can be put into portfolio risk. According to Boedie, Kane and Alan [22] the Merton model will imply that any expected returns with beta from a single factor CAPM will be generalized to form a two-factor relationship:

$$E(\ ) = \quad + \quad [E(\ _{j}) - \ ] + \quad [E(\ ) - \ ]$$

Where:

beta securities i against the market portfolio

beta risk of oil price

E( )- risk premiums associated with exposure to oil price uncertainty

The best portfolio yield as a hedge of oil price uncertainty is. Thus this equation is a two factor CAPM.

3.6.3Money supply

Broad Money Broad Money (M2) is the sum of M1 (currency plus deposits in the form of a current account or demand deposit) which includes domestic time deposits and savings deposits and domestic private currency accounts as part of the provision of money or quasi money measurement that used is in units of trillions of rupiah.

3.6.4Gross domestic product

Gross Domestic Product (GDP) is defined as the market value of all finished goods and

services produced in a country for a certain period of time [10].

3.6.5 Inflation is the general level of price increases in goods that occur continuously

The inflation rate used is the inflation rate obtained from the Price Index Consumer (CPI) monthly. The measurements used are in percent units.

3.6.6 Interest rate of Certificate of Bank Indonesia (SBI)

Interest rate of Bank Indonesia Certificate (SBI) is the interest rate determined by Bank Indonesia for the issuance of Bank Indonesia Certificates (SBI). The interest of Bank Indonesia Certificate (SBI) used is Certificate interest rate Bank Indonesia (SBI) 1 month. The measurement used is the percent unit.

3.6.7 Exchange rates

Exchange rate is the price of a country's currency against the currency of another country. The exchange rate used is the US dollar exchange rate against the rupiah which is calculated based on the exchange rate middle rate calculated based on selling rate and buying rate regulated by Bank Indonesia. Measurements used in Rp/$ USD.

3.7 Types and Data Sources

The data in this study were obtained from the publication of Bank Indonesia in the form of annual report of Bank Indonesia, in the form of gross domestic product, inflation, interest rate of Bank Indonesia Certificate (SBI), US dollar exchange rate against rupiah (US $/Rp). Data derived from the Indonesian Economic and Financial Statistics (SEKI) in the form of data on the price of oil and money circulating. While the data derived from the Indonesia Stock Exchange is the stock trading volume.

3.8 Method of Collecting Data

In this research the method used in data collection is the method of documentation, that is by record and copy the written data related to the research problem either from the source document or books, the internet and others on the Volume of Stock Trading, Oil Price, Money Supply, Gross Domestic Product, Inflation, Interest Rate, Exchange Rate and in the form of monthly data from July 2005 to December 2015.

3.9 Data Analysis Technique

3.9.1 Descriptive statistics

The measurement by calculating the minimum value, maximum value, mean and standard deviation.

3.9.2 Inferential statistics

Inferential statistical analysis is used to perform testing of research models and hypothesis testing.

3.10 Research Model

The research model is used to look at the independent variables that affect the dependent variable.

The impact of oil prices, the amount of money in circulation, gross domestic product, inflation, interest rates, exchange rates, on stock trading volume.

$$VP = \beta 1\ HM + \beta 2\ UB + \beta 3\ IF + \beta 4\ SB + \beta 5\ NT + \varepsilon$$

Remarks:

β1-β5	: Regression Coefficient
HM	: Oil Price
UB	: Total Money Supply
IF	: Inflation
SB	: Interest Rate
NT	: Rupiah Exchange Rate

3.11 Model Feasibility Test (Goodness of Fit)

To assess the accuracy of the sample regression function in estimating the actual value can be measured from the Goodness of Fit [23]. Statistically the Goodness of Fit can be measured from the coefficient of determination and F statistic value.

3.11.1 Coefficient of determination ( )

The coefficient of determination basically to measure how far the ability of the model in explaining the dependent variable. The coefficient value of determination between zero to one. The small value of means that the ability of independent variables to explain the dependent variable is very limited. A value close to one means the independent variables provide almost all the information needed to predict the variation of the dependent variable [23]. The best regression model, the researchers recommend to use the adjusted value of since the adjusted value of can rise or fall if one independent variable is added to the model.

3.11.2 Partial test (t test)

The statistical test t basically shows the effect of one independent variable individually in explaining the variation of the dependent variable [23]. In accepting or rejecting the proposed hypothesis by looking at SPSS output results, we can only see the value of the

significant t test of each variable. If the value is significant 0.05 then we can conclude that the hypothesis is accepted [23].

4. RESEARCH RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Descriptive statistics provide an overview of the object of the study being sampled. Explanation of data through descriptive statistics is expected to provide a preliminary over view of the problem under study. Descriptive statistics focus on the maximum, minimum, mean and standard deviation. Based on sampling during July 2005 to December 2015 obtained126 observations, descriptive statistical test results appear in Table 1.

