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ANALYSIS OF THE RELATIONSHIP BETWEEN GOLD PRICE, POLITICAL STABILITY, EXCHANGE RATE AND INFLATION IN INDONESIA

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ABSTRACT : This research aims to analyze the relationship between Gold Prices, Political Stability, Exchange Rates and Inflation in Indonesia. This type of research is a type of quantitative research. The data source in this research uses secondary data obtained from Bullion Rates, World Bank, and Bank Indonesia (BI). The data used is data on Gold Prices, Political Stability, Exchange Rates and Inflation in the form of monthly time series for the period January 2008 to December 2022. Data analysis was carried out using Vector Error Correction Model (VECM). The research results show that there is a one-way relationship between the exchange rate and the price of gold, inflation and political stability, and inflation and the exchange rate. In the long-term relationship between gold prices, political stability, exchange rates and inflation, there is cointegration or balance. In the short term, inflation has a negative and significant influence on the price of gold, political stability has a negative and significant influence on the exchange rate, and inflation has a negative and significant influence on the exchange rate.

Keywords - Gold Prices, Political Stability, Exchange Rates, and Inflation

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1. INTRODUCTION

Gold is one of the precious metals used as a tool of exchange in trade in various countries and plays an important role in the global economy (Nuraini & Setyowati, 2023). Gold has characteristics that are difficult to destroy by fire or water, can be divided into smaller parts, is untouched by monetary crises and political conflicts up to military, has limited quantities, and is flexible in buying transactions (Hafizd, 2021). Therefore, gold is seen as a valuable asset that is used in investing by the public because it is more profitable than investing in stocks, securities and bonds so that the demand for gold increases year after year (Amalia et al., 2024).

Gold demand has increased as the public has understood that gold is a safe haven for the long term because it has a low risk (Puspitasari et al., 2022). Gold has a price that tends to rise, it is always stable, easily liquidated in the form of cash, high liquidity, interest-free, low risk of inflation, retains wealth assets and can be used as jewelry (Kalsum et al., 2020). Gold demand is high on economic uncertainty and affects political developments in the world. The slowly rising movement of the price of gold has caused people to keep their money in the form of gold for long-term investments (Nurulhuda & Kosasih, 2019). Factors affecting the price of gold include inflation, geopolitics, construction laws, water shortages, and inflation. The Covid-19 pandemic, the Russian-Ukrainian conflict, and the Palestinian-Israeli conflict have caused economic instability, created political

uncertainty and increased risk to investors. Investors switch to Safe Haven gold to minimize risk and maximize profits (Kesarditama et al., 2020).

Research on the relationship between gold prices, political stability, exchange rates, and inflation has been done by several researchers with different variables. Nurulhuda & Kosasih (2019) research on the influence of inflation, US dollar exchange rate, and interest rate (BI), on gold price determination shows that inflation and US dollar rate have a positive and significant influence on the price of gold determination while interest rates have a negative and significant impact on the value of gold. Kesarditama et al., (2020) research on inflation influence, rupee exchange rates per US dollar, world crude oil prices and combined stock price index against gold prices in Indonesia show that exchange values, world oil prices, and equity price indices have a significant and positive impact on gold prices whereas inflation has a negative influence and significantly affects gold prices. Research by Nuraini & Setyowati (2023) regarding the impact of the exchange rate, interest rates, IHSG, inflation and gold demand on gold prices in Indonesia shows that inflation and gold demand influence the price of gold while the exchange rate, interest rates and IHSG do not affect the price of gold.

This research is based on the current phenomena of dollar exchange rate movements, world geopolitics, demand and supply for gold, reference interest rate fluctuations, and inflation, which are the factors of the fluctuation of gold prices, which cause economic uncertainty and affect political developments in the world. Based on the background described, the researchers are interested in doing research on the relationship between gold prices, political stability, exchange rates, and inflation in Indonesia. Therefore, they are interested to do the research entitled “Analysis of the Relationship Between Gold Price, Political Stability, Exchange Rate and Inflation in Indonesia”.

