Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-050

Volume 07 Issue 05 May 2024

Article DOI: 10.47191/jefms/v7-i5-69, Impact Factor: 8.044

Page No: 2964-2972

The Influence of the Exchange Rate, Money Supply,Exports, Bank Indonesia's Reference Interest Ratesand the Price of Gold on Inflation in Indonesia

Silvia Puspita Sari[1], Meiran Panggabean[2]

[1,2] Tanjungpura University, Indonesia

ABSTRACT: This research aims to examine and analyze the influence of the exchange rate, money supply, exports, Bank Indonesia reference interest rates, and gold prices on inflation in Indonesia. The data is secondary *time series data* from 2000Q1 to 2023Q3 obtained from Bank Indonesia, the Central Statistics Agency, and *the London Bullion Market Association* (LBMA). This research uses a quantitative approach with the *Error Correction Model* (ECM) research method to determine the long-term and short-term effects between variables. The data processing tool uses the statistical application *E Views*- 10. The results of data analysis show that in the long term the money supply, exports and the BI reference interest rate have an effect on inflation in Indonesia, while the Rp/USD exchange rate and the price of gold have no effect on inflation in Indonesia. Indonesia in the long term. Then, in the short term, only the money supply and Bank Indonesia's benchmark interest rate have an effect on inflation in Indonesia, while the Rp/USD exchange rate, exports and gold prices have no effect on inflation in Indonesia in the short term.

KEYWORDS: Inflation, Exchange Rate, Money Supply, Exports, BI Reference Interest Rate, Gold Price.

1. INTRODUCTION

Inflation is one of the most familiar words in economics. Inflation itself has plunged many countries into long periods of instability. Inflation is usually defined as a comprehensive measure that includes general price increases or increases in the cost of living in a country. When shocks occur, both local and global, inflation can reduce economic growth.

Consensus regarding what variables influence inflation has not yet reached a good agreement. Inflation in Indonesia tends to experience changes with a low trend despite increases in the exchange rate, money supply,exports, BI benchmark interest rates and gold prices. This condition shows that there is a gap between these indicators and inflation. A depreciating exchange rate should increase inflation. Likewise, if the money supplycontinues to increase, it should also cause an increase in the price level. Furthermore, increasing exports will also put pressure on risinginflation. Likewise, BI's benchmark interest rate should be a variable that can control inflation. Then the price of gold can act as a barrier to inflation, but in several years this has not happened.

The exchange rate has a positive influence both in the short term and in the long term (Nasution *et al* ., 2023) . Other research alsostates that the exchange rate has a negative influence in the short and long term (Agustin & Anis, 2021). However, it is different from Mahendra (2016) which shows the exchange rate has no influence on inflation. Amanda (2022) said that the money supply had no influence on changes in inflation in Indonesia, either in the short term or in the long term. But Son (2022) shows that there is a positive influence of the money supply on inflation. A separate analysis has shown that the money supply has a negative influence on inflation in the instance of Indonesia. However, the results of other studies show that the money supply has a negative influence on inflation in Indonesia (Putri, Rahmita, & Rosyetti 2017). Likewise with Agustin & Anis (2021). said that the moneysupply had a negative influence on inflation in the short term and had no influence in the long term .

Jumhur *et al* ., (2018) said that exports have a positive influence on inflation in Indonesia. Research on exports on inflation was also conducted in Kenya and identified the results that exports had a positive influence on inflation in the short and long term (Kiganda,Obange & Adhiambo, 2017). Albab and Nugraha (2022) show that oil and gas exports have an influence on inflation, but non-oil and gas exports have no influence on inflation. Research conducted in Pakistan states that exports have a positive influence on inflation in the short and long term (Ahmed *et al* ., 2020) . However, Sodiqin (2015) said that exports had no influence on inflation. Putri *et al* ., (2017) said that the BI *Rate* had a positive influence on inflation in Indonesia . Research was also carried out in Ghana and showed the results that the Ghanaian central bank's benchmark interest rate had a positive influence on inflation in the short and long term. (Yeboah, 2020) . Meanwhile, Fauziyah & Cahyono (2014) found that the BI *Rate* had no influence on changes in inflation in Indonesia. Amanda (2022) also conducted research that the BI reference interest rate had no influence on inflation in Indonesia in the short or long term. On the other hand Ichwani, Kaniati & Husna (2018) found that the BI *Rate* had a negative influence on inflation in Indonesia. Agustin & Anis (2021) say that BI's benchmark interest rate has a negative influence on inflation in the long term.

