

Determinants of Inflation in Indonesia: Evidence from Monetary Policy and Fiscal Institutions

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ABSTRACT

This article determines inflation through monetary policy and fiscal institutions. Fiscal institutions help anticipate sudden inflationary shocks, including those arising from government policies, natural disasters, and disruptions to global supply chains—factors beyond Bank Indonesia's control as the monetary authority. This study uses regression and correlation methods on panel data from 10 Indonesian provinces covering 2000 to 2020. The instruments representing monetary policy are the benchmark interest rate (BI-Rate), Bank Indonesia's balance sheet (specifically securities purchases and sales in the financial market; purchases increase assets, while sales decrease them), and imports. The fiscal institution is represented by the National and Regional Inflation Control Teams (TPIN/D). In this process, a stationarity test is conducted using the Augmented Dickey-Fuller test to ensure no spurious regression occurred. The findings indicate that the BI Rate, Bank Indonesia's balance sheet, imports, and TPIN/D simultaneously and significantly affect inflation. Furthermore, each of these independent variables has a significant and positive effect on inflation, except for imports, which have no influence on inflation.

INTRODUCTION

Inflation is a phenomenon that exists in all countries, whether developed or developing. When setting economic growth targets, policymakers always take inflation into account. Several studies have also shown a relationship between these two variables. Behera, who conducted research in South Asian countries using time-series data from 1980 to 2012, also found a strong correlation between economic growth and inflation across these countries (Behera, 2014). Similarly, Xiao examined the relationship between inflation and economic growth in China. (Xiao, August 2009) Similarly, Thorvaldur Gylfason's study of 160 countries from 1985 to 1994, based on World Bank data, also found that high inflation is associated with low economic growth (Gylfason, June 1999).

From this, we can draw a preliminary conclusion that inflation is like a vehicle's lubricant – more of it is needed when the vehicle is driven at high speeds and on long journeys. Inflation is not merely, as Milton Friedman described it, an “old disease” that the United States has endured for thousands of years; from a technical standpoint, stopping inflation is not difficult (Nelson, 2007).

However, inflation must be carefully controlled because, if left unmonitored, it can spiral into hyperinflation, in which prices can rise by as much as 500 percent, as experienced by Germany in 1923 and Zimbabwe in 2008 (Mankiw, 2010). As Milton Friedman states, the costs of controlling inflation will be far smaller than those incurred if inflation were allowed to run rampant (Nelson, 2007).

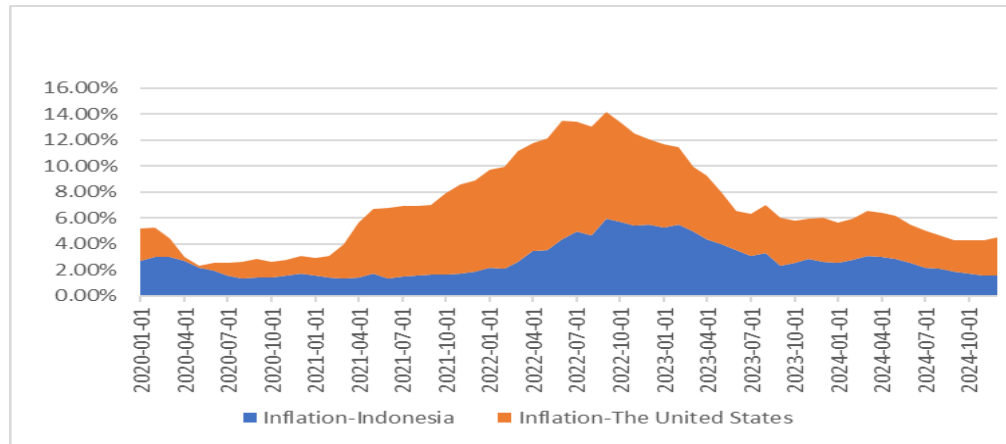
Milton Friedman boldly says that inflation control must be achieved through monetary policy and need not be supported by fiscal policy at all, since monetary policy can curb inflation. This is because monetary policy has a greater and more rational impact on aggregate spending than fiscal policy. (Nelson, 2007) In line with Milton Friedman's view, Frederic S. assesses the relationship between money growth and inflation – both in the short and long term – as a monetary instrument. (Mishkin, 2016)

In practice, the United States employs a monetary policy approach to control inflation, using the Federal Funds Rate (FFR) as an instrument set by the Federal Open Market Committee (FOMC). The Fed uses the FFR as its primary tool for controlling inflation (System, August 2020). Second, it controls the Fed's balance sheet (Management-US, April 2024) through open market operations by buying and selling federal government securities (Walsh, 2002).