2. LITERATUR REVIEW

2.1 Rational Expectations Theory

Rational expectation is the optimum decision-making by economic actors using all available information. This theory was first proposed by John F. Muth in 1961. Djirimu & Tombolotutu (2022) states that every decision is heavily influenced by the perception of the economists of what they anticipate will happen in the future. For example, if an economist predicts that the price of goods will rise, they will tend to buy and stockpile goods to increase the company's supply. Specifically, this theory assumes that workers and companies will make estimates through economic mechanisms that depend on determining the actual rate and they use the value of the actual price level as an expectation of the price level (Dornbusch et al., 2004).

2.2 Baumol-Tobin Theory

The Baumol-Tobin theory is an economic theory that explains the demand for money for transaction purposes. This theory was first developed by William baumol in 1952 and James Tobin in 1956. According to Manik et al. (2023) the Baumold-Tobin theory focuses on the behavior of individuals in the context of companies and households. The concept states that individuals receive income once a month and use it to meet their needs for a month. Unlike Keynes, who only considers income, Baumol also focuses on interest rate factors. Tobin, on the other hand, emphasizes individual expectations. The greater the individual's expectations of profits from interest rates, the greater are the risks that the individual faces, which are more related to personal expectation.

3. METHOD

In this study, quantitative data types were used and sourced from secondary data. The data used are data on Gold Prices, Political Stability, Exchange Rates, and Inflation in Indonesia using monthly time series data from the period January 2008 to December 2022. The data is obtained from the publication of various websites. Gold price data is sourced from Bullion Rates, political stability is sourced from the World Bank, while exchange rates and inflation are sourced from Bank Indonesia. The analysis method used in this research is the Vector Error Correction Model (VECM) analysis to see the relationship between gold prices, political stability, exchange rates and inflation in Indonesia. Vector Error Correction Model (VECM) is a restricted form of Vector Autoregression (VAR) used for variables that are not stationary at the level level, but have the potential to be cointegrated. The

Vector Error Correction Model (VECM) utilizes the cointegration restriction information into its specifications so that the adjustment accelerates from short to long term (Firdaus, 2020).

The specifications of the VECM model in general are as follows:

$$\Delta y_t = \mu_{0x} + \mu_{1x}t + \Pi_x y_{t-1} + \sum_{i=1}^{k-1} \Gamma_{ix}\Delta y_{ti} + \varepsilon_t \quad (3.1)$$

Description:

y_t = vector containing the variables analyzed in the study

μ_{0x} = intercept vector

μ_{1x} = regression coefficient vector

t = time trend

Π_x = $\alpha_x \beta`$ where $b`$ contains the long-run cointegration equation

y_{t-1} = in-level variable

Γ_{ix} = regression coefficient matrix

k-1 = VECM order of VAR

ε_t = error term

In determining the Vector Autoregressive/Vector Error Correction Model (VAR/VECM) equation, there are steps that must be fulfilled, namely the data stationary test, determining the optimal lag, VAR model stability test, granger causality test, cointegration test, Vector Error Correction Model (VECM), causality test, Vector Error Correction Model (VECM) Stability Test, Implus Response Function (IRF), Variance Decompotion (VD).

4. RESULTS

4.1 DATA STATIONARITY TEST (UNIT ROOT TEST)

TABLE 4.1 FIRST DIFFERENCE LEVEL DATA STATIONARITY TEST RESULTS

Variable	ADF	Prob.
HE	-10.50057	0.0000
	-5.277620	0.0000
SP		
NT	-11.27189	0.0000
INF	-8.924529	0.0000

Source: Eviews processed data, 2024

Based on the stationarity test results in Table 4.1 shows that the probability value of all variables (HE, SP, NT, and INF) < 0.05, it can be concluded that the data is stationary at the first difference level.

4.2 OPTIMAL LAG TEST

TABLE 4.2 RESULTS OF OPTIMAL LAG TEST

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-2961.556	NA	6.16e+09	33.89207	33.96440	33.92141
1	-2918.787	83.09350	4.53e+09	33.58614	33.94783*	33.73285*
2	-2895.783	43.64122	4.19e+09	33.50610	34.15714	33.77018
3	-2877.000	34.77598*	4.06e+09*	33.47429*	34.41468	33.85574
4	-2870.323	12.05654	4.52e+09	33.58084	34.81058	34.07966

Source: Eviews processed data, 2024

Table 4.2 shows that the optimal length test results seen from the lowest Akaike Information Criteria (AIC) value and many acentric signs (*) are at lag 3. This indicates that lag 3 will be used in the estimation process.