Aleemi, Tariq & Ahmed (2016) said that the price of gold has a positive effect on inflation. About this too It was stated by other research that the price of gold had a positive influence on inflation in Indonesia (Purwanti, 2022) .However, other research results found that the price of gold actually had a negative influence oninflation in Indonesia (Hena & Silalahi, 2022). Based on what has been mentioned, there areinconsistencies in each research result and this is an urgency for researchers to conduct research regarding the influence of the exchange rate, money supply, exports, Bi reference interest rates, and gold prices on inflation in Indonesia.

2. LITERATURE REVIEW

Monetarist Theory

Monetarists who adhere to classical theory believe that the amount of money in circulation has a direct impact on changes in price levels in the economy. An increase in the money supply will stimulate price increases, while a contraction in the money supply will have the opposite effect. This classical theory is usually called the Quantity Theory of Money (Mankiw in Utari *et al* ., 2015)

Non-Monetarist Theory

This theory can be divided into two, namely structural theory and Keynessian theory. Structural theory takes a different approach to theconcept of inflation than classical theory. According to structural theory, inflation is causedby an imbalance in the economy. Developing countries have shown significant support for this hypothesis, which explains that inflation is not only a problem of the economy's monetary system, but is also a structural phenomenon. Thisis because the economies of developing countriesare still vulnerable to the impact of internal and external turmoil, both of which have the potentialto cause price fluctuations in the domesticmarket.

Furthermore, according to Keynes' theory, the quantity of money is not the only element thatdetermines the price level. This is due to the fact that inflation can occur in an economy even though the amount of money remains the same. Inflation movements tend to increase in the short term because changes *in output* are relatively constant in the short term. In the short term, the price level is influenced by the amount of money households spend on consumption and investment costs.

According to Keynes' theory, an increase in the price level will occur in the short term when there is demand that is greater than production capacity. On the other hand, as time goes by, production capacity will adjust the total amount of aggregate demand in such a way that iteventually reaches a state of equilibrium at the new price level. When consumers can no longer afford goods at current price levels, the rate of inflation will end. This is done to ensure that the effective demand of society as a whole does not exceed the currently available supply of commodities (Christianingrum & Syafri, 2019).

3. HYPOTHESIS (H)

A weakening of a country's currencyexchange rate will result in an increase in the price of imported goods. This can happen when acountry's currency depreciates or when the nominal exchange rate of that currency increases when compared with another country's currency. If the contribution of imports plays a very large role in the economy, especially in the manufacturing process, depreciation of the currency exchange rate can cause production costs to rise which ultimately results in an increase in domestic price levels (Fajarwati &Setiawina, 2018) .

H1: The Rp/USD exchange rate has a significant effect on inflation

There is a positive relationship between the money supply and inflation, which is consistent with the quantity theory of money in monetary policy. Therefore, this shows that whenthe money supply increases, individuals will havea tendency to increase society's desire to increase the amount of money spent in consumption, which will ultimately lead to an increase in the overall price level.

H2: The money supply has a significant effect on inflation

Keynesian theory explains that inflation is caused by excessive demand which cannot bemet by the currently available production capacity. The demand-pull theory states that exports are one of the main determining factorsof inflation. The influence of exports on inflation is reflected in the supply of products available to domestic consumers

H3: Exports have a significant effect on inflation

As a reference interest rate, BI7DRR plays a role as the main indicator of interest rate movements. It is hoped that changes to BI7DRR will stabilize the movement of money circulating in society. When BI sets a loose monetary policy,there will be a lot of money in circulation. This type of policy is usually to overcome excessive deflation which results in sluggish economic growth. However, when there is a lot of money incirculation, BI will raise interest rates, usually this policy is called tight monetary policy. This policy is set so that inflation does not exceed predetermined expectations. As a result of theincrease in BI7DRR will increase banking interest rates so that incentives or rates of return on money will be higher in society. Then people will save and reduce credit so that money circulation is reduced and inflation can becontained.

H4: Bank Indonesia Reference Interest Rates influence inflation

In theory, when inflation increases, it will decrease. As a result, individuals or society will prefer to increase their ownership of gold while reducing their ownership of money (Khair- Afham, Law & Azman-Saini, 2017). The amount of money will decrease and ultimately the inflation rate will decrease.

H5: Gold prices have a significant effect on inflation

4. RESEARCH METHODS

This research is research with a quantitative approach that took place in Indonesiaover a 23 year period from the first quarter of 2000 to the third quarter of 2023. The data usedis time series secondary data obtained from the Central Statistics Agency (BPS), Bank Indonesia (BI), and *London Bullion Market Association* (LBMA). This research uses the *error* correction model (ECM) regression analysis method which can estimate short-term and long-term relationships between independent variables and dependent variables and uses analysis tools in theform of E- *Views 10 software* . The analysis stages start from the unit root test, degree of integration test, cointegration test, long-term test, ECM estimation test and classical assumption test consisting of normality test,heteroscedasticity test, linearity test,multicollinearity test and autocorrelation test.