However, Joseph S. Stiglitz, the 2001 Nobel Prize winner in economics, has stated that several additional risks could drive inflation beyond the reach of monetary policy tools. This could raise inflation expectations and potentially lead to excess aggregate demand, which raises prices (Stiglitz, July 9, 2024), meaning that relying solely on monetary policy instruments to control inflation will not bring inflation down quickly; it will take time.

In Indonesia, which targets high economic growth with low inflation of around 2.5 percent plus or minus 1 (Indonesia B., Inflation Data, 2026) (Indonesia K. K., August 6, 2025), Indonesia employs both monetary policy and fiscal institutional approaches to control inflation. The fiscal institution is employed to control inflation in response to shocks beyond Bank Indonesia's control, such as

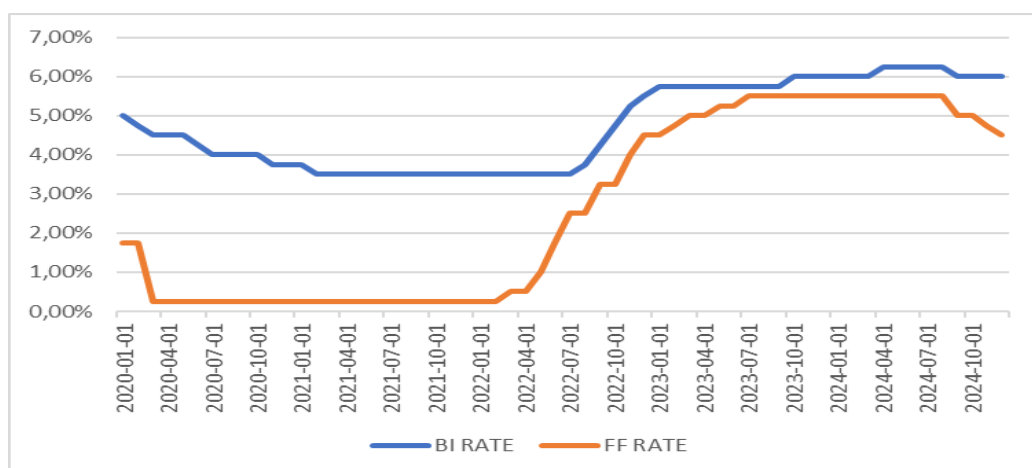
climate change, natural disasters, El Niño, and disruptions to global supply chains. These fiscal institutions are represented by the National and Regional Inflation Control Teams (TPIN/D), which are formed by Bank Indonesia and the government, through the Ministry of Finance, and are designed to address and mitigate the nonmonetary causes of inflation.



Source: 1. Inflation Data of Bank Indonesia, December 2024
2. Current US Inflation Rates, 2000-2024, US Inflation Calculator.

Graph 1: Indonesia Inflation vs America

For comparison, the graph above shows the narrowing gap in benchmark interest rates between the Indonesian and U.S. governments as part of their efforts to control inflation. Then, the following line graph, in which the lines converge, indicates that the difference (gap) between benchmark interest rates is narrowing.



Source: 1. BI Rate Data from Bank Indonesia, 2020-2024.
2. Trading Economics, the Fed Funds Rate of the United States, 2026.

