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Beyond the Target: Macroeconomic Determinants of Inflation and Implications for The Creative Economy in Indonesia

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ABSTRACT

This study is motivated by the persistent discrepancy between Bank Indonesia's inflation target and actual inflation in Indonesia during the 2019–2024 period. Notable inflation fluctuations - particularly the sharp spike to 5.51% in 2022 driven by global geopolitical conflict, and the unusually low inflation of 1.57% in 2024 reflecting weakened public purchasing power - underscore the need for an in-depth examination of the macroeconomic determinants of inflation. Inflation stability supports the creative economy sector: for several sub-sectors that depend on imported raw materials, exchange rate stability also helps contain fluctuations in production costs. This study aims to determine the short-run and long-run effects of money supply, exports, imports, interest rates, and exchange rates on inflation in Indonesia. A quantitative associative approach was employed using monthly time-series data for the period January 2019 - December 2024 (n = 72 observations), analyzed using the Error Correction Model (ECM) with the assistance of E-Views 10. The results show that money supply has a significant negative effect on inflation in the long run, while exports and interest rates have a significant positive effect in the long run. Imports and exchange rates have a positive but insignificant effect in the long run. In the short run, none of the variables have a significant effect on inflation. These findings indicate that the productive distribution of liquidity by Bank Indonesia has successfully curbed price pressures, while structural export growth and anticipatory interest rate policy are the main drivers of long-run inflation.

INTRODUCTION

Every country certainly desires a strong, stable economy capable of sustainable growth, so that its people can achieve a higher level of welfare. The same holds true for Indonesia. To realize this condition, two key instruments - fiscal policy and monetary policy - play a highly important role. When synergy between fiscal and monetary policy is achieved appropriately, the economy has a greater opportunity to grow in a positive and stable manner [1]. Economic growth reflects an overall increase in economic activity, as seen through rising public income, purchasing power, and consumption patterns for goods and services [2]. This rise in consumption indicates improved welfare; however, it can also generate inflationary pressure if not accompanied by increased production and the availability of goods. When public purchasing power rises significantly, consumption patterns tend to become more consumptive, thereby driving up demand. This condition then causes the prices of goods and services to rise generally, as a response to expansive economic activity [3].

To achieve stability, macroeconomic indicators play a crucial role, one of which is monetary policy [4]. This policy enables the government to control inflation while simultaneously promoting economic growth. Inflation itself can be understood as a continuous increase in the prices of goods and services over a certain period of time; this condition of inflation typically arises from an imbalance between the amount of money in circulation and the availability of goods in the market. Inflation is part of the national economic index that best reflects a country's economic health. A controlled inflation rate can maintain people's purchasing power and support sustainable economic growth. Conversely, excessively high or unstable inflation creates economic uncertainty and reduces public welfare, especially among low-income groups [5]. Bank Indonesia has set an annual inflation target of 2.5%–4.0%, a level deemed sufficient to maintain purchasing power stability and stimulate economic growth. However, Indonesian inflation throughout 2019–2024 fluctuated with

considerable volatility. As shown in Table 1, actual inflation deviated from the target in several years, most markedly in 2022 when the post-pandemic economic recovery collided with the Russia–Ukraine conflict, pushing inflation to 5.51%, far exceeding the 3.0% target. On the other hand, 2024 recorded inflation of only 1.57%, below the lower limit of the 2.5%–3.5% target, indicating structural weakening of domestic demand.

Table 1. Actual Inflation and Indonesia's Inflation Target for 2019–2024

Year	Inflation Target	Actual Inflation
2019	3.50%	2.72%
2020	3.00%	1.68%
2021	3.00%	1.87%
2022	3.00%	5.51%
2023	3.00%	2.61%
2024	2.50%	1.57%

Inflation is influenced by a number of macroeconomic factors. According to the Quantity Theory of Money (Fisher), excessive growth of the money supply is a primary trigger of inflation because excess liquidity pushes aggregate demand beyond production capacity [6]. When money circulates too rapidly, it reduces the value of money itself. Public purchasing power weakens because the same nominal amount of money can no longer purchase as many goods as before. In the long run, this situation forces people to hold larger amounts of money to meet their daily needs, making inflation more pronounced and potentially disrupting national economic stability. Conversely, when the central bank is able to carefully manage the volume of money in circulation - through interest rate policy, open market operations, or credit regulation - the prices of goods and services can remain stable. A balance between the money supply and production capacity creates a healthier economic environment: the public retains confidence in the currency, businesses feel more secure investing, and the economy can grow without disruptive price spikes.