The following is the ECM regression model applied.

1. Long run equation

$Inf_t = \alpha_0 + \alpha_1 NT_t + \alpha_2 JUB_t + \alpha_3 NEX_t + \alpha_4 IR_t + \alpha_5 HE_t + \mu_t$

Information:

Inf_t = Inflation

$\alpha 0$ =Constant

$\alpha 1$, .., $\alpha 5$ = Long-term coefficient

NT_t = Exchange Rate

JUB_t = Money Supply

NEX_t = Export

IR_t = BI reference interest rate

HE_t = Gold price

μ_t = Residual Value

2. Short term equation

$$\Delta \quad Inf_t = \beta_0 + \beta_1 \Delta NT_t + \beta_2 \Delta JUB_t + \beta_3 \Delta NEX_t + \beta_4 \Delta IR_t + \beta_5 \Delta HE_t + ECT + \mu_t$$

Description:

Δ Inf_t = Inflation cause the purchasing power of money to

0=Constant

β_1, .., β_5 =Short-term coefficients

$\beta_1 \Delta NT_t$ = Exchange Rate for period t

$\beta_2 \Delta JUB_t$= Money Supply in period t

$\beta_3 \Delta NEX_t$= Exports in period t

$\beta_4 \Delta IR_t$ = BI Reference Interest Rate for period t

$\beta_5 \Delta HE_t$= Gold Price period t

μ_t = Residual Value

Δ = Change

ECT = *Error Correction Term*

5. RESULTS

Table 1 . Estimated Results

Variable	Coefficient		t Static		t Table		Information	
	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term
NT	1.3813	5,2031	0.4525	1.4241	1,987	1,987	Not significant	Not significant
JUB	- 6.2460	- 12.8891	-2.5690	- 2.6013	1,987	1,987	Significant	Significant
N.E	3.9889	1.3608	2.4501	1.0768	1,987	1,987	Significant	Not significant
IR	0.9652	1.3216	7.3800	4.1066	1,987	1,987	Significant	Significant
HE	3.5780	1.6631	1.7808	0.7472	1,987	1,987	Not significant	Not significant
Prob ECT (-1)				-0.5634				

Hypothesis Results

Hypothesis H1 is that there is asignificant influence of the Rp/USD exchange rate on inflation. The results of hypothesis testing state that the t statistic < t table so that there is no significant influenceof the Rp/USD exchange rate on inflation. **Hypothesis H1 is rejected.** Hypothesis H2 is that there is a significant influence of the money supply on inflation. The results of hypothesis testing state that t statistics > t table so that the money supply has a significant effect on inflation. **Hypothesis H2 is accepted.** Hypothesis H 3 is that there is a significant influence of exports on inflation. The test estimation results statethat t statistics > t table, in other words exports have a significant effect oninflation. **Hypothesis H3 is accepted.** Hypothesis H4 is that there is a significant influence of the BI reference interest rate on inflation. According to the test results, it was found that t statistics > t table, in other words the BI reference interest rate has an effect on inflation. **Hypothesis H4 is accepted.** Hypothesis H 5 is that there is a significant influence of gold prices on inflation. According to the results of testing the price of gold against inflation, it was found that the t statistic < t table, so **the hypothesis H5 was rejected.**

Hypothesis H 1 is that there is a significant influence of the Rp/USD exchange rate on inflation. The results of hypothesis testing state that the t statistic < t table so that there is no significant influence of the Rp/USD exchange rate on inflation. **Hypothesis H1 is rejected.** Hypothesis H 2 is that there is a significant influence of the money supply on inflation. The results of hypothesis testing state that the statistical t value > t table so that g a the money supplyhas a significant effect on inflation. **Hypothesis H2 is accepted.** Hypothesis H3 is that there is a significant influence of Exports on inflation. The test estimation results state that the t statistical value < t table so that there is no significant effect of exports on inflation, therefore **hypothesis H3 is rejected.** Hypothesis H4 is that there isa significant influence of the BI reference interest rate on inflation. According to the test results, it was found that the statistical t value > t table, so that **the hypothesis H4 was accepted.** Hypothesis H5 is that there isa significant influence of gold prices on inflation. According to the results of testing the price of gold against inflation, it was found that the statistical t value was <t table,so **the hypothesis H5 was rejected.** The ECT value has passed the significance of 0.05 Because it shows a probability value of 0.0000 <0.05 and has been fulfilled because the coefficient has a negative value. The ECT value of -0.5634 means that the short- term adjustment phase towards long-term balance occurs quite quickly. So that the inflation model specifications applied in the research are valid so that they are able to explain long-term and short-term relationships. Short-term to long-term balance is estimated to occur within two quarters because the ECT value is 0.5634, inother words *the speed of adjustment* occurs at 0.5634 for every 1% imbalance.