Graph 2: BI Rate vs FF Rate

In other words, controlling inflation through monetary instruments alone can reduce it, but only over a fairly long period – meaning the reduction process is slow. The results differ when inflation control employs a combination of monetary policy and fiscal institutions; inflation can be reduced more quickly. As Indonesia uses both approaches, the results have been quite remarkable, with its inflation rate far lower than that of the United States. Likewise, the gap between Indonesia's benchmark interest rate (BI Rate) and the United States' benchmark interest rate (Fed Funds Rate) is narrowing. Therefore, this phenomenon warrants urgent research.

To complete the two graphs above, the summary of data from the following tables illustrates the empirical gap between them.

Table 1: Indonesian Inflation Vs American Inflation

	INDONESIA INFLATION	AMERICAN INFLATION	Gap
31/01/2020	2.68%	2.50%	0.18%
31/12/2020	1.68%	1.40%	0.28%
31/12/2021	1.87%	7.00%	-5.13%
31/12/2022	5.51%	6.50%	-0.99%
31/12/2023	2.61%	3.40%	-0.79%
31/12/2024	1.57%	2.90%	-1.33%

Source: 1. Inflation Data of Bank Indonesia, December 2024
2. Current US Inflation Rates, 2000-2024, US Inflation Calculator.

The table above shows that Indonesia's inflation rate is much lower than the United States'.

Table 2: BI Rate VS Fed Funds Rate

	BI RATE	FF RATE	Gap
31/01/2020	5.00%	1.75%	3.25%
31/12/2020	3.75%	0.25%	3.50%
31/12/2021	3.50%	0.25%	3.25%
31/12/2022	5.50%	4.50%	1.00%
31/12/2023	6.00%	5.50%	0.50%
31/12/2024	6.00%	4.50%	1.50%

Source: 1. BI Rate Data from Bank Indonesia, 2020-2024.
2. Trading Economics, the Fed Funds Rate of the United States. 2026

As shown in the table above, the gap between Indonesia's benchmark interest rate and the United States' is narrowing. This indicates that Indonesia does not rely solely on monetary instruments (among others, interest rates) to determine and control inflation.

Given the limited research on how monetary policy and fiscal institutions determine inflation, this study may represent a novel contribution.

However, this study does not aim to compare inflation determination in Indonesia and the United States. Rather, this research aims to identify the role of monetary policy and fiscal institutions in determining inflation in Indonesia. The variables representing monetary instruments are the BI Rate and Bank Indonesia's balance sheet (in terms of buying and selling financial securities in

the financial markets; buying increases assets on the balance sheet and vice versa), as well as imports. Meanwhile, the variable representing the fiscal institution is TPIN/D.

LITERATURE REVIEW

Based on the description outlined above, the literature review for this study can be formulated as follows:

- A. The BI rate, Bank Indonesia's balance sheet, imports, and the National/Regional Inflation Control Teams (TPIN/D) simultaneously determine and influence inflation.
- B. Partially, the BI Rate has a positive effect on inflation. This is in line with a study conducted by Gragon Paun et al. from 1987 to 2011 for China and the United States, using the econometric theory of multiple regression, where the results show that in the United States a 1% increase in interest rates results in a 0.6% rise in inflation, but in contrast, inflation figures in China never accurately reflect reality, as China has full control over its financial and banking institutions, allowing for the optimal implementation of monetary policy without distortion. (Gragon, Michaela, & Stefan, June 2013) This is similar to research by Anthony Marino Roza, which finds that in the United States, the federal funds rate has the strongest influence on inflation, with a beta coefficient of 0.162. In Germany, the most significant variable influencing inflation is the interest rate, with a beta coefficient of 0.264, whereas in China, the interest rate's influence on inflation is 0.119. (Roza, 2020) The same result is also found in the study by Nayef Al-Shammari and Mohammed Al-Sabaey from Kuwait, 1970 to 2007, across 59 countries, employing a panel data model with a random-effects specification. They found that, among other factors, the main determinants of inflation in developed countries are interest rates. (Al-Shammari & Al-Sabaey, February)
- C. Bank Indonesia's balance sheet has a positive influence on inflation. Galariotis et al. conducted a study on the effects of the European Central Bank's (ECB) unconventional monetary policy (balance sheet expansion) during the European Union crisis on economic expectations, including inflation expectations. They found that these unconventional measures had a significant effect on changes in expectations, such as inflation, particularly in the core countries (Germany, France, the Netherlands, Belgium, and Austria). (Galariotis, Makrichoriti, & Spyrou, 2018) and (Meramveliotakis & Manioudis, January 31, 2021). Similarly, a study by Meinusich et al. that measured the impact of QE (increase of bank central balance sheet) on several monetary variables, including inflation, found that QE shocks led to lower interest rates, higher stock prices, and increases in real economic activity and inflation (Meinusich & Tillmann, 2016).
- D. Imports have influenced inflation in the positive direction. A study on the role of imports in determining inflation was conducted by Thomas D. Corrigan, who researched "The Relationship Between Import Prices and Inflation in the United States." Overall, this study supports the view that import prices have played a significant role in explaining inflation patterns

