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Influence Inflation , Policy Monetary to Unemployment 2015 - 2025

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Abstract. . Research This aim For analyze influence inflation and policy monetary to level unemployment in Indonesia during 2015–2025 period . Research use approach quantitative with method Time series data regression and Ordinary Least Squares (OLS) estimation . Secondary data obtained from publication official Central Statistics Agency (BPS) and Bank Indonesia (BI), including inflation data , BI-7 Day Reverse Repo Rate as indicator policy monetary , as well as level unemployment open . Research results show that inflation No influential significant to level unemployment , so that No support hypothesis Phillips curve in the period research . On the other hand , policy monetary through BI-7DRRR interest rate has an effect significant to unemployment with direction positive , which indicates that improvement interest rates tend to increase unemployment consequence weakening activity investment and absorption power work . In a way simultaneous , inflation and policy monetary give significant influence However relatively limited to variation unemployment , which is indicated by the value coefficient determination that is not too big . Findings This implies that factor structural and non- monetary own role more dominant in determine dynamics unemployment in Indonesia.
Keywords: Inflation ; Interest Rate; Unemployment ; Policy Monetary ; Economic Stability ; OLS.

INTRODUCTION

Phenomenon improvement price goods and services in a number of year final the more felt by the Indonesian people . The increase price on demand principal , such as material food , energy and services basic , has become burden significant economic for House stairs . Condition This No let go from policy government related adjustment fuel oil (BBM) prices and rates base electricity (TDL), which is historical always impact directly to the increase prices commodities in the market. The increase the price that occurred in a way continously the push rate increasing inflation high and causes instability economy national (Artati et al., 2025) .

Inflation is basically is a process of increasing prices in a way general and continuous in something economy . Inflation can happen consequence increase the amount of money in circulation , increasing request aggregate , as well as existence shock economy like crisis or increase cost production . Impact inflation No only limited to decline Power buy society , but also give rise to cost sufficient social high . First , inflation can cause inequality distribution income , where society earning still tend experience decline Power buy , while group communities that have asset financial more capable maintain mark his wealth . Second , high and unsustainable inflation controlled can also be impact negative to growth economy Because lower consumption , investment , and effectiveness policy government .

In an attempt guard stability price , government through Bank Indonesia implementing policy monetary as instrument main For control inflation . Policy monetary done with arrange amount of money in circulation , value exchange rate , and rate interest rates . Implementation policy tight monetary policy (tight money policy), such as restrictions credit or improvement interest

rates , can lower inflation through subtraction liquidity in economy . However Thus , the policy the can cause impact advanced in the form of decline investment in the sector real , increasing cost loans , as well as rise level unemployment (Angelia & Nugraha, 2020) .

The interest rate has role central in influence condition economy . Interest rates that are too high tall can hinder activity investment and production , so that slow down growth economy and improve level unemployment . On the other hand , interest rates that are too high low potential push improvement the amount of money in circulation that can be trigger inflation . Therefore that , interest rates need to be maintained at a stable and optimal level to be able to support activity investment (Toni & Nasution, 2024) , encouraging interest saving , and pressing capital outflow risk . Bank Indonesia uses instrument policy interest rates , such as Bank Indonesia Certificate (SBI) and BI Rate/BI-7DRRR, as tool main in stabilize inflation and direct condition monetary national .

Based on background behind said , research This done For answer two questions main , namely : (1) how influence inflation to level unemployment in Indonesia, and (2) how influence policy monetary through interest rates in control inflation as well as the impact to condition employment . With Thus , research This aim For analyze connection between inflation rate interest rates , and unemployment in order to provide understanding comprehensive about dynamics Indonesian macroeconomics and the implications for policy economy national .

LITERATURE REVIEW

1. Quantity Theory of Money – Irving Fisher

Irving Fisher put forward that inflation happen Because existence increase money supply in something economy . Fisher explains that level price compared straight with the amount of money in circulation (money supply). This theory formulated in equation MV = PT, where M is the amount of money in circulation , V is speed money circulation , P is level price general , and T is the transaction volume goods as well as service .

Fisher emphasized that changes in the money supply will push change price in a way proportionally . If the amount of money increases , then level price will increase so that push occurrence inflation . The determining factor The value of money according to Fisher includes :

- Speed velocity of money
- Amount transaction goods and services

Quantity theory emphasize that inflation can controlled with reduce amount of money in circulation . When the amount of money in circulation pressed through policy monetary tight , pressure inflation will down and prices will back to a stable level .