Keynesian theory further posits that a sustained increase in exports can trigger demand-pull inflation when domestic production capacity is unable to keep pace with rising demand. An increase in a region's exports indicates growing foreign demand for local products. As foreign demand rises, so does the need for domestically produced goods. This condition stimulates business activity and creates more employment opportunities; however, once domestic production capacity approaches its maximum limit, industries cannot immediately increase output to meet surging demand. As a result, a larger share of output is diverted to meet export demand, reducing the supply of goods available in the domestic market [7]. With respect to imports, when the prices of goods abroad rise, the prices of imported goods entering Indonesia also increase [8]. This increase affects not only the cost of international trade transactions but also directly impacts domestic production costs. Industries that rely heavily on imported raw materials experience the greatest pressure, as they must pay higher costs to obtain the materials they need; consequently, firms are often forced to adjust their selling prices to offset rising production costs. If this condition persists over the long term, cost structures across various sectors may rise and ultimately trigger inflation. High import costs force firms to bear heavier production burdens. Since firms cannot fully absorb this increased cost without reducing their profits, the burden is passed on to consumers through price adjustments. This process contributes to rising inflation, particularly in sectors that are highly dependent on imported inputs [6].

From the exchange-rate perspective, a depreciation of the rupiah raises the price of imported goods and affects domestic prices through the exchange-rate pass-through mechanism [9]. Purchasing Power Parity (PPP) theory explains the relationship between a country's inflation rate and its exchange rate. This theory holds that when a country's inflation rate is higher than that of other countries, its currency tends to depreciate [10]. This depreciation is necessary so that public purchasing power for goods and services, both domestic and foreign, returns to a balanced position. The core principle of PPP theory is maintaining purchasing-power equality: if domestic prices rise faster, the currency's value must fall so that consumers retain a balanced price incentive when purchasing goods from other countries. This theory directly reflects inflation differentials between countries. Countries that succeed in keeping inflation low tend to have stronger and more stable currencies, while countries with high inflation typically experience currency depreciation. Meanwhile, the interest rate serves as the primary instrument for managing inflation expectations through the BI Rate.

In terms of its implications, stable inflation conditions have an important impact on the development of the creative economy in Indonesia. The creative economy has become a strategic pillar in driving national economic growth. Sub-sectors under the creative economy sector, including culinary, design, film, animation, digital content, and fashion, make a substantial contribution to economic growth and employment distribution. In 2025, the creative economy was recorded to have contributed IDR 1,757.87 trillion, exceeding the national economic growth rate of 5.11% [11], and absorbed 27.4 million workers [12]. Sub-sectors within the creative economy are dependent on macroeconomic conditions, as fluctuating exchange rates lead to increased production costs. Micro, small, and medium enterprises (MSMEs) are also affected by changes in bank interest rates. On the export side, creative economy products are likewise affected, as this sector represents a continuously growing and developing non-commodity segment of the national economy. When export growth drives price increases through rising foreign demand and export revenue, exporters in the creative sector benefit from a larger export base, yet remain exposed to demand-pull inflationary pressure. Based on this explanation, the dynamics of export, import, money supply, interest rate, and exchange rate factors not only affect inflation but also have implications for the sustainability of the creative economy.

Nevertheless, studies that simultaneously analyze the short-run and long-run dynamics of these five variables using ECM for the 2019–2024 period - which spans the pandemic phase, recovery, peak inflation, and disinflation - remain limited. This study seeks to fill that gap by providing a comprehensive ECM estimation.

The research questions guiding this study are: (1) Do money supply, exports, imports, interest rates, and exchange rates have a significant effect on inflation in Indonesia in the long run? (2) Do these variables have a significant effect on inflation in the short run? The findings are expected to be useful for monetary policy formulation, the development of academic literature, and future research directions for creative economy.

METHODS

This study employs a quantitative approach with an associative research design, aiming to analyze the causal relationships between macroeconomic variables and inflation in Indonesia [13]. Indonesia was selected as the research setting because of its complex economic dynamics and the phenomenon of discrepancy between the inflation target and actual inflation during the study period.