in recent years. Furthermore, a 10 percent change in non-oil import prices has led to a relatively rapid 1 percent change in the PPI (producer price index). For consumer prices, the response was only one-third of the producer price response. (Corrigan, 2005).

In Sweden, the study also demonstrates that import inflation has played a significant role in price developments in the Swedish economy. At the same time, domestic inflation has also risen sharply. (Lindskog & Loveus, September 2023) Similarly, a study in Turkiye shows that import price shocks had a substantial and persistent impact on inflation and profit share, particularly between 2018 and 2023 (Yilmaz & Bulut, September 2025). A study conducted in Afghanistan also indicates that both imports and exports significantly affect the CPI in the short and long term, based on observations from 1990 to 2023 using the Autoregressive Distributed Lag (ARDL) model (Jingjing, Mowahed, & Zada, April 2025).

Research in Indonesia shows that, in the short term, the inflation rate is influenced, among other factors, by the previous year's imports. However, in the long term, the impact of imports is not significant, according to an analysis of data from 1992 to 2021 using an autoregressive distributed lag model (Leasiwal, Hanoebon, Assel, & Tobin, February 2025). In contrast to findings from a study conducted in four ASEAN countries (Timor-Leste, Laos, Cambodia, and Myanmar) from 2003 to 2024, imports and exports had no statistically significant effect on inflation (Hamdi, Hasyim, Syafii, & Tanjung, September 2024). In Pakistan, the results of an analysis conducted by Ahmed et al. indicate that, in the long run, a 1 percent increase in imports leads to a 0.57 percent rise in inflation. However, the results of the Granger causality and Toda-Yamamoto causality tests provided no evidence supporting the hypothesis that monthly changes in exports and imports do not lead to monthly changes in inflation (Ahmed, Ghauri, Veinhardt, & Streimikiene, 2018).

- E. The National/Regional Inflation Control Team (TPIN/D) has a positive effect on inflation. This is a bit different from the study by Surya Dharma in North Sumatra Province, which found that the establishment of the Regional Inflation Monitoring and Control Team (TPID) contributed to reducing inflation and its persistence in the province from January 2002 to December 2013. (Dharma & Pratomo, 2013).

METHODOLOGY

This study employs regression and correlation analyses to determine the strength of relationships among several variables, yielding coefficients and correlation values. These coefficients explain the magnitude of each variable's contribution, expressed as a percentage, to determine the degree of determination.

Furthermore, this study uses panel data for 10 Indonesian provinces, covering 2000 to 2020. The 10 provinces are DKI Jakarta, West Java, Central Java, East Java, East Kalimantan, Lampung, Riau, South Sulawesi, South Sumatra, and North Sumatra. This study includes 210 data points. The choice of 10 provinces is based on the regional gross domestic product in December 2020, which

accounts for 75,83 percent of the national gross domestic product. Hence, this could be said to represent Indonesia.

RESEARCH RESULT

A variable is a characteristic or attribute of an individual or organization that can be measured and analyzed, and that varies among the individuals or organizations under study. Meanwhile, an independent variable is a variable that (potentially) determines, influences, or affects the outcome. A dependent variable depends on the independent variable. In other words, the dependent variable is the result or consequence of the independent variable's influence. (Creswell, 2014)

The variables used in this study are BI Rate, BI Balance Sheet, Imports, TPIN/D, and Inflation, defined as follows.