Findings Empirical evidence in modern economics also supports Fisher's theory , although with variation certain . Research by Setiartiti and Hapsari (2019) found that the amount of money circulating in Indonesia has influence significant to inflation in term short . The study use Error Correction Model (ECM) approach and prove that increase in money supply encourages increase inflation in a way directly . In addition , research by Maulidya et al. (2025) also shows that money supply is one of the determinant main inflation in Indonesia in term long , confirm relevance theory quantity of money in context contemporary Indonesian economy .

2. Keynes's theory of Inflation

John Maynard Keynes explains that inflation happen when request aggregate demand exceeds capacity production or offer aggregate (aggregate supply). Inflation according to Keynes not only consequence increase in money circulation , but also because public do expenditure exceed ability its economy .

According to Keynes, the perpetrator economy that causes inflation includes :

- The government , which prints new money For close deficit budget .
- Businessman private sector , which increases investment use bank credit .
- Workers / unions workers , who demanded increase wages exceed productivity .

If the process is Keep going continue , then inflation will ongoing in a way continuously . Keynes put inflation as emerging phenomena Because pressure demand pressure and expectations public to increase price .

3. Inflation Theory

Inflation is trend increasing price goods and services in a way general and continuous in something economy . Inflation measured through change index price , such as Consumer Price Index (CPI). Based on level severity , inflation classified become :

- Inflation Mild (Creeping Inflation): occurs when increase price not enough from 10% per year .
- Galloping Inflation : increase price between 10%–30% per year .
- High/Hyper Inflation : increase price more from 30% per year and can reach hundreds percent .

Reason Inflation :

a. Demand-Pull Inflation

Inflation that arises Because increasing request aggregate exceed capacity production .

b. Cost-Push Inflation

Inflation consequence increasing cost production , including increase price material standard import .

c. Imported Inflation

Inflation that originates from increase price goods import so that influence structure cost industry domestic .

Impact Inflation :

a. Decline Power purchasing and community welfare
b. It's getting worse distribution income
c. Disturbed stability economy and increasing uncertainty investment

4. Unemployment Theory

Unemployment is condition when force Work No own work although has try look for work . Unemployment can appear Because mismatch between amount power available work with request power Work .

According to Zurisdah (2016), unemployment is part from force work that is not absorbed in the job market . Prasaja (2013) emphasizes that unemployment happen when expenditure aggregate more low than capacity available production . Navarrete in Jhingan (2014) explains that unemployment describe inability sector economy For absorb factor production power Work optimally .

Mankiw (2012) adds that the job search process or search Work be one of reason unemployment always there is , because matching skills between workers and jobs No always in harmony .

5. Interest Rate Theory

The interest rate is reply service on use of money in something period certain . Interest rates work as instrument monetary important in control amount of money in circulation .

Types of Interest Rates

- Fixed Interest Rate
- Flat Interest Rate
- Annuity Interest Rate
- Effective Interest Rate
- Floating Interest Rate

Interest Rate Function

- Control money supply
- Push interest saving and investing
- Become instrument monetary For control demand for money in economy

Interest Rate Calculation

Balance method daily often used with formula :

Interest = balance daily × savings interest rate × amount days / 365

RESEARCH METHODS

A. Data Types and Sources

Study This use quantitative data type , namely data that can be measured as well as stated in form numbers . Quantitative data used in study This covering number unemployment , inflation , and interest rates in 2015–2025 period .

Data sources used is secondary data , namely data obtained No in a way direct from object research , but through agency or institution official who has process and provide it . In research this is secondary data obtained from :

- Bank Indonesia (BI) – interest rate data .
- Central Statistics Agency (BPS) – level data inflation and rates unemployment .

The data in the form of a time series and is used For test connection intervariable in the research model .

B. Data collection technique

Data collection techniques were carried out through documentation , namely secondary data collection already available at the institution official . Procedure data collection includes :

Access publication of the Central Statistics Agency (BPS) for get inflation and unemployment data annual .

Access Bank Indonesia (BI) for get interest rate data (BI Rate / BI 7 Days Repo Rate) for the period 2015–2025.

Do recording , processing and grouping data according to need study .

C. Data Analysis Techniques

Data analysis in study This use Ordinary Least Square (OLS) method with multiple linear regression model , because variables independent used more from one , namely inflation and interest rates as variables free , and unemployment as variables tied .

Analysis process done using EViews 12 Student Lite software with level significance 10% (α = 0.10).