Research Variables

The dependent variable in this study is Indonesia's monthly inflation rate (Y). The independent variables consist of: (X1) the broad money supply (M2, in billion rupiah); (X2) exports (in billion USD); (X3) imports (in billion USD); (X4) the BI Rate interest rate (%); and (X5) the rupiah exchange rate against the USD (IDR/USD).

Data and Sample

Secondary data were obtained from the official publications of Bank Indonesia (BI) and the Central Statistics Agency (BPS). The sample comprises 72 monthly observations from January 2019 to December 2024, selected through purposive sampling based on data availability and relevance to the study period. This time span was deliberately chosen because it captures one complete inflation cycle: pre-pandemic stability, the pandemic recession, recovery, peak inflation, and disinflation

Analysis Technique: Error Correction Model (ECM)

This study applies the Error Correction Model (ECM) because economic time-series data are generally non-stationary, and ECM allows for the simultaneous estimation of short-run dynamics together with long-run equilibrium relationships. The analytical stages employed are as follows [14]: First, a multicollinearity test was conducted using the Variance Inflation Factor (VIF); the model is considered free of multicollinearity if $VIF < 10$ and the Tolerance value > 0.10 . Second, the Augmented Dickey-Fuller (ADF) stationarity test was applied at the level and first-difference stages to ensure that all variables share the same order of integration, a prerequisite for cointegration testing [15]. Third, the Johansen Cointegration Test was used to detect long-run equilibrium relationships; cointegration is confirmed when the trace statistic exceeds the critical value at the 5% significance level. Fourth, the optimal lag length was determined using the Akaike Information Criterion (AIC), the Schwarz Information Criterion (SIC), and the Hannan-Quinn Criterion (HQ), selecting the smallest value to ensure accurate estimation. Fifth, the Granger Causality Test was applied to identify the direction of the causal relationships between variables.

The long-run ECM equation formulated is as follows:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + e_t \quad (1)$$

The short-term ECM equation is:

$$\Delta Y_t = \beta_0 + \beta_1 \Delta X_{1t-1} + \beta_2 \Delta X_{2t-1} + \beta_3 \Delta X_{3t-1} + \beta_4 \Delta X_{4t-1} + \beta_5 \Delta X_{5t} + \lambda ECT_{t-1} + e_t \quad (2)$$

Where Y is inflation, X_1 - X_5 are the independent variables as defined above, ECT is the error correction term derived from the long-run residuals, λ is the adjustment-speed coefficient, and e_t is the error term. All analyses were conducted using E-Views 10.

RESULTS AND DISCUSSION

Data and Sample

Based on the descriptive statistical analysis, the characteristics of the data for each variable are as follows:

Table 2. Descriptive Statistics Results

Measure	Inflation	Money Supply	Exports	Imports	Interest Rate	Exchange Rate
Mean	2.803	7.489	1.909	1.772	4.885	14855
Maximum	5.95	9.21	2.78	8.4	6.25	16421
Minimum	1.32	5.64	1.05	1	3.5	13662
Std. Deviation	12.247	10.992	0.4487	0.8575	10.738	715.958

The descriptive statistics illustrate the distribution characteristics of each variable over the 72-month observation period. Inflation ranged from 1.32% to 5.95%, with an average of 2.94%. The money supply (M2) grew consistently from IDR 5.64 trillion to IDR 9.17 trillion, reflecting an accommodative monetary policy. Export values fluctuated between USD 1.17 billion and USD 2.79 billion, peaking in August 2022 amid high global commodity prices. Import values ranged from USD 1.00 billion to USD 2.22 billion, with an outlier in May 2020 of USD 8.40 billion caused by emergency procurement of pandemic-related needs. The BI Rate moved within a range of 3.50%–6.25%, while the rupiah exchange rate ranged from IDR 13,542 to IDR 16,399 per USD.

Stationary Test

A unit-root test was conducted to determine whether the data used are stationary. The stationarity test results are as follows.

Table 3. Level Stationarity Test Results

Variable	t-statistic	Prob.	Description
Inflation	-2.52	0.115	Non-stationary
Money Supply	-0.669	0.847	Non-stationary
Exports	-1.412	0.571	Non-stationary
Imports	-8.632	0.000	Stationary
Interest Rate	-1.324	0.613	Non-stationary
Exchange Rate	-2.221	0.2	Non-stationary

The ADF test results at the level show that all six variables are non-stationary at $I(0)$; the test therefore proceeds to the first difference, $I(1)$, as follows.