- a. The independent variables consist of benchmark interest rates represented by the BI Rate (X_1), the BI Balance Sheet (X_2), Imports (X_3), and TPIN/D (X_4).
- b. The dependent variable is inflation (Y)

Table 3: Operationalization of Variables

Variables	Definition	Data Class
BI Rate (X_1)	Reeves S. (2012) states that an interest rate is the interest rate paid by a borrower to a lender for the use of borrowed funds. Interest rates are typically expressed as a percentage per year; they are also an important monetary policy tool and are taken into account when addressing variables such as investment, inflation, and unemployment.	Ratio Data
BI Balance Sheet (X_2)	Monetary policy that utilizes the central bank's balance sheet is also referred to as "unconventional" policy, as it involves injecting liquidity into the market and restoring the monetary policy transmission mechanism through direct purchases of government bonds in the secondary market. In the United States, this is referred to as the Fed's response to the subprime crisis through Quantitative Easing (QE). (Galariotis, Makrichoriti, & Spyrou, 2018)	Ratio Data
Imports (X_3)	According to Mila Cleary, imports encompass transactions involving goods and services (sales, barter, gifts, or grants) from residents to nonresidents. The import of a good occurs when there is a change in ownership, which does not necessarily mean the good physically crosses a border. However, in certain cases, there is no legal change in ownership, such as in cross-border financial leases, cross-border shipments between affiliated companies, and goods that cross a border for significant processing or repair as ordered. Meanwhile,	Nominal Data

	imports of services consist of all services provided by non-residents to residents; among these, all expenditures by tourists in the economic territory of another country are considered part of imports of services. (Cleary, 2012)	
TPIN/D (X_4)	The Inflation Control Team (TPI) was first established at the national level in 2005, and since 2008, Regional Inflation Monitoring and Control Teams (TPID) have also been established to help achieve inflation targets in the regions (Subekan, 2017) As the leader of the TPIN at the national level, the Minister of Home Affairs monitors and coordinates with provincial governors, regency heads, and city mayors every Monday to discuss inflation trends in each region. They also discuss obstacles and solutions to issues that could push inflation above the target. These meetings are held via Zoom and last about 4 hours.	Nominal Data
Inflation (Y)	According to Milton Friedman, inflation is a general rise in prices or the money supply, both of which can reduce a currency's purchasing power. From the consumer's perspective, inflation occurs when the prices of goods and services across various sectors of the economy rise (Montevirgen, March 2025). Meanwhile, according to Mankiw, the inflation rate is the percentage change in the overall price level, which varies significantly over time and across countries (Mankiw, 2010).	Ratio Data

Techniques of Data Collection

The required data for this study consist of secondary data from several units of analysis, officially published on their respective websites and in online media. These units of analysis include Bank Indonesia, the Central Statistics Agency (BPS), the Financial Services Authority (OJK), and other sources closely related to this study, such as journals, reports, books, and e-books.

Table 4: Types and Sources of Data for Each Variable

No.	Variables	Indicators	Units of Measure	Unit Analysis
1	Inflation	Inflation	%	BPS
2	BI-Rate	BI-Rate	%	BI-SEKI
3	BI-Balance Sheet	BI-Balance Sheet	%	BI-SEKI
4	Imports	Imports	Rp	BPS
5	TPIN/D	TPIN/D	0 or 1	Department of Home Affairs

Source: Research 2026

Actually, the BI balance sheet is presented in BI's financial statements in billions of rupiah, but to track changes in the balance sheet's volume, percentages are used to determine the weights applied in open market operations.

Data Analysis Methods

This study's panel data, which combines cross-sectional and time-series data and comprises 210 observations, was analyzed using the statistical methods discussed below.