Equation model regression used is :

$$UNEMP_t = \beta 0 + \beta 1\ INF_t + \beta 2\ IR_t + \varepsilon t$$

Information :

- UNEMPt = Unemployment Rate
- INFtINF_tINFt = Inflation Rate
- IRtIR_tIRt = Interest Rate
- β0\beta_0β0 = Constant
- β 1,β 2\beta_1, \beta_2β1 ,β 2 = Coefficient regression
- εt \ varepsilon_tεt = Error term

D. Data Analysis Steps

Before do multiple linear regression , was performed testing assumptions classic agar regression model own characteristic unbiased , efficient , and consistent (BLUE – Best Linear Unbiased Estimator). The steps are as follows: is as following :

1. Normality Test

Normality test done For know are the residuals in the regression model normally distributed . A good regression model have residuals that are normally distributed or approaching normal. The test used is the Jarque-Bera Test.

2. Heteroscedasticity Test

This test aim see whether there is inequality residual variance between observation . Good model No experience heteroscedasticity . The test used including the White Test or Breusch-Pagan-Godfrey Test.

3. Autocorrelation Test

Autocorrelation is connection between residual periods walk with residuals in the period previously . Autocorrelation is usually appears in time series data. The test used is the Durbin-Watson Test or the Breusch-Godfrey Serial Correlation LM Test.

4. Analysis Multiple Linear Regression

Multiple linear regression used For know :

- direction influence inflation to unemployment ,
- direction influence interest rates on unemployment ,
- as well as how much big contribution second variables free to variables tied .

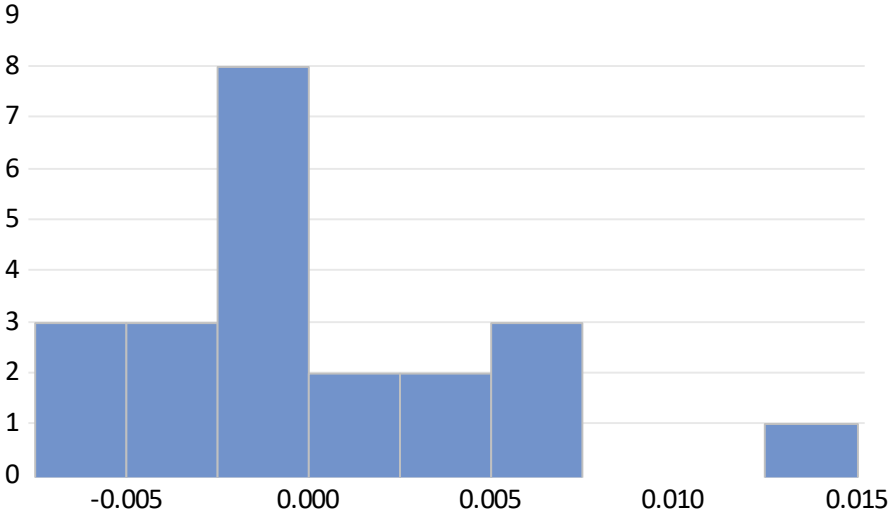
Analysis regression This follow provision Ghozali (2018) with interpretation in the form of :

- coefficient regression ,
- mark probability (t-test),
- F test,
- as well as R-Square value for measure big contribution variables independent .

RESULTS AND DISCUSSION

Assumption test classic

Normality test



Series: Residuals	
Sample 2015S1 2025S2	
Observations 22	
Mean	6.31e-18
Median	-0.001664
Maximum	0.014967
Minimum	-0.006625
Std. Dev.	0.005309
Skewness	1.124247
Kurtosis	3.988164
Jarque-Bera	5.529508
Probability	0.062992

From the picture on Can We conclude that :

The hypothesis obtained :

H 1 : Data is not normally distributed

H 0 : Data is normally distributed

Normality Requirements :

If the probability value is < 0.05, then the data is not normally distributed .

If the probability value > 0.05, then the data is normally distributed .

residual normality test above is : the Jarque-Bera value is 5.529508 with a p value of 0.062992 where > 0.05 so that accept H0 or which means the residuals are normally distributed

Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	1.196104	Prob. F(2,17)	0.3266
Obs*R-squared	2.713903	Prob. Chi-Square(2)	0.2574

The results above show Where If hypothesis in the autocorrelation test is

H0: no There is autocorrelation

H1: there is autocorrelation

so If p -value of mark Obs *R-squared significant in Variable (less from 0.05) then H0 (no There is autocorrelation) is rejected . The results of the LM test above show mark *Probability* Obs *R-squared = 0.2574 >0.05 then H0 is accepted while H1 is rejected , meaning happen autocorrelation .