Table 4. First-Difference Stationarity Test Results

Variable	t-statistic (1st Diff.)	Prob.	Description
Inflation	-2.535	0.111	Non-stationary
Money Supply	-12.215	0.000	Stationary
Exports	-8.537	0.000	Stationary
Imports	-8.18	0.000	Stationary
Interest Rate	-8.886	0.000	Stationary
Exchange Rate	-3.844	0.004	Stationary

Table 4 shows that after testing at the first difference, every variable reached a stationary condition except the dependent variable (inflation), whose probability value remains above 0.05. A stationarity test at the second-difference level is therefore required.

Table 5. Second-Difference Stationarity Test Results

Variable	t-statistic (2nd Diff.)	Prob.	Description
Inflation	-12.438	0.000	Stationary
Money Supply	-7.436	0.000	Stationary
Exports	-11.002	0.000	Stationary
Imports	-7.068	0.000	Stationary
Interest Rate	-10.024	0.000	Stationary
Exchange Rate	-7.542	0.000	Stationary

The stationarity test results in Table 5 show that after testing at the second difference, every variable - both independent and dependent - reached a stationary condition. This uniform order of integration is a necessary precondition before conducting the Johansen cointegration test.

Cointegration Test

This study employs the Johansen System method to test for the existence of a long-run relationship among the variables by comparing the trace statistic against the critical value at the 5% significance level. A summary of the cointegration test results is presented below.

Table 6. Cointegration Test Results

Trace Statistic	0.05 Critical Value	Prob.	Description
117.812	95.753	0.0007	Cointegrated

The Johansen Cointegration Test identifies at least five cointegrating vectors at the 5% significance level (trace statistic > critical value), confirming the existence of a long-run equilibrium relationship among the six variables. This confirmed cointegration justifies the application of ECM in this study

Long-Run ECM Estimation

To examine whether each predictor variable is able to predict the response variable in both the long run and the short run, a Granger causality test was conducted. The following presents the test results

$$\hat{Y}_t = -3.004 - 1.19X_{1t} + 3.025X_{2t} + 0.12X_{3t} + 0.537X_{4t} + 0.0004X_{5t} + e_t$$

The coefficient of determination ($R^2 = 0.381$) indicates that the five independent variables jointly explain 38.1% of the variation in inflation in the long run. The F-test confirms the overall significance of the model ($F = 8.141$; sig. = 0.000). Table 7 summarizes the partial (t-test) results of the long-run ECM.

Table 7. Long-Run ECM Partial Test Results

Variable	Coefficient	Sig.	Description
Money Supply (X_1)	-1.190	0.000	Significant
Exports (X_2)	3.025	0.000	Significant
Imports (X_3)	0.12	0.399	Not Significant
Interest Rate (X_4)	0.537	0.000	Significant
Exchange Rate (X_5)	0.0004	0.175	Not Significant

Based on the long-run ECM equation obtained, the constant value in the model is -3.004. This indicates that when the money supply, exports, imports, interest rate, and exchange rate are all equal to zero, the inflation variable has a value of -3.004. Accordingly, inflation in the long run is strongly influenced by changes in the macroeconomic variables included in the model; in other words, inflationary pressure emerges when changes occur in the money supply, export and import activity, interest rates, and the exchange rate. The variables exports (X_2), imports (X_3), interest rate (X_4), and exchange rate (X_5) have positive coefficients of |3.0247|, |0.1198|, |0.5371|, and |0.0004|, respectively. This means that if exports, imports, interest rates, and the exchange rate increase by one unit, inflation will increase in the long run according to the respective coefficient value of each variable, assuming no other variables exert an influence. The money supply variable (X_1) has a negative coefficient of -1.190. This indicates that a one-unit increase in the money supply will lead to a decrease in inflation in the long run according to the coefficient value, assuming no other variables exert an influence.