6. DISCUSSION

The Effect of Exchange Rates on Inflation

The estimation results show that in the long term the Rp/USD exchange ratedoes not have a significant effect on inflation with a positive correlation direction. This indicates that changes in the exchange rate do not have a real influence on changes in inflation in the long term.This result is not in line with structural theory, which states that inflation occurs from shocks, one of which is the exchange rate which is a variable influencing inflationfrom external shocks, where if the Rp/USD exchange rate depreciates, it will increase the price of imported goods and the inflationrate will increase. also experienced anincrease. In a simple theoretical frameworkconsidering a small open economy with a flexible exchange rate and with a monopolistically competitive imported finished goods sector. The main component of the framework is price stickiness. Theprice of goods is set at the beginning of eachperiod before the rate of change in the exchange rate is known. It is further assumed that the future market will not be *liquid* so that importers will face difficulties in hedging and do not want to bear the risk of exchange rate depreciation. So in economic models, the exchange rate is assumed to be an exogenous random variable. This creates a motive for importersto increase prices first. In a sense, importers add a risk premium to consumer prices due to increased exchange rate uncertainty. So in the long term the exchange rate does not have a significant influence on inflation but has a positive direction. When the exchange rate depreciates, consumer prices will be higher than depreciation expectations because of the premium imposed on consumer prices, even though these prices are actually sticky.

On the other hand, in the short term the Rp/USD exchange rate also does not have a significant influence on changes in inflation in Indonesia due to the seasonal nature of price levels. The depreciation of the exchange rate will indeed cause the price of imported raw materials to rise, but in the short term the price level in the market can still be maintained from increasing because companies prefer to reduce the amount of production rather than increase the price level.

The absence of a significant influence of the rupiah exchange rate on inflation was also found in research conducted in 2022 regarding the influence of the Rp/USD exchange rate on inflation in Indonesia from 2015 to 2021. The results ofthe research identified that it did not exist significant influence and has a positive direction of the Rp/USD exchange rate on inflation (Yanti & Soebagiyo, 2022) . This can be experienced because during theresearch period the exchange rate showed a stable trend. Therefore it can be concluded that inflation fluctuations can be caused by factors other than the exchange rate. Thus, it can be concluded that there is no significant influence between the exchange rate on inflation in the long term but it has a positive sign. Another study which showed that the exchange rate had no influence on inflation was carried out in Indonesia by Mahendra (2016), Malau (2017) , Fitriyani, Iranto & Dianta (2023) .

The Effect of Money Supply on Inflation

According to research results, it shows that the money supply has a significant negative effect on inflation in Indonesia with a coefficient of -6.2460. If the change in the money supply increases by1 billion rupiah, then the percentage change in inflation will decrease by 6.2460 percent. This indicates that changes in the moneysupply have a real influence on changes in inflation in the long term. This is not inaccordance with what is said by monetarists who state that in the long term if there is an increase in the money supply then the price level will increase and result in inflation. Nowadays, money not only functions as a medium of exchange, but also as a tool for accumulating wealth and has a significant impact on the distribution of cash in society.The function of cash will shift from being just a medium of exchange to a tool forgenerating further wealth. This will greatly influence the accumulation of capital which is much more valuable than money that is only used for trading.

The current demand for money is alsorelated to transactions in the capital market with various long-term financial instrumentsthat can be traded, such as bonds, shares, mutual funds and other instruments. Looking at these developments, it is becoming increasingly apparent that money in circulation is being used to make money rather than being used for transactions of goods and services in the real sector. In this way, it can be said that money is used as a traded commodity, not as a means of payment. This is what causes the inflation rate to decrease even though the money supply is increasing. The increase in money is dominated by quasi money rather than currency and demand deposits which can be used for direct transactions.

Meanwhile, short-term estimationresults show that the money supply also has a significant negative effect on inflation in Indonesia. This shows that changes in the money supply have a real influence on changes in inflation in the short term. This matter can be explained by Keynes's theory that an increase in the money supply in the short term is not a determining factor in the increase in the inflation rate. Keynes' theory also explains that an increase in the money supply can indeed increase prices, but anincrease in the money supply is not always proportional to an increase in the prices of goods and services. In the short term, the amount of money circulating in theeconomy is not always responded to by society by changing consumption patternsby increasing demand.