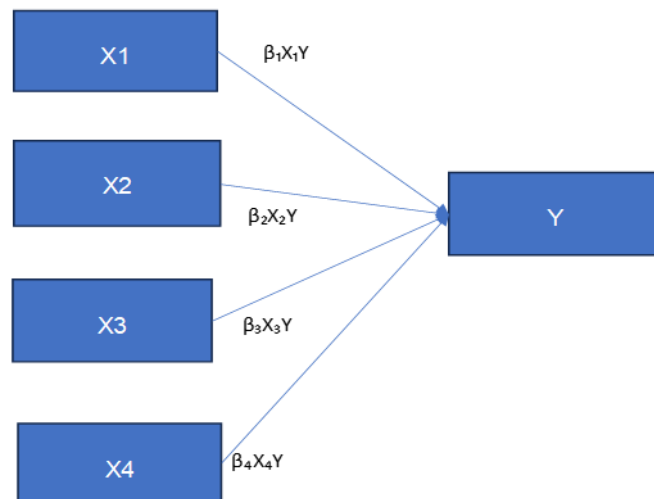


Figure 1: Panel Data Regression Analysis

Description:

X_1 = BI Rate

X_2 = BI-Balance Sheet

X_3 = Imports

X_4 = TPIN/D

Y = Inflation

The multiple regression equation is derived using the following statistical formula. The regression equation is as follows.

$$Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_4 + \varepsilon$$

Where i denotes the index identifying the cross-sectional unit, and t is the time index (yearly in this study). Meanwhile, β_0 is a constant; β_1 – β_4 are the regression coefficients for the independent variables X_1 – X_4 ; and ε is the error term (epsilon).

Then, to test the effect of each independent variable on inflation—including the effect of the independent variable TPIN/D—the t-test is used, as follows:

$$H_0: \beta_1 = 0$$

$$H_1: \beta_1 \neq 0$$

This means that if $\beta_1 = 0$, the independent variable is not related to inflation. If $\beta_1 \neq 0$, the independent variable is related to inflation. In other words, if $\beta_1 > 0$, the relationship is positive; if $\beta_1 < 0$, it is negative.

Panel Data Regression

Panel data regression, also known as panel data regression, combines cross-sectional and time-series data. The panel data regression equation in log-linear form is as follows. (Widarjono, 2016).

$$\ln Y_{it} = \beta_0 + \beta_1 \ln X_{1it} + \beta_2 \ln X_{2it} + \beta_3 \ln X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$$

i = cross-sectional data, and t = time series.

The variable X_4 is not converted to the natural logarithm because it is a dummy variable that takes values of 0 and 1, which cannot be transformed into natural log form. Therefore, the independent variables X_1 , X_2 , and X_3 are converted to natural logarithms.

Model Selection

To determine the appropriate choice of panel data regression model among the three options – CEM, FEM, and REM – three techniques are used: the Chow test, the Lagrange Multiplier (LM) test, and the Hausman test. (Widarjono, 2016) However, a stationarity test is first conducted on the panel data regression results.

Hypothesis Testing

Hypothesis testing is a procedure for verifying a claim about a population based on sample data. From the formulated hypotheses, the researcher establishes a null hypothesis and an alternative hypothesis. The null hypothesis, denoted by H_0 , is the researcher's claim that is tested using sample data. Meanwhile, the alternative hypothesis, denoted by H_a (or H_1), is the opposite of H_0 and is accepted if H_0 is rejected. (Widarjono, 2016). Hypothesis testing uses the F-test (simultaneous significance test), the t-test (partial significance test), and the coefficient of determination (R^2). The coefficient of determination (R^2) is a statistical measure that assesses how well a regression model explains the variation in the dependent variable. Its value ranges from 0 to 1: a value close to 1 indicates the model explains most of the variability, while a value close to 0 means it explains very little.

DISCUSSION

Stationarity Test

Before conducting the stationarity test, all data collected and tabulated according to the predetermined variables were converted to natural logarithms.

The stationarity test was conducted using the Augmented Dickey-Fuller test; if $\beta \leq 0.05$, the data are classified as stationary. Another method uses a graph: if the curve shows a normal distribution, the data are considered stationary. This study uses the Augmented Dickey-Fuller test. The following table shows the results at the data level.