Short-Run ECM Estimation

The short-run ECM estimation produces the following equation:

$$\Delta Y_t = 0.007 - 0.358\Delta X_{1t-2} + 0.28\Delta X_{2t-2} - 0.016\Delta X_{3t-2} + 0.226\Delta X_{4t-2} + 0.0002\Delta X_{5t-2} - 0.134ECT_{t-1} + e_t$$

The short-run equation results show that when there is no change in the predictor variables, the value of the response variable, namely inflation, is 0.007. For the money supply and import variables, which have negative values, a change occurring two periods earlier will decrease inflation by 0.358 and 0.016, respectively. Meanwhile, a change occurring two periods earlier in the other variables - namely exports, interest rate, and exchange rate - will increase inflation by the respective coefficient value of each parameter in the model. The ECT coefficient value of 13.4% indicates that the disequilibrium between the Y and X variables in the previous period is corrected back toward long-run equilibrium. However, this figure is relatively low, as it is below 20%.

Table 8. Short-Run ECM Partial Test Results

Variable	Coefficient	Sig.	Description
Money Supply (X_1)	-0.358	0.343	Not Significant
Exports (X_2)	0.280	0.132	Not Significant
Imports (X_3)	-0.015	0.578	Not Significant
Interest Rate (X_4)	0.225	0.595	Not Significant
Exchange Rate (X_5)	0.000	0.147	Not Significant

Effect of Money Supply on Inflation in Indonesia

The Money supply has a significant negative effect on inflation in the long run ($\beta = -1.190$; $p = 0.000$), but an insignificant effect in the short run ($p = 0.343$). This long-run negative relationship contradicts the prediction of Irving Fisher's Quantity Theory of Money, which states that an increase in the money supply will drive up aggregate demand and, ultimately, prices [6]. This finding, however, is consistent with the Solow-Swan Neoclassical growth framework: when increased liquidity is channeled productively into capital accumulation and expanded production capacity, aggregate supply grows in tandem with demand, thereby containing inflationary pressure [16]. During the study period, Bank Indonesia implemented quantitative easing of IDR 88.91 trillion in 2021 and purchased IDR 108.43 trillion of Government Securities in the primary market. M2 grew by 11.5% (yoy) in April 2021. Nevertheless, inflation remained low at 1.87% because household consumption had not yet fully recovered from the pandemic. This explains why liquidity expansion did not automatically trigger a rise in prices. This result is in line with the findings of Anilah, who identified a significant negative relationship between money supply and inflation in Indonesia [17].

This is consistent with Solow-Swan Neoclassical theory, which emphasizes that economic growth accompanied by increased capital and production efficiency can reduce inflationary pressure even as the money supply increases [16]. This condition reflects the monetary authority's ability to effectively manage liquidity growth, so that an increase in the money supply can be directed toward productive economic activity without generating excessive price pressure. This indicates that the monetary policy transmission mechanism does not operate directly, but rather through a gradual process. In practice, the distribution of the money supply can effectively support the creative economy production process, for example through people's business credit schemes and other similar programs, without exerting a substantial impact on inflation. The analysis results, which show a negative relationship between the two variables, indicate that the expansion of financing for creative MSMEs can continue to be implemented without compromising price stability, provided that credit is properly targeted toward creative economy actor

Effect of Exports on Inflation in Indonesia

Exports have a significant positive effect on inflation in the long run ($\beta = 3.025$; $p = 0.000$), but an insignificant effect in the short run ($p = 0.132$). This delayed transmission can be explained by contract-based pricing mechanisms and the buffer stocks maintained by firms against the flow of export revenue into domestic consumption. In the long run, sustained export growth drives increases in producer income and foreign-exchange reserves, which in turn strengthen public purchasing power and trigger demand-pull inflation, consistent with the logic of Keynesian theory [7]. Indonesia's export performance reached an all-time high in March 2022, at USD 26.50 billion, growing 44.36% (yoy), driven by a surge in coal prices to USD 330.97 per ton (October 2022) and a 16.72% monthly increase in CPO prices (March 2022) (databoks.katadata.co.id, n.d.). This export surge substantially boosted producer income and foreign-exchange reserves; however, its inflationary impact only materialized gradually, consistent with the long-run significance found in this study. This finding aligns with research conducted by Harsono, who found a positive effect of exports on inflation using ECM [5].