The empirical findings in this research support research conducted in 2023regarding the money supply on inflation in Indonesia using the ECM method showing the results that the money supply has a negative long-term and short-term influence on inflation in 1999-2019 (Nasution *et al* ., 2023) . The results of other studies regarding the negative influence of the money supply on inflation in Indonesia werealso carried out by Putri *et al* ., 2017) using multiple linear regression methods . Then another study that supports the results of research regarding the negative influence of the money supply on inflation in the long term using the ECM method was also carried out by *Bugis et al* ., (2023) . Apart from that, research conducted by Ningsih & LMS, (2018) also supports the results of thisresearch which shows that the money supplyhas a significant negative influence oninflation.

The Effect of Exports on Inflation

The estimation results of the influence of exports on inflation show that exports in the long term have a significant positive influence on inflation. This shows that exports provide a real change in changes in inflation in the long term. The estimation results are in accordance with theKeynesian theory of *demand pull theory* which explains that inflation is caused by excess demand which cannot be met by the available production capacity. Keynesian theory describes how demand can influence changes in the price level. When demand increases, the increase in demand will push the price level to increase.

The empirical findings of this research support research on the influenceof exports on inflation using the ECM method, stating that exports have a positive influence on inflation in the long term, where every increase in exports will increase the inflation rate. (Ratri &Munawar, 2022) . Exploring the determinants of inflation in Kenya for the period January 2005 to December 2015, using VECM produced research results that exports had a positive and significant influence on inflation in the long term (Kiganda et al., 2017) . Other research that also supports the results of this research is: Jumhur *et al* . (2018) , Wulandari & Laut (2022) , and Albab & Nugraha (2022) .

Meanwhile, short-term estimationresults show that exports do not have asignificant influence on inflation. Regarding this, in the short term the availability ofgoods at the trader and distributor level isstill available. This availability can meetdomestic market demand so that it does nothave an impact on changes in inflation inthe short term. In the short term, consumerscan still buy the goods they demand becausethe previous stock of goods is still availablefrom traders and distributors. Apart from that, consumers can also take steps tosubstitute by importing because the supplyof imported goods can meet domestic demand compared to the supply of domesticgoods that are exported. However, if thishappens over a long period of time it willhave an impact on increasing the inflationrate. Therefore, it is necessary to pay closeattention beforecarrying outexport activities by looking at domestic needs first .The results of this research are supported by Albab & Nugraha (2022)where the results of their research show thatnon-oil and gas exports do not influencechanges in the inflation rate, while oil andgas exports do . In line with the empiricalresults of this research , Ulfa & Abbas(2020) also supports the results of this research by finding that exports have no influence on inflation in Indonesia . Meanwhile , Pebriyanti & Utomo (2023) found that exports have a positive influence but with a small effect where if exports increase then prices will not increase, but household consumption will grow positively.

The Influence of Bank Indonesia Reference Interest Rates on Inflation

According to the estimation results, the BI benchmark interest rate in the long term and short term has a significant effect on inflation in a positive direction. This indicates that every increase in the BI benchmark interest rate will increase the inflation rate in Indonesia, and vice versa, a decrease in the BI benchmark interest rate will reduce the inflation rate in Indonesia. Interest rate regulation is more responsive tobusiness actors and investors than to society in general.

In accordance with the view of structural theory, the rationale for price increases is transmitted through the supply side. This theory is also supported by Fisher's theory which explains the positive relationship between interest rates and inflation. An increase in interest rates in the economy will basically reduce the amount of money circulating in society, but if viewed from the supply side and Fisher'stheory, a higher increase in interest rates cancause obstacles to investment in the real sector. A high increase in interest rates will also cause savings to be transferred to banksand will ultimately reduce *the output of* goods and services which will affect the increase in the inflation rate. The movements of the BI reference interest rate and inflation have the same direction even though they do not intersect directly. This similarity in direction explains that everytime there is an increase in the BI reference interest rate, the inflation rate also increases.This could happen because during the research period when interest rates were at alow level, third party banking funds did not experience a decline. So that the money circulating in society does not increase so that it does not cause inflation to increase.