Table 5: Stationarity Test Results

Variables	Aug. Dickey-Fuller	Description
Inflation (Y)	0,0000	Stationery
BI Rate (X ₁)	0,0000	Stationery
BI Balanced Sheet (X ₂)	0,0000	Stationery
Imports (X ₃)	0,0239	Stationery
TPIN/D (X ₄)	0,0001	Stationery

Source: The data were processed using the EViews 12 software

Hypothesis Testing

To test the hypotheses, the first step is to select the best panel data regression model based on the results of the common-effects (CEM), fixed-effects (FEM), or random-effects (REM) models. Next, these tests are conducted for the first and second equations, as discussed below.

Panel Data Regression

In this section, testing is carried out to determine the influence of the independent variables of the BI-Rate interest rate (X₁), BI Balance (X₂), Imports (X₃), and TPIN/D (X₄) on the dependent variable Inflation (Y), both partially and simultaneously.

a. Selection of the Best CEM or FEM Model

To determine the best choice between the Common Effect Model and the Fixed Effect Model, a Chow test, also known as the likelihood ratio test or Redundant Fixed Effect Test, is performed. The test criteria are that H₀ is accepted and H₁ is rejected if the P-value is > 0.05. This means that the Common Effect Model is better to use. However, if the P-value is < 0.05, H₀ is rejected, and H₁ is accepted. This means that the Fixed Effect Model is better to use. The results of the likelihood test are shown in the following table

Tabel 6: Uji Likelihood

Redundant Fixed Effects Tests
Equation: EQUATION_Y_X1_X2_X3_X4
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.513157	(9,196)	0.8640
Cross-section Chi-square	4.890896	9	0.8437

Source: The data were processed using the EViews 12 software

Based on the table above, the results of the likelihood test show that the probability of cross-section F > 0.05 and cross-section Chi-square > 0.05, which means that the common effect model is preferable to the fixed effect model for estimating panel data.

b. Best Model: REM or CEM

After obtaining results indicating that the common effect model is better than the fixed effect model, the panel data is then compared again with the random effect model using the Lagrange Multiplier test, as shown in the following table. The requirement is that if the Breusch-Pagan Cross-section probability is <0.05 , reject H_0 ; meaning the best model selected is the Random Effect Model (REM). If the Breusch-Pagan Cross-section probability >0.05 , accept H_0 ; meaning the best model selected is the Common Effect Model (CEM).

Table 7: Test of Lagrange Multiplier

Lagrange Multiplier Tests for Random Effects
Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	3.079626 (0.0793)	384.0940 (0.0000)	387.1736 (0.0000)

Source: The data were processed using the EViews 12 software

Based on the Lagrange Multiplier test results in the table above, the Breusch-Pagan cross-section probability is $0.0793 > 0.05$; H_0 is accepted. This means the best model selected is the Common Effect Model (CEM) for panel data estimation.

c. Panel Data Regression Analysis: Common Effect Model

Furthermore, the results of the common-effects model regression are used to analyze the multilevel linear regression model for panel data, which is formulated as follows

Table 8: Common Effect Model

Dependent Variable: Y__INFLASI__
Method: Panel Least Squares
Date: 08/30/26 Time: 11:51
Sample: 2000 2020
Periods included: 21
Cross-sections included: 10
Total panel (balanced) observations: 210

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.925677	0.608561	-4.807531	0.0000
X1__BI_RATE__	1.421207	0.079293	17.92359	0.0000
X2__NERACA BI	0.084241	0.027038	3.115583	0.0021
X3__IMPOR	0.005510	0.019429	0.283605	0.7770
X4__TPIN_D__	0.249529	0.125394	1.989954	0.0479
Root MSE	0.725041	R-squared	0.677004	
Mean dependent var	3.402588	Adjusted R-squared	0.670701	
S.D. dependent var	1.278793	S.E. of regression	0.733829	
Akaike info criterion	2.242441	Sum squared resid	110.3937	
Schwarz criterion	2.322134	Log likelihood	-230.4563	
Hannan-Quinn criter.	2.274658	F-statistic	107.4206	
Durbin-Watson stat	1.991482	Prob(F-statistic)	0.000000	

Source: The data were processed using the EViews 12 software

d. F-Test

The p-value of the F-statistic is $0.0000 < 0.05$, indicating that the independent variables BI-Rate (X_1), BI balance sheet (X_2), Imports (X_3), and TPIN/D (X_4) together have a significant effect on inflation. This also indicates that the formula is reliable for predicting the effect of the independent variables on the dependent variable.

e. t-Test

To determine the significance of each independent variable's influence on the dependent variable, a t-test was conducted. In this research, an α value of 0.05 was used. As shown in the table above, the results are as follows.