4.3 Stability Test

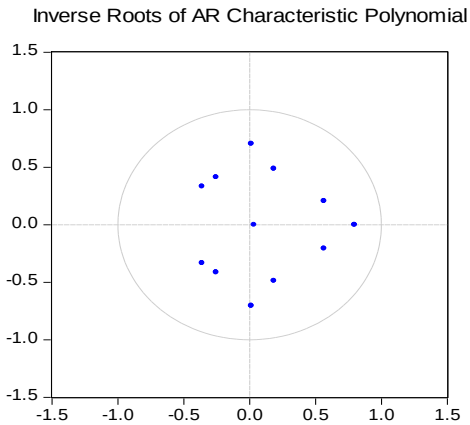

Figure 4.1 Stability Test Results of AR Root Graph Method

Source: Eviews processed data, 2024

Based on Figure 4.1 shows that the results of the stability test with the AR Root Graph method in the form of dots (inverse roots) are the variables of Gold Prices, Political Stability, Exchange Rates, and Inflation in Indonesia formed from the optimal lag (lag 3) are in a circle (unit circle), it can be generated that the VAR / VECM model has stabilized.

4.4 GRANGER CAUSALITY ANALYSIS

TABLE 4.3 RESULTS OF GRANGER CAUSALITY TEST

Null Hypothesis:	Obs	F-Statistic	Prob.
SP does not Granger Cause HE	177	0.57625	0.6314
HE does not Granger Cause SP		1.08200	0.3582
NT does not Granger Cause HE	177	4.96199	0.0025*
HE does not Granger Cause NT		0.81219	0.4887
INF does not Granger Cause HE	177	0.08342	0.9690
HE does not Granger Cause INF		0.76307	0.5162
NT does not Granger Cause SP	177	1.20804	0.3085
SP does not Granger Cause NT		0.34504	0.7928
INF does not Granger Cause SP	177	3.87878	0.0103*
SP does not Granger Cause INF		1.08952	0.3551
INF does not Granger Cause NT	177	3.96133	0.0092*
NT does not Granger Cause INF		2.31878	0.0773

Source: Eviews processed data, 2024

Based on the results of the study in table 4.3 shows that there is a direct causality relationship between the exchange rate and the price of gold which is consistent with the studies Putri et al., (2022), Lastri (2021) and Sunaryo (2023) which stated that the gold price with the rate of exchange has a relationship, when the value of the currency decreases the demand for gold will increase because investors regard gold as a safer asset thus driving the rise of the price. There is also a correlation between inflation and political stability that is consistent with the Milasaite & Micic (2022). And inflation at exchange rates also has correlations that are in consonance with the research Fitriyani & Dianta (2023).

4.5 COINTEGRATION TEST

TABLE 4.4 RESULTS OF COINTEGRATION TEST

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.270996	150.9070	47.85613	0.0000
At most 1 *	0.226326	95.59377	29.79707	0.0000
At most 2 *	0.179491	50.68789	15.49471	0.0000
At most 3 *	0.087726	16.06758	3.841466	0.0001

Source: Eviews processed data, 2024

The cointegration test results in Table 4.4 show that the trace statistic value > critical value with probability < 0.05. This indicates that between the Gold Price, Political Stability, Exchange Rate, and Inflation there is a cointegration equation or has a balance and movement in the long run. In addition, it can also be said that all variables in the short-term period will adjust each other to achieve long-term equilibrium. The existence of a cointegration relationship in time series data that is not stationary, then the analysis used is the Vector Error Correction Model (VECM) model.

4.6 ESTIMATION OF VECTOR ERROR CORRECTION MODEL (VECM)

TABLE 4.5 LONG-TERM VECM TEST RESULTS

Variabel	CointEq1	Std. error	t-Statistic	t-Tabel
D(HE(-1))	1.000000			
D(SP(-1))	-475010.6	233789	-2.03179	
D(NT(-1))	168.8724	27.1585	6.21804	1.973534
D(INF(-1))	-34765.52	10761.7	-3.23049	
C	-8228.101			