This is in accordance with Keynes's view when seen in the real sector that most business actors are unable to increase their *output capacity*, but on the other hand, an increase in production costs will increasethe selling price of products. This is becausean increase in interest rates will affect funding costs due to an increase in the price of production factors due to an increase in interest rates. This will happen over a short period of time, and will be exacerbated if this happens over a long period of time because funding costs tend to be higher and there is a consequence of rising prices through the cost-push supply effect. Funding costs increase and on the other hand companies have to fund the productionprocess so that in this case companies have to borrow more from banks. Increased loansare one source of money creation which ultimately drives an increase in the inflation rate. From the consumer side, BI's disinflation efforts by increasing the benchmark interest rate are considered by the public to be responded to by an increase in banking interest rates which will cause some traders to choose to increase product selling prices. This assessment will shape people's expectations regarding inflationthat will occur in the future. In the end, the increase in the benchmark interest rate did not actually minimize inflation but instead triggered a higher increase in inflation. Thus, the results of research regardingchanges in the BI benchmark interest rate having a positive influence on inflation are in accordance with the hypothesis that has been proposed.

Research regarding the BI reference interest rate for inflation was carried out in 2023, where the research examined the influence of interest rates on inflation for the period January 2012 to December 2021 which showed the results that interest rates had a positive influence on inflation in a positive direction. (Bugis *et al* ., 2023) .Other research on interest rates on inflation was also conducted in Iceland in 2020 which showed that an increase in interest rates also caused an increase in the inflation rate. (Egilsson, 2020) . Apart from that, research was also carried out on the same variable in Nigeria in 2016 and identified that interest rates had a significant positive influence on inflation in the long term (Amaefula, 2016) . The same research was also carried out by (Yeboah, 2020) which shows the results that Ghana's interest rates have a significant influence in the short and long term on inflation .

The Effect of Gold Prices on Inflation

The estimation results show that the price of gold does not have a significanteffect on inflation in Indonesia in the long term. This indicates that changes in gold prices do not have a real influence on changes in inflation. These results show thatgold does not help hedge against inflation inthe long term. This finding shows that in thegold market in developing countries golddoes not function as a hedge. In Indonesia, these findings can explain the fact that gold purchases are more motivated by culturaland traditional aspects, for example gifts for weddings and other celebrations comparedto other reasons based on financial aspects. According to the Ministry of Trade In 2017, Indonesia's gold consumption was only 0.22grams per capita, then in 2018 the per capitagold consumption in Indonesia was 0.24 grams per capita and there was a decline of only 0.1 grams per capita in 2020. Gold is used as a support for wealth for the household. Increased feelings of prosperity because the wealth of gold is higher than normal income, so when the price of gold is high, people will sell the gold they have and use it for consumption. This is what causes the price of gold to have a positive relationship with inflation.

The estimation results also show that the price of gold does not have a significant influence on inflation in the short term. Thishappens because the gold price used is the international gold price, where the price of gold is quite high and can only be reachedby a few groups. Middle and lower middle class people are more sensitive to domestic gold prices and the price of gold that has been made into jewelry. In addition, gold prices quoted in London and converted to domestic currency cannot reflect the local gold market situation or local inflation, especially in developing countries such as Indonesia.

The specific relationship between gold and the US dollar currency can providebiased results for other countries. This research supports research conducted by Hoang, Lahiani & Heller (2016) regarding gold prices was carried out in the period1955 to 2015 in China, India, Japan, France,England and the United States. The resultsof the research show that the price of gold has no effect on inflation in China and India but has an effect on inflation in France, England and the United States.

7. CONCLUSION

Based on the research results, there are some variables that are able to explain inflation and some that are not. In the long term, the variables that are able to explain inflation are the money supply, exports and the Indonesian bank's benchmark interest rate. Meanwhile, the exchange rate and goldprice variables are unable to explain inflation. In the short term, the variables thatare able to explain inflation are the money supply and Bank Indonesia's reference interest rate. Meanwhile, the exchange rate, export and gold price variables are unable toexplain inflation.

RECOMMENDATION

Bank Indonesia should carry out performance evaluations in determining monetary policy in order to create a conducive economic atmosphere by maintaining the inflation rate at a level that is good for the economy, provided that it is not too high and not too low. Because by maintaining inflation, it will maintain thepurchasing power of the poor household group and the non-poor household group. Inorder for the monetary policy implemented by Bank Indonesia to run well in practice, the government must balance it by establishing fiscal policy so that the goal ofa conducive economy with a good inflation rate is achieved.