Overall, this study shows that exports have a significant effect on inflation in the long run but no significant impact in the short run. This finding indicates that exports act as a structural factor that gradually affects the economy, rather than a factor that directly triggers price changes within a short period. From the perspective of Solow-Swan Neoclassical growth theory, an increase in exports can encourage the use of capital goods, expand the scale of production, and increase demand for factors of production [16]. If the growth of export activity outpaces increases in production capacity and technological progress, the rise in aggregate demand cannot be fully matched by supply. This condition has the potential to generate price pressure and drive inflation in the long run. Conversely, the insignificant effect of exports on inflation in the short run indicates that the economy is still able to make initial adjustments to increased export demand. Such adjustments can occur through the use of existing stocks, optimization of existing production capacity, and pricing mechanisms that do not change immediately. The current growth condition of creative economy products, which is aligned with national economic growth, also contributes to the demand-pull inflation mechanism. The growth of this sector further increases the country's foreign exchange reserves, raises the income of creative economy actors, and improves overall economic conditions. This is driven by foreign market demand exceeding domestic supply capacity in the short run. Therefore, to build positive value from the demand for creative economy products, synergy between industry actors and the government is also required.

Effect of Imports on Inflation in Indonesia

Imports do not have a significant effect on inflation, either in the long run ($p = 0.399$) or in the short run ($p = 0.578$). This result is inconsistent with Suparmono's argument that rising prices of goods abroad can increase the price of imported goods, thereby affecting domestic production costs, particularly for industries dependent on imported raw materials. In this view, higher production costs may lead producers to raise selling prices, which in the long run can trigger inflation through the cost-push inflation mechanism [6]. This result reflects the structure of Indonesia's imports, which are dominated by capital goods and raw materials, accounting for more than 70% of total imports. This type of import serves to support domestic production capacity and expand the supply side, rather than directly driving up consumer prices [9]. In addition, the government's continued promotion of import-substitution policies has helped reduce dependence on consumer-goods imports, which are more vulnerable to price fluctuations. This finding is consistent with research by Harahap et al., who likewise found no significant effect of exports and imports on inflation in Indonesia over a comparable period [18].

Several sub-sectors within the creative economy are highly relevant to Indonesia's import conditions. The need for raw materials and specialized equipment significantly affects the costs incurred by creative economy actors. When the import prices of these needs rise, this has an impact on increasing production costs in sub-sectors such as fashion, printing, and others. Consequently, if left unaddressed, this can substantially disrupt the stability of the production process, and such disruption is difficult to manage in the short run, particularly for small-scale businesses with thin margins and limited bargaining power. These findings also indicate that import price volatility affects

the input costs of creative sub-sectors. Therefore, to reduce external costs, emphasis needs to be placed on the importance of developing local supply chains within the creative economy sector.

Effect of Interest Rate on Inflation in Indonesia

Interest rates have a significant positive effect on inflation in the long run ($\beta = 0.537$; $p = 0.000$), but an insignificant effect in the short run ($p = 0.595$). This positive relationship indicates that movements in the BI Rate are largely reactive: Bank Indonesia raises interest rates in response to inflationary pressure that has already occurred or is anticipated, rather than as a cause of inflation. The significant positive effect of interest rates on inflation is consistent with the Fisher Effect theory, which states that nominal interest rates adjust to changes in anticipated inflation [9]. According to this theory, when inflation rises, financial institutions and monetary authorities raise nominal interest rates to preserve the stability of real interest rates. In the long run, interest-rate increases more accurately reflect a response to inflationary pressure that has occurred or is expected, rather than a cause of inflation itself. This indicates that interest-rate adjustment policy is implemented adaptively in response to inflation dynamics. As inflation expectations rise, interest-rate adjustments serve as a mechanism to protect the real value of returns on investments and loans.

The transmission lag of monetary policy is an inherent feature: the public and businesses need time to adjust their consumption and investment behavior following an interest-rate change. Bank Indonesia's aggressive tightening policy throughout 2022–2023, which raised the BI Rate by 225 basis points from 3.50% to 5.75%, was a front-loaded and pre-emptive measure to control inflation expectations, which ultimately succeeded in bringing inflation back within the target range in 2023 (BI Tahan Suku Bunga 5.75 Persen pada Februari 2023, n.d.). In carrying out their business operations, creative MSMEs generally require additional financing through microcredit and bank financing. A condition of high interest-rate increases can raise the burden on creative MSME actors, which has implications for increased production cost burdens, particularly given that MSMEs typically have limited capital and assets. This can result in an increased installment burden that must be borne by the business. In the long run, the resulting high production costs affect internal business operations, such as workforce reductions and suboptimal production processes. Therefore, a more appropriate interest rate policy is needed, one that takes into account its impact on each sub-sector as well as overall price stability.