Source: Eviews processed data, 2024

The form of the VECM's long-term estimates above suggests that political stability has a negative and significant influence on gold prices, in line with research by Mitsas et al., (2022) and (Tiwari et al., 2020). Political uncertainty can reduce investor confidence in the Indonesian economy, which increases investment risk and interferes with the implementation of economic policies. Political instability can also affect overall economic conditions, such as inflation and exchange rates, which indirectly affect demand and gold prices in domestic markets. While exchange rates have a positive and significant influence on the price of gold, according to Houcine et al., (2020) and (Ranjusha et al., 2017). This suggests that changes in the exchange rate of the rupee will affect the purchasing power of investors toward gold as well as reflect the economic conditions and market perceptions that affect gold prices in Indonesia. And inflation has a negative and significant influence on the price of gold according to research by (Rizaldy et al., 2022). This is because the Bank of Indonesia has implemented a strict monetary policy to control inflation by raising interest rates, reducing investor attractiveness to gold and causing other investment returns to rise.

Apart from knowing the long-term relationship, VECM also estimates the short-term balance of variables as in table 4.6 as follows:

TABLE 4.6 SHORT TERM VECM TEST RESULTS FOR GOLD PRICES

	Coefficient	Std. error	t-Statistic	t-Tabel
CointEq1	-0.170971	0.05385	-3.17503*	
D(HE(-1),2)	-0.426621	0.09030	-4.72474*	
D(HE(-2),2)	-0.322529	0.08652	-3.72800*	
D(HE(-3),2)	-0.178896	0.07764	-2.30412*	1.973534
D(SP(-1),2)	89429.27	80825.9	1.10644	
D(SP(-2),2)	127305.5	91074.6	1.39782	
D(SP(-3),2)	44982.15	80058.3	0.56187	

D(NT(-1),2)	37.05361	8.44856	4.38579*
D(NT(-2),2)	-0.095321	7.26203	-0.01313
D(NT(-3),2)	11.13252	6.41196	1.73621
D(INF(-1),2)	-6418.519	3358.19	-1.91130
D(INF(-2),2)	-760.5278	3085.90	-0.24645
D(INF(-3),2)	-3466.769	3007.66	-1.15265
C	274.4990	1638.08	0.16757
R-Squared	0.438496		

Source: Eviews processed data, 2024

Based on Table 4.6, the short-term VECM estimates show that the price of gold is influenced by its own variables and that the exchange rate has a positive and significant influence on lag 1 against the gold price.
Further, the results of the short-term VECM estimates of political stability can be seen through Table 4.7 below:

TABLE 4.7 SHORT-TERM VECM TEST RESULTS FOR POLITICAL STABILITY

	Coefficient	Std. error	t-Statistic	t-Tabel
CointEq1	1.16E-07	5.3E-08	2.20767*	
D(HE(-1),2)	-1.78E-07	8.8E-08	-2.02419*	
D(HE(-2),2)	-1.75E-07	8.4E-08	-2.07537*	
D(HE(-3),2)	-1.46E-07	7.6E-08	-1.93193	
D(SP(-1),2)	-0.622897	0.07892	-7.89234*	
D(SP(-2),2)	-0.323404	0.08893	-3.63654*	
D(SP(-3),2)	-0.115931	0.07817	-1.48297	1.973534
D(NT(-1),2)	-1.21E-05	8.2E-06	-1.47044	
D(NT(-2),2)	-4.13E-06	7.1E-06	-0.58213	
D(NT(-3),2)	-7.90E-06	6.3E-06	-1.2623	
D(INF(-1),2)	-0.001988	0.00328	-0.60616	
D(INF(-2),2)	-0.004203	0.00301	-1.39473	
D(INF(-3),2)	-0.000354	0.00294	-0.12063	
C	-0.000325	0.00160	-0.20347	
R-Squared	0.383890			

Source: Eviews processed data, 2024

Based on Table 4.7, the short-term VECM estimates of political stability show that the price of gold has a negative and significant influence on lag 1 and 2 on political Stability and Political Stability affected by its own variables.
Further, the short-term VECM estimates of exchange values can be viewed through Table 4.8 below:

TABLE 4.8 SHORT TERM VECM TEST RESULTS FOR EXCHANGE RATES

	Coefficient	Std. Error	t-Statistic	t-Tabel
CointEq1	-0.004695	0.00068	-6.91964*	
D(HE(-1),2)	0.003487	0.00114	3.06473*	
D(HE(-2),2)	0.002744	0.00109	2.51762*	
D(HE(-3),2)	0.000787	0.00098	0.80492	
D(SP(-1),2)	-2693.206	1018.39	-2.64458*	
D(SP(-2),2)	-2383.951	1147.52	-2.07748*	
D(SP(-3),2)	-253.5051	1008.72	-0.25131	1.973534
D(NT(-1),2)	0.127096	0.10645	1.19395	
D(NT(-2),2)	-0.20326	0.09150	-2.22143*	
D(NT(-3),2)	-0.023958	0.08079	-0.29655*	
D(INF(-1),2)	-140.1039	42.3124	-3.31118*	
D(INF(-2),2)	-93.14096	38.8816	-2.3955*	
D(INF(-3),2)	-106.6649	37.8957	-2.81469*	

C	-3.104538	20.6395	-0.15042
R-Squared	0.499908		

Source: Eviews processed data, 2024

Based on Table 4.8, the short-term VECM estimates of exchange rates show that gold prices have a positive and significant influence on lag 1 and 2 on the exchange rate. Political stability has a negative and significant impact on Lag 1 and 2. Exchange rate is influenced by its own variables. And inflation has a significant negative impact on lag 1,2 and 3 on the rate.

And the short-term VECM estimates of inflation can be seen through Table 4.9 below:

TABLE 4.9 SHORT TERM VECM TEST RESULTS FOR INFLATION

	Coefficient	**Std. error**	**t-Statistic**	**t-Tabel**
CointEq1	3.22E-09	1.5E-06	0.00215	1.973534
D(HE(-1),2)	-2.76E-06	2.5E-06	-1.09857	
D(HE(-2),2)	-5.00E-07	2.4E-06	-0.20768	
D(HE(-3),2)	-8.46E-07	2.2E-06	-0.39115	
D(SP(-1),2)	0.802802	2.25070	0.35669	
D(SP(-2),2)	4.384542	2.53609	1.72886	
D(SP(-3),2)	1.059819	2.22933	0.4754	
D(NT(-1),2)	0.000110	0.00024	0.46835	
D(NT(-2),2)	0.000151	0.00020	0.74623	
D(NT(-3),2)	-0.00015	0.00018	-0.86354	
D(INF(-1),2)	-0.41197	0.09351	-4.40547*	
D(INF(-2),2)	-0.44527	0.08593	-5.18169*	
D(INF(-3),2)	-0.19134	0.08375	-2.28463*	
C	-0.00952	0.04561	-0.20876	
R-Squared	0.257015			

Source: Eviews processed data, 2024

Based on Table 4.9 short-term inflation estimates of the VECM indicate that inflation is influenced only by its own vriable.

4.7 IMPULSE RESPONSE FUNCTION (IRF)

The response of gold prices to political stability, exchange rates and inflation can be seen in the following figure:

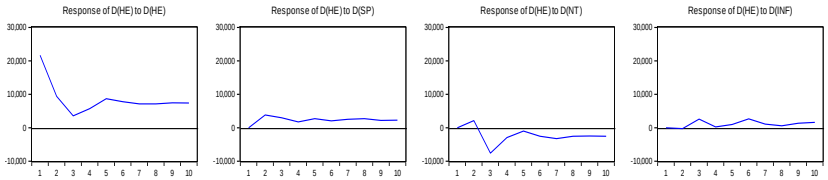

FIGURE 4.2 IMPULSE RESPONSE FUNCTION GOLD PRICE

Source: Eviews processed data, 2024

Based on Figure 4.2, it explains the gold price response from the beginning of the period up to the tenth period, giving a positive response to every change and shock in the gold price itself. The response of gold prices to political stability gave a positive response in the first to tenth periods. The response of the gold price to the exchange rate was negative from the first to the tenth period. The gold price response to inflation did not respond in the initial and second periods because the standardized value was zero. Then in the third to final period it gives a fluctuating response with slow movements.

Meanwhile, the response of Political Stability to Gold Prices, Exchange Rates and Inflation can be seen in Figure 4.3 below:

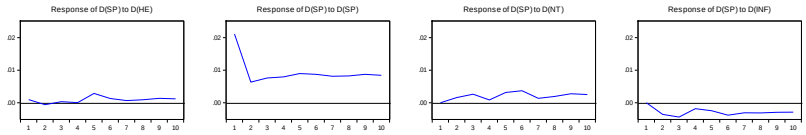

FIGURE 4.3 IMPULSE RESPONSE FUNCTION POLITICAL STABILITY

Source: Eviews processed data, 2024

Based on Figure 4.3, it explains the response of political stability to the price of gold itself, which provides a fluctuating response over ten periods. The response of political stability to the exchange rate gave a positive response in the first to tenth periods.