REFERENCES

1) Agustin, SP, & Anis, A. (2021). The Effect of Monetary Variable Shockson Exchange Rates and Inflation inIndonesia. *Journal of Economic andDevelopment Studies*, *03* (03), 49–64. http://103.216.87.80/students/index.ph p/epb/article/view/7724
2) Ahmed, R.R., Ghauri, S.P., Vveinhardt,J., & Streimikiene, D. (2020). AnEmpirical Analysis of Export, Import,And Inflation: A Case of Pakistan.*RomanianJournal of Economic Forecasting*,*4*(1),521–542.http://www.nber.org/papers/w23664%0Ahttp://www.nber.org/papers/w23664.ack%0Ahttp://www.nber.org/papers/w17930%0Ahttp://marefateadyan.nashriyat.ir/node/150%0Ahttp://www.embase.com/search/results?subaction=viewrecord&from=export&id=L32094195%5Cnhttp://cy7sh
3) Albab, AU, & Nugraha, J. (2022). The Influence of Oil and Gas and Non-Oil and Gas Export and Import Values on Inflation in Indonesia. *Independent: Journal of Economics* , *2* (1), 116–132.https://doi.org/10.26740/independent.v2i1.44525
4) A leemi, AR, Tariq, M., & Ahmed, S. (2016). the Role of Gold Prices, Exchange Rate and Interest Rate onthe Continuity of Inflation in Pakistan. *Pakistan Business Review* , *March* ,37–54.
5) Amaefula, C.G. (2016). Long-Run Relationship between Interest Rate and Inflation: Evidence from Nigeria. *IOSRJournal of Economics and Finance* , *7* (3),24–28. https://doi.org/10.9790/5933-0703012428
6) Amanda, N.F. (2022). The Influence of Interest Rates, Money Supply, and Exchange Rates on Inflation in Indonesia. *Economics, Accounting andBusiness Journal* , *2* (3), 592–602.
7) Bugis, M., Louhenapessy, D., Siregar, N.C., & Tuasuun, S. (2023). TheInfluence of Interest Rates, Money Supply and Rupiah Exchange Rate on the Inflation Rate of North Sumatra Province 2012-2021. *Journal of PublicPolicy and Business Applications* , *4* (2), 502–520. https://doi.org/10.1111/j.1467-9299.1995.tb00817.x
8) Christianingrum, R., & Syafri, RA (2019). Factors Affecting Core Inflation in Indonesia. *BUDGET Journal* , *4* (2), 19–40.
9) Egilsson, J. H. (2020). How raising interest rates can cause inflation and currency depreciation. *Journal ofApplied Economics*, *23* (1), 450–468. https://doi.org/10.1080/15140326.20201795526
10) Fajarwati, RY, & Setiawina, ND (2018).Analysis of the Impact of MonetaryPolicy on the Money Supply, Foreign Exchange Reserves and Inflation Rate in Indonesia 2010-2016. *Unud EP E- Journal* , *7* (6), 1168–1198. https://ojs.unud.ac.id/index.php/eep/article/view/38933
11) Fauziyah, WEN, & Cahyono, H. (2014).The Influence of the BI Rate and the Amount of Money in Circulation onthe Inflation Rate in Indonesia. *Journal of Economic Education* , *4* (3),1–9.
12) Fitriyani, E., Iranto, D., & Dianta, K. (2023). The Influence of Monetary Policy Transmission Channels onInflation in Indonesia. *Perspective:Journal of Economics & Management, Bina Sarana Informatics University* ,*21* (1), 60–68. https://doi.org/10.31294/jp.v21i1.15193
13) Hena, E., & Silalahi, E.E. (2022). The Influence of Gold and Cooking Oil Prices on Inflation in Indonesia. *Journal of Information Systems, Applied, Management, Accounting andResearch* , *6* (3), 643–649.https://doi.org/10.52362/jisamar.v6i3.555
14) Hoang, TH Van, Lahiani, A., & Heller, D. (2016). Is gold a hedge againstinflation? New evidence from a nonlinear ARDL approach. *EconomicModelling*,*54*,54–66.https://doi.org/10.1016/j.econmod.201 5.12.013
15) Ichwani, T., Kaniati, R., & Husna, H. (2018). Analysis of Bank Indonesia's Performance as a Stabilitator of Inflation and the Rupiah Exchange Rate in the Monetary Sector. *Journal of Applied Business and Economics* , *4* (3), 250–265. https://doi.org/10.30998/jabe.v4i3.2025
16) Jumhur, J., Nasrun, MA, Agustiar, M., & Wahyudi, W. (2018). The Effect of Money Supply, Exports and Importson Inflation (Empirical Study of the Indonesian Economy). *Journal of Business Economics and Entrepreneurship*, *7* (3), 186. https://doi.org/10.26418/jebik.v7i3.26991
17) Khair-Afham, MSM, Law, SH, & Azman-Saini, WNW (2017). Is goldinvestment a safe haven or a hedge for the Malaysian inflation? *International Journal of Business and Society* , *18* (1),51–66.https://doi.org/10.33736/ijbs.489.2017