1) The Effect of BI-Rate (X_1) on Inflation (Y)

The t-statistic for the BI-Rate is 17.92359, and its p-value is 0.0000. This value is much smaller than the significance requirement of 0.05, which means that H_0 is rejected (insignificant effect, $\alpha > 0.05$), and H_1 is accepted ($\alpha < 0.05$). A positive t-statistic value indicates a directional relationship, which may also reflect a monetary-policy reaction to inflation. This means that the BI-Rate positively and significantly determines the inflation rate. If the BI Rate increases by 1 point, it will raise inflation by 1.42 percent (β coefficient), as higher loan costs increase production costs, which in turn raise selling prices. This means inflation.

2) The Influence of BI Balance Sheet (X_2) on Inflation (Y)

The t-statistic value of the BI Balance Sheet is 3.115583, and its p-value is 0.0021. This p-value is much smaller than the 0.05 significance level requirement, meaning that H_0 is rejected (insignificant effect, $\alpha > 0.05$), and H_1 is accepted ($\alpha < 0.05$). A positive t-statistic value indicates a directional relationship. This means that the BI Balance Sheet has a positive and significant effect on the inflation rate. If the BI raises its balance sheet by 1 percent, inflation will increase by 0.08 percent (β coefficient). As the BI Balance Sheet increases, the BI channels liquidity into the money market, increasing the money supply and raising prices, which indicates inflation.

3) The Influence of Imports (X_3) on Inflation (Y)

The t-statistic value of imports is 0.283605, and its p-value is 0.7770. This p-value is greater than the 0.05 significance level, so we fail to reject H_0 (insignificant effect, $\alpha > 0.05$) and reject H_1 ($\alpha < 0.05$). A positive t-statistic value indicates a directional relationship. This means that imports have no significant effect on the inflation rate.

4) The Effect of TPIN/D (X_4) on Inflation (Y)

The t-statistic for TPIN/D is 1.989954, and its p-value is 0.0479, which is below the significance level of $\alpha < 0.05$. This means we reject H_0 (insignificant effect, $\alpha > 0.05$) and accept H_1 ($\alpha < 0.05$). A positive t-statistic value indicates a directional relationship. This means TPIN/D has a positive and significant effect on inflation. However, a positive TPIN/D

coefficient does not prove that TPIN/D reduces inflation. Hence, this needs further study and identification.

f. Coefficient of Determination (R-Square)

The Adjusted R-Squared shows how well the independent variables—BI-Rate, BI Balance, Imports, and TPIN/D—explain the variation in the dependent variable, Inflation. From the previous table, the Adjusted R-Squared value is 0,670701, indicating that the independent variables together explain 67,0701 percent of the change in Indonesia's inflation rate.

CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis and discussion in the previous sections, this study concludes as follows.

- a. The BI Rate, the BI balance sheet, Imports, and the National/Regional Inflation Control Team (TPIN/D) simultaneously influence inflation.
- b. The BI Rate has a significant effect on inflation in the positive direction.
- c. The BI balance sheet has a significant and positive influence on inflation.
- d. However, imports in this study have no significant effect on inflation.
- e. TPIN/D has a significant effect on inflation, in the positive direction. In other words, TPIN/D does not prove to have a role in reducing inflation.

This result differs from Surya Darma's findings in North Sumatra Province, where TPID contributed to reducing inflation. However, this study suggests that TPIN/D remains effective in influencing inflation, along with other independent variables—the BI Rate, the BI Balance Sheet, and Imports.

Finally, further research could therefore be conducted to examine the role of TPIN/D in determining inflation, as this study also has limitations.

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