Effect of Exchange Rate on Inflation in Indonesia

The exchange rate does not have a significant effect on inflation, either in the long run ($p = 0.175$) or in the short run ($p = 0.147$). This finding indicates a weak exchange-rate pass-through mechanism in Indonesia during the study period. Bank Indonesia succeeded in maintaining rupiah stability through a series of macroprudential instruments, including Bank Indonesia Rupiah Securities (SRBI), Bank Indonesia Foreign Currency Securities (SVBI), Bank Indonesia Foreign Currency Debt Securities (SUVBI), and bilateral currency-swap agreements. In addition, the tendency of businesses not to immediately adjust selling prices in response to short-run exchange-rate fluctuations, particularly for goods under medium- to long-term import contracts also contributed to the limited transmission of exchange-rate movements to domestic price levels [1].

These results are not fully consistent with Purchasing Power Parity (PPP) theory, which holds that inflation differentials between countries will be reflected in changes in the exchange rate. Under this theory, a depreciating exchange rate should be associated with rising domestic inflation as a form of purchasing-power adjustment [10]. However, during the 2019–2024 study period, the exchange rate was not able to significantly influence the price level. This condition indicates that exchange-rate movements more strongly reflect dynamics in the monetary sector and external factors, such as global economic conditions and international financial markets, without exerting direct pressure on domestic goods and services prices.

Global market competition can benefit creative economy producers when the rupiah exchange rate tends to remain stable. This enables exports of creative economy products, both on a small and medium scale, to be priced more appropriately in the global market, thereby ensuring price certainty amid exchange rate fluctuations throughout the export process. This predictability in product value is more advantageous for creative MSMEs, given that their internal conditions still lack the capacity for exchange rate risk management. Stability in the rupiah exchange rate supports input costs and also facilitates access to global markets. Although the results are not statistically significant, the rupiah exchange rate nevertheless plays a role in the competitiveness of the creative economy sector.

CONCLUSIONS

This study analyzes the short-run and long-run effects of money supply, exports, imports, interest rates, and exchange rates on inflation in Indonesia during the period January 2019–December 2024, using the Error Correction Model (ECM) with 72 monthly observations. Based on the test results, five main findings were obtained. First, money supply has a significant negative effect on inflation in the long run, reflecting Bank Indonesia's success in channeling expansive liquidity into productive sectors, thereby containing price pressure. Second, exports have a significant positive effect on inflation in the long run, illustrating a demand-pull inflation mechanism that emerges gradually alongside rising income and purchasing power driven by export activity. Third, imports have no significant effect in either the long run or the short run, reflecting Indonesia's import structure, which is dominated by capital goods and raw materials that primarily support supply rather than drive up prices. Fourth, interest rates have a significant positive effect in the long run, confirming that BI Rate adjustments constitute an anticipatory monetary policy response with a notable transmission lag. Fifth, the exchange rate has no significant effect in either the long run or the short run, demonstrating the effectiveness of Bank Indonesia's exchange-rate stabilization instruments and the weak pass-through of the exchange rate to domestic prices.

For policymakers, these findings recommend continuing the strategy of productive liquidity distribution accompanied by close monitoring to ensure that liquidity genuinely flows into the real sector. Interest-rate policy should be anticipatory and expectation-based rather than merely reactive. Export growth needs to be balanced with investment in domestic production capacity to prevent long-run demand-pull inflationary pressure. For future researchers, it is recommended to extend the observation period to at least ten years, incorporate additional macroeconomic variables, and consider regional or sectoral disaggregation so that the heterogeneous dynamics of inflation can be better captured.

Based on the findings of this study, macroeconomic factors have an impact on the creative economy sector in Indonesia, even though this impact was not measured directly. Financing schemes for the creative economy need to be designed with appropriate strategies to avoid contributing to elevated inflation risk, so that credit disbursement can be properly targeted, particularly given this sector's dependence on bank financing channeled through credit. In addition, the growth of creative product exports can also contribute to improving Indonesia's economy; nevertheless, adequate supply capacity must also be in place. The finding that imports value has no significant effect in the short run should not be interpreted as meaning that the creative economy sector is unaffected, since this sector also depends on import value for its production processes. Analyzing the implementation of macroeconomic variables on inflation within the creative economy sector requires further study incorporating creative economy data.

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