From the above descriptive statistical calculation can be concluded as follows:

a. Oil Price: The mean price of oil in Indonesia July 2005 to December 2015 amounted to 83.5703 and the standard deviation of 25.26726 where the standard deviation is less than the mean. This indicates small oil fluctuations or inferred good spread, with a minimum value of 36.38 and a maximum value of 134.96.

b. Money Supply: The mean money supply in Indonesia July 2005 to December 2015 is 1.9852E + 06 and the standard deviation of 1.0443E + 06 where standard deviation is less than the mean. This indicates small or exclusive fluctuations in money supply with a minimum value of 200,648and a maximum value of 4.55E + 06.

c. Inflation: Mean Inflation in Indonesia July 2005 to December 2015 of 7.2971 and deviation standard of 3.60675 where standard deviation is less than the mean. This indicates small inflation fluctuations or can be summed up well, with a minimum value of 2.41 and a maximum value of 18.38.

d. Interest rate: The interest rate in Indonesia in July 2005 to December 2015 was 7.7976 and the standard deviation of 1.83894 where the standard deviation is less than the mean. This indicates small fluctuations in interest rates or can be inferred good spread, with a minimum value of 5.75and a maximum value of 12.75.

e. Rupiah exchange rate against US $: The mean value of the rupiah against US $ in Indonesia from July 2005 to December 2015was 10,177.4415 and the standard deviation of 1,488.27949 where the standard deviation is less than the mean. This shows the fluctuations of the rupiah exchange rate against US $which is small or can be summed up well, with a minimum value of 8,515.581 and a maximum value of 14,396.10

f. Stock Trading Volume: The mean volume of stock trading in Indonesia Stock Exchange in 2005-2015 amounted to4.4931E + 12 and the standard deviation of 1.74889E + 12 where the standard deviation is greater than the mean. This indicates large fluctuations in stock trading volume or can be inferred unfavorable distribution, with a minimum value of 9.44E + 11 and a maximum value of 8.54E + 12.

4.2 Inferential Statistics

Inferential statistical analysis is used to perform testing of research models, and hypothesis testing.

4.2.1Model Feasibility test

4.2.1.1 Coefficient of determination (R^2)

The test results in Table 2, R of 0.815 (81.5%), the results indicate a strong influence between Stock Trading Volume (VP) with independent variables because above 50%. While the value of Adjusted R Square (R2) shows 0.687 (68.7%), it means 68.7% VP can be explained by variations of oil price, money supply, inflation, interest rate, and exchange rate while the rest of 31.3% is explained by other variables not included in the model.

4.2.1.2 Test F

From the results of F test in Table 3 ANOVA, obtained is 25.081 with a significance level of 0.000 0.05 then the regression model can be used to predict the Volume of Stock Exchange (VP).

4.2.1.3 T Test

From the result of t test in Table 4 shows the impact of each independent variable on the dependent variable. The result of t test interpretation as follows:

- Oil Price Variable has t value equal to 2,905 with value of sig 0.004 from = 5% meaning that oil prices have a significant impact on VP changes.
- Variable of Money in circulation has t value equal to 0,724 with value of sig 0.041 from =5% meaning that money supply has a significant impact on VP changes

- Inflation variable has t value equal to -0.760 with value of sig 0.049 from = 5% meaning inflation has a significant impact on VP changes.
- Interest rate variable has t value equal to -2,287 with value sig 0.024 from =5% meaning that interest rates has a significant impact on VP changes.
- The exchange rate variable has a t value of -2.261 with a sig value of 0.026 of = 5% meaning that the exchange rate has significant impact on VP changes.

4.3 Hypothesis Testing

To test the hypothesis of multiple regression analysis to determine whether there is an impact of independent variables on the dependent variable. Regression results are shown in Table 5.

Based on Table 5, the regression model is formulated and analyzed as follows:

VP = 0,298 HM + 0,080 UB – 1,107 IF – 0.373 SB – 0,275 NT

4.4 Analysis of Oil Price Impacts on VP Changes

Value of regression coefficient of Oil Price (HM) positive 0,298 with significant 0,004 0. 05, statistically regression coefficient of HM positive value mean bigger HM higher VP.

While the value of sig 0.004 0.050, meaning HM impact on VP changes. This explains that an increase in oil prices will have an impact on the rise of VP. Thus the hypothesis stating that oil prices have a significant positive impact on changes in Stock Trading Volume (VP) is proven.

4.5 Analysis of the Impact of Money Supplied on VP Changes

The value of monetary regression coefficient (UB) positive 0.080 with significant 0.041 0.05, statistically UB regression coefficient positive value means the greater the higher the UBVP. While the value of sig 0.041 0.050, it means UB impact on VP changes. This explains that the increase in the money supply has an significant positive effect on the rise of VP. Thus the hypothesis stating that the money supply has a significant positive impact on changes in volume of stock trading (VP) is proven.