The response of political stability to inflation gave a negative response from the first to the tenth period.

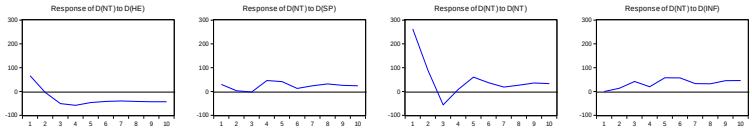

FIGURE 4.4 IMPULSE RESPONSE FUNCTION EXCHANGE RATES

Source: Eviews processed data, 2024

Based on Figure 4.4, the response of the exchange rate to the price of gold itself provides a fluctuating response over ten periods. The response of the exchange rate to political stability provides a fluctuating response over ten periods. The response of the exchange rate to the exchange rate itself provides a fluctuating response over ten periods.

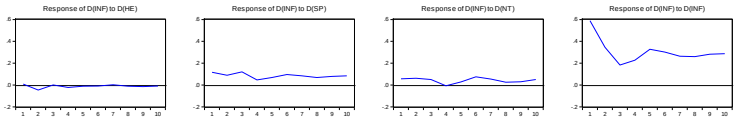

FIGURE 4.5 IMPULSE RESPONSE FUNCTION INFLATION

Source: Eviews processed data, 2024

Based on Figure 4.5, it explains the response of the exchange rate to the price of gold itself from the beginning of the period to the tenth period, which shows negative changes or shocks that occurred in the price of gold. The response of inflation to political stability gave a positive response in the first to tenth periods. The response of inflation to the exchange rate gave a positive response in the first to tenth periods. Meanwhile, the response from inflation to inflation itself has been positive for ten periods.

4.8 VARIANCE DECOMPOSITION (VD)

TABLE 4.10 RESULTS OF VD ANALYSIS OF GOLD PRICES IN INDONESIA

Periode	S.E.	D(HE)	D(SP)	D(NT)	D(INF)
1	21644.90	100.0000	0.000000	0.000000	0.000000
2	24002.05	96.70804	2.495901	0.782517	0.013542
3	25725.19	86.08870	3.474969	9.434571	1.001756
4	26566.06	85.28136	3.672862	10.09883	0.946954
5	28117.48	85.70378	4.201196	9.143132	0.951896
6	29465.97	84.92658	4.322164	9.093514	1.657744
7	30602.39	84.11220	4.658475	9.570125	1.659204
8	31635.38	83.74260	5.077296	9.598952	1.581149
9	32690.10	83.55448	5.203159	9.587844	1.654514

10	33727.08	83.29415	5.328783	9.597254	1.779808

Source: Eviews processed data, 2024

The results of the Variance Decomposition (VD) analysis for gold prices in Table 4.10 show that in the first period the gold price was influenced by itself by 100 percent without any contribution from political stability, exchange rates or inflation. Meanwhile, the exchange rate makes a greater contribution in influencing the price of gold when compared to political stability and inflation. It can be seen from the second period to the tenth period, in the tenth period the exchange rate has a proportion of influence on the price of gold of 9.59 percent, political stability has a proportion of influence of 5.32 percent and inflation has an influence of 1.77 percent on the price of gold in Indonesia.

Furthermore, the results of the Variance Decomposition (VD) analysis for Political Stability in Indonesia can be seen in Table 4.11 as follows:

TABLE 4.11 RESULTS OF VD ANALYSIS OF POLITICAL STABILITY IN INDONESIA

Periode	S.E.	D(HE)	D(SP)	D(NT)	D(INF)
1	0.021136	0.210055	99.78994	0.000000	0.000000
2	0.022409	0.257797	96.71613	0.523777	2.502293
3	0.024215	0.240198	92.64778	1.652565	5.459456
4	0.025573	0.215533	92.77587	1.604979	5.403621
5	0.027554	1.264353	90.56406	2.724078	5.447511
6	0.029421	1.315973	88.28656	3.957328	6.440138
7	0.030715	1.257543	88.00529	3.823971	6.913199
8	0.032028	1.239955	87.57963	3.879486	7.300925
9	0.033475	1.302242	86.99251	4.248693	7.456552
10	0.034753	1.327254	86.59489	4.484291	7.593566