Multicollinearity

Variance Inflation Factors

Date: 12/04/25 Time: 12:45
Sample: 2015S1 2025S2
Included observations: 22

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2.91E-05	20.54900	NA
I	0.007432	6.827496	1.418619
SK	0.014114	28.77424	1.418619

Provision :
VIF > 10 occurs multicollinearity
VIF < 10 no happen multicollinearity

It can be known that the table above Centered VIF is 1.418619 < 10. So it can be concluded that the data is not happen symptom multicollinearity or multicollinearity test assumptions Already fulfilled

Heteroscedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

F-statistic	0.671633	Prob. F(2,19)	0.5226
Obs*R-squared	1.452661	Prob. Chi-Square(2)	0.4837
Scaled explained SS	1.618827	Prob. Chi-Square(2)	0.4451

Conditions that must be met fulfilled is No existence deviation heteroscedasticity .
Hypothesis :
H0: None heteroscedasticity
H1: There is heteroscedasticity
Probability < (0.05), H0 is rejected , H1 is accepted
Probability > (0.05), H1 is rejected , H0 is accepted

The results of the Breusch-Pagan-Godfrey test show mark probability F- Statistic (F- Count) is more big from Alpha (0.05) which is 0.4837, meaning that the variable is more big than Alpha (0.05) so can concluded , H1 is rejected and H0 is accepted . There is no problem heteroscedasticity in this data .

Multiple Linear Regression Test

Dependent Variable: P
Method: Least Squares
Date: 12/04/25 Time: 11:57
Sample: 2015S1 2025S2
Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.064520	0.005394	11.96155	0.0000
I	0.137320	0.086211	1.592840	0.1277
SK	-0.265008	0.118801	-2.230696	0.0380

R-squared	0.214292	Mean dependent var	0.055045
Adjusted R-squared	0.131586	S.D. dependent var	0.005989
S.E. of regression	0.005581	Akaike info criterion	-7.412716
Sum squared resid	0.000592	Schwarz criterion	-7.263937
Log likelihood	84.53987	Hannan-Quinn criter.	-7.377668
F-statistic	2.591009	Durbin-Watson stat	1.319269
Prob(F-statistic)	0.101153		

From the test above can We know the equation obtained as following :

P = 0.0645202734058 + 0.137320065254*I - 0.265007761396*SK

Information :

P = Unemployment

I = Inflation

SK = Interest Rate

from the equation above We get explanatory variables that :

Based on results analysis regression displayed in the output table , can explained that in a way partial variable I has mark coefficient of 0.137320 with mark *t-statistic* 1.592840 and value probability of 0.1277. Because the value probability the more big from level significance 5% (0.05), then can concluded that variable I does not influential significant against P. This is show that although the coefficient worth positive , an increase in variable I statistics No proven capable increase P value in terms of significant .

Furthermore , the SK variable shows different results . Variables This own mark coefficient of -0.265008, the value *t-statistic* -2.230696, and the value probability of 0.0380. Because the value probability the more small from 0.05, then can concluded that SK variable has an effect significant on P. Influence the nature negative , which means that increase in SK instead lower P value in terms of statistics significant . This result indicates existence connection backwards between SK and variables dependent P.

Temporary that , based on simultaneous test results (F test) were obtained F-statistic value of 2.591009 with probability of 0.101153. The probability value This more big from 0.05, so that can concluded that in a way simultaneous variables I and SK do not influential significant to P. In other words, both variables the in a way together Not yet capable explain variation change in P significant in the model. This is also seen from R-squared value of 0.214292, which indicates that the model only capable explain approximately 21.43% of the variation in P, whereas the rest 78.57 % is explained by other variables that are not entered in the research model This .

CONCLUSION

Based on results study about Influence Inflation and Policy Monetary to Unemployment in Indonesia for the period 2015–2025, which has analyzed use multiple linear regression with Ordinary Least Squares (OLS) method , then can obtained a number of conclusion main as following :

1. Influence Inflation to Unemployment

Analysis results show that inflation No influential significant to level unemployment in Indonesia. Although mark coefficient regression inflation show direction positive , value probability of 0.1277 (> 0.05) proves that change inflation in period study No own sufficient impact strong to fluctuations level unemployment . Findings This indicates that connection inflation and unemployment as put forward in the Phillips Curve no proven in a way empirical in context of Indonesia in the period 2015–2025. Conditions This can explained by factors labor market structure Work Indonesia, such as productivity , rigidity wages , as well as dynamics more industrialization dominant influence level absorption power Work .

2. The Influence of Interest Rates (Policy) Monetary) against Unemployment

Variables interest rates as representation policy monetary show significant results with mark probability 0.0380 (< 0.05). This result show that policy monetary influential real to level unemployment . Coefficient regression worth negative indicates that increase interest rates cause improvement pressure economy that leads to a decline absorption power work . The height interest rates decrease interest investment sector real , increase