4.6 Inflation Impact Analysis of VP Change

The value of regression coefficient Inflation (IF) negative 0.107 with significant 0.449 0.05, statistically regression coefficient IF negative value means the greater the lower

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
HM	126	35.38	134.96	83.3703	25.26726
UB	126	206648.00	4.55E+06	1.6852E+06	1.64436E+06
IF	126	2.41	18.38	7.2971	3.60675
SB	126	5.75	12.75	7.7976	1.83894
NT	126	8532.00	14396.10	10177.4415	1488.27949
VP	126	9.44E+11	8.54E+12	4.4931E+12	1.74889E+12
Valid N (list wise)	126				

Table 2. Model Summary[b]

Model	R	R Square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	.815[a]	.711	.687	1.25318E+12	.822

Table 3. ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.954E+26	5	3.917E+25	25.081	.000[a]
	Residual	1.869E+26	120	1.56 E+24		
	Total	3.823E+26	125			

Table 4. Coefficients[a]

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	2.488E+12	2.149E+12		1.158	.249		
HM	2.063E+10	7.103E+09	.298	2.905	.004	.387	2.584
UB	8.523E+04	1.178E+05	.080	.724	.041	.332	3.008
IF	-5.167E+10	6.830E+10	-.107	-.760	.449	.207	4.830
SB	-3.550E+11	1.552E+11	-3.73	-2.287	.024	.153	6.538
NT	-3.230E+09	1.429E+08	-.225	-2.261	.026	.276	3.623

Table 5. Hypothesis testing H1-H5

No	Model	Hypothesis Results	Testing	Regression coefficient (β) & sig.value
1	HMVP	H1: Oil prices have a significant positive impact on VP changes	Oil prices have a significant positive impact on VP changes	B = 0.298 Sig = 0.004
2	UB VP	H2: Money supply has a significant positive impact on VP changes	Money supply has a significant positive impact on VP changes	B = 0.080 Sig = 0.041
3	IF VP	H4: Inflation has a significant negative impact on VP changes	Inflation has not negatively significant impact on VP changes	B = -0,107 Sig = 0.449
4	SB VP	H5: Interest rates have a significant negative impact on VP changes	Interest rates have a significant negative impact on VP changes	B = -0.373 Sig = 0.024
5	NT VP	H6: Exchange rates have a significant negative impact on VP changes	The exchange rate has had no significant positive impact on VP changes	B = -0,275 Sig = 0.026

IFVP. While the value of sig 0.449 0.050, it means that IF no impact on VP changes. This explains that an increase in inflation will have not impact VP changes. Thus the hypothesis that inflation has a significant negative impact on changes in the volume of stock trading (VP) is not proven. This is because the prevailing inflation mean of 7.242% is still less than 10%, according to Samuelson and Nordhaus [5] is still relatively low inflation, so that inflation changes have no impact on VP changes.

4.7 Analysis of the Impact of Interest Rate on VP Changes

The value of negative interest rate regression coefficient (SB) negative 0.373 with significant 0.024 0.05, statistically coefficient of regression SB negative value meaning bigger SB lower VP. While the value of sig 0.024 0.050, meaning SB impact on VPS change. This explains that an increase in interest rates will have an impact on VPS declines. Thus the hypothesis that the interest rate had a significant negative impact on changes in the volume of stock trading (VP) is proven.

4.8 Exchange Rate Impact Analysis of VP Changes

The value of positive exchange rate regression coefficient (NT) negative 0.275 with significant 0.026 0.05, statistically NT negative regression coefficient means the greater NT the higher VP. While the value of sig 0.026 0.050, meaning NT have affect the VP changes. This explains that the increase in the exchange rate has impact on the increase of VP. Thus the hypothesis that exchange rate has a significant negative effect on stock trading volume changes (VP) is proven.

5. CONCLUSION

Based on Multiple Linear Regression Analysis Result and t test result above can be concluded as follows:

1. Oil Price have a significant positive impact on changes in trading volume of shares in the Indonesia Stock Exchange.
2. Money supply have significant positive impact on changes in trading volume of shares in Indonesia Stock Exchange.
3. Inflation does not have a significant negative impact on the changes of stock trading volume on the Indonesia Stock Exchange.
4. Interest Rate have a significant positive impact on changes in trading volume of shares in the Indonesia Stock Exchange.
5. Exchange Rate have a significant positive impact on changes in trading volume of shares in the Indonesia Stock Exchange.

6. RECOMMENDATION

1. The need for comprehensive information for investors or the broad society about the phenomenon of influence between independent variables (oil price, money supply, inflation, SBI rate, Rupiah/US $) to the dependent variable (stock trading volume) Indonesia stock exchange.
2. There is a need for maximum role from the government, Bank Indonesia as the holder of monetary authority and Securities Managing Board, Brokers and Issuers (business actors) and investors to keep the performance of the Indonesia Stock Exchange achieve satisfactory results for all parties.
3. For future researchers should be more perfect again by adding other factors that may affect the volume of stock trading.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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