Source: Eviews processed data, 2024

In Table 4.11 it can be seen that political stability in the first period was influenced by itself by 99.78 percent and the gold price by 0.21 percent, while the exchange rate and inflation had not contributed to political stability at the beginning of the period. Even though it did not contribute at the beginning of the period, if seen as a whole over the ten periods inflation had a greater contribution than the exchange rate and gold price in influencing political stability in Indonesia. In the inflation period, the proportion was 7.59 percent greater than the exchange rate which was only 4.48 percent and the gold price was 1.32 percent in influencing political stability in Indonesia.

Meanwhile, the results of the Variance Decomposition (VD) analysis of exchange rates in Indonesia can be seen in the following picture:

TABLE 4.12 RESULTS OF VD ANALYSIS OF EXCHANGE RATES IN INDONESIA

Periode	S.E.	D(HE)	D(SP)	D(NT)	D(INF)
1	272.7206	5.930342	1.200864	92.86879	0.000000
2	287.2937	5.365221	1.092390	93.31818	0.224206
3	300.1126	7.787487	1.007147	89.02621	2.179160
4	309.8869	10.79429	3.152394	83.58511	2.468203
5	326.8490	11.72740	4.421446	78.53759	5.313562
6	336.7278	12.58510	4.306854	75.20607	7.901982
7	342.0555	13.54969	4.660474	73.18590	8.603935
8	348.5483	14.46843	5.321504	71.06310	9.146971
9	356.7818	15.25649	5.605106	68.80385	10.33455
10	364.5799	16.02632	5.793633	66.71165	11.46839

Source: Eviews processed data, 2024

In Table 4.12 it can be seen that the exchange rate in the first period was influenced by itself by 92.86 percent, the gold price by 5.93 percent and political stability by 1.20 percent, while inflation had not contributed to the exchange rate at the beginning of the period. If we look at the first period to the tenth period, the gold price has the largest contribution in terms of influencing the exchange rate, when compared with inflation and political stability. The price of gold had a proportion of influence on the exchange rate of 16.02 percent, inflation had a proportion of influence of 11.46 percent and political stability had a proportion of influence of only 5.79 percent on the exchange rate in the tenth period in Indonesia.

And the results of the Variance Decomposition (VD) analysis of inflation in Indonesia can be seen in the following picture:

TABLE 4.13 RESULTS OF VD INFLATION ANALYSIS IN INDONESIA

Periode	S.E.	D(HE)	D(SP)	D(NT)	D(INF)
1	0.602731	0.022624	3.751567	0.887743	95.33807
2	0.704940	0.447134	4.331570	1.434765	93.78653
3	0.739959	0.405907	6.566424	1.774670	91.25300
4	0.775777	0.456098	6.341691	1.622251	91.57996
5	0.845310	0.400504	5.989784	1.477487	92.13222
6	0.905561	0.359809	6.342658	1.979040	91.31849
7	0.948499	0.328783	6.579275	2.133766	90.95818
8	0.986253	0.315551	6.567735	2.041437	91.07528
9	1.029309	0.309658	6.614262	1.958709	91.11737
10	1.073013	0.292999	6.697610	2.027055	90.98234

Source: Eviews processed data, 2024

In Table 4.13 it can be seen that inflation has an influence on itself of 95.33 percent, political stability of 3.75 percent, the exchange rate of 0.88 percent and the price of gold of 0.022 percent. The analysis results also show that political stability has the largest contribution in influencing inflation when compared to the exchange rate and gold price. This contribution can be seen in the second to tenth periods, political stability has a proportion of influence on inflation of 6.69 percent, the exchange rate has a proportion of 2.02 percent and the price of gold only has a proportion of influence of 0.29 percent on inflation in the tenth period in Indonesia.