18) Kiganda, E.O., Obange, N., & Adhiambo, S. (2017). The Relationship between Exports and Inflation in Kenya: An Aggregated Econometric Analysis. *Asian Journal of Economics, Business andAccounting* , *3* (1), 1–12. https://doi.org/10.9734/ajeba/2017/33192
19) Mahendra, A. (2016). Analysis of the Effect of Money Supply, SBI Interest Rates and Exchange Rates on Inflation in Indonesia. *Journal of Accounting & Finance Research* , *2* (1), 1–12. https://doi.org/10.54367/jrak.v2i1.170
20) Malau, N.A. (2017). THE INFLUENCEOF THE RUPIAH EXCHANGE VALUE ON INFLATION IN INDONESIA. *Scientific Journal "INTEGRITAS" Vol* , *3* (2).
21) Nasution, SWP, Zulaili, Nasution, SUA,& Radiah. (2023). Determinants of Inflation in North Sumatra. *ECOBISMA Journal* , *10* (1), 81–93.
22) Ningsih, S., & LMS, K. (2018). ANALYSIS OF THE INFLUENCE OF MONEY SUPPLY, INTEREST RATES AND EXCHANGE RATEON INFLATION IN INDONESIAFOR THE 2014-2016 PERIOD. *Journal of Resource Management Economics* , *20* (2), 96–103. http://journals.ums.ac.id/index.php/dayasaing/article/view/7258/4405
23) Pebriyanti, BN, & Utomo, YP (2023). Analysis of the Factors Influencing theInflation Rate in Indonesia During the Covid-19 Pandemic. *Proceedings of the Medan International Conference Economics and Business* , *1* (January), 244–254.
24) Purwanti, Y. (2022). Analysis of theEffect of Gold Prices, Rupiah Exchange Rates and Interest Rates and the Degree of Persistence of West JavaInflation. *Government and Statistics* ,*1*(1), 43–52.https://doi.org/10.21787/govstat.1.202 2.43-52
25) Son, NY (2022). ANALYSIS OFFACTORS AFFECTINGINFLATION IN INDONESIA 2015-2020. *Transeconomics: Accounting, Business And Finance* , *2* (5), 195–212. https://doi.org/10.55047/transeconomi ca.v2i5.183
26) Putri, VK, Budiartiningsih, R., & Rosyetti, R. (2017). Analysis of the Effect of Money Supply, Bank Indonesia Certificate Interest Ratesand Investment Credit Interest Rateson Inflation in Indonesia. *Online Journal of Students at the Faculty of Economics, University of Riau* , *4* (1), 26–39.
27) Ratri, DA, & Munawar. (2022). Analysis of the Influence of Interest Rates (Bi Rate), Money Supply and Exports on Inflation in Indonesia During the Covid-19 Pandemic. *Journal of Development Economic andSocial Studies* , *1* (1), 28–70.
28) Sodiqin, A. (2015). THE INFLUENCE OF EXPORTS, IMPORTS AND EXCHANGE RATES ON INFLATION AND ITS IMPACT ON MARKET RETURNS ON THE INDONESIAN STOCK EXCHANGE. *Krisnadwipayana Business Management Journal*, *3* . https://doi.org/10.35137/jmbk.v3i1.94
29) Ulfa, N., & Abbas, T. (2020). the Effect of Export and Import on Inflation in Indonesia Period 1990-2016. *Journal of Malikussaleh Public Economics* , *1* (2),60. https://doi.org/10.29103/jmpe.v1i2.2212
30) Utari, GAD, Cristina, R., & Pambudi, S.(2015). Inflation in Indonesia: Characteristics and Control. *Bank Indonesia Institute* , *23*, 1–64.
31) Wulandari, D., & Laut, LT (2022). Development Economics BulletinAnalysis of the Relationship between Exports, Imports, JUB and Inflation in Indonesia 2015-2019. *Development Economics Bulletin, 3* (2), 292–308.
32) Yanti, Y., & Soebagiyo, D. (2022).ANALYSIS OF THE INFLUENCEOF JUB, INTEREST RATES ANDEXCHANGE RATE ON INFLATIONIN INDONESIA 2005-2021. *Journalof Development Economics*, *8* (2),265–277. https://doi.org/10.35906/jep.v8i2.1256
33) Yeboah, S.A.(2020). Modeling inflation-interest rate nexus for Ghana. *International Journal of Finance, Accounting, and Management* , *2* (3),227–241. https://doi.org/10.35912/ijfam.v2i3.25 7