5. DISCUSSION

The change in gold prices is more influenced by monetary policies taken from the United States Federal Reserve System, so gold investors in Indonesia pay more attention to global market conditions than domestic political situations. Political uncertainty can lower investor confidence in the Indonesian economy, thereby increasing investment risks and hindering the implementation of economic policies. Political instability also potentially affects overall economic conditions, such as inflation and exchange rates, which have an indirect impact on demand and gold prices in domestic markets. The phenomena that led to political stability in Indonesia had a negative link with the price of gold, namely the revision of the KPK and RKUHP laws and the creation of labour laws, which triggered mass protests and political debates which led to the rupee weakening and increased demand for gold as a safe asset. The treatment of the Covid 19 pandemic has also sparked criticism from governments, causing economic and political uncertainty that has driven the rise in gold prices worldwide. Houcine et al., (2020) and Ranjusha et al., (2017) stated that the exchange rate has no causal relationship with the price of gold while Wicaksono & Arfianto (2022) stated in their research that the value of gold with the rate of exchange has a causal relation. Studies Putri et al., (2022), Lastri (2021) and Sunaryo (2023) also stated, that gold's value with the exchanges rate has a relationship, when currency value decreases demand for gold will increase because investors consider gold as a safer asset thus promoting price increases. Inflation is more influenced by monetary policy, fiscal policy, and the dynamics of domestic supply and demand, while gold prices are more affected by global trends and international market sentiment. In the long run, inflation in Indonesia has a negative and significant influence on gold prices in Indonesia because the Bank of Indonesia has issued a

strict monetary policy to control inflation by raising interest rates so that the attractiveness of investors to gold decreases and causes an increase in returns from other investments. Laduni (2022) stated that inflation often did not have a significant effect on the price of gold in the short term because investors preferred to consider other factors such as interest rates, exchange rates, and geopolitical uncertainty as factors that influenced the short-term gold price.

According to Hesniati et al., (2022) and Karimah & Laulita (2023) political stability with exchange rates has a connection because foreign investors are always looking for a politically stable country. In the short term, political stability and exchange rates in Indonesia have a negative and significant correlation as political uncertainty can raise market concerns about the sustainability and accuracy of economic policies that can affect investor perceptions and capital flows. Inflation in Indonesia has a causal relationship with political stability in Indonesia because when high rates of inflation will increase public spending and can generate public dissatisfaction thus triggering protests and disrupting political Stability when governments face pressure to tackle economic problems due to high inflation. While political stability in Indonesia has no significant influence on inflation in Indonesia as stable political conditions do not directly affect inflation rates. Inflation will be more influenced by economic factors such as monetary policy, supply availability and demand for goods. Research by Maruf et al. (2017) states that in the long term political stability and inflation have co-integration. Indonesian political stability and Indonesia's inflation are interlinked because strong policy stability will create stable economic conditions capable of effectively controlling inflation. On the other hand, low inflation can support political stability by reducing the risk of public dissatisfaction and political pressure associated with economic problems. The results of this study also indicate that in the short term inflation does not affect political stability in Indonesia and, on the contrary, in accordance with the research carried out. (Tjandrasa, 2021). This is because price changes are not immediately responded by the public and government so they do not interfere with political stability. Political stability is more influenced by public policy, overall economic performance, and political issues directly perceived by the public. With rising inflation, rupee purchasing power will decrease, encouraging investors and market players to exchange rupee for foreign currencies that are considered more stable. External factors like the Covid-19 pandemic will increase inflation and exchange rate volatility. A study by Sriwahyuni et al., 2020 stated that in a short-term relationship exchange rates have a positive and insignificant influence on inflation as exchange rate fluctuations indirectly affect prices in the domestic market.

6. CONCLUSION

Based on the results of the discussion and analysis of research analyzing the Relationship Between Gold Prices, Political Stability, Exchange Rates, and Inflation in Indonesia resulted in the following conclusions: there is a unidirectional causality relationship between exchange rates and gold prices, inflation and political stability, and inflation and exchange rates. In the long run between gold prices, political stability, exchange rates, and inflation there is a cointegration equation or has an equilibrium. Political stability has a negative and significant effect on gold prices in the long run. The exchange rate has a positive and significant effect on the price of gold in the long run. And inflation has a negative and significant effect on the price of gold in the long run. The exchange rate in the short term has a positive and significant effect on gold prices in lag 1. Gold prices in the short term have a negative and significant effect on political stability in lag 1 and lag 2. Gold Prices in the short term have a positive and significant effect on Exchange Rates in lag 1 and lag 2. Political stability in the short term has a negative and significant effect on exchange rates in lag 1 and lag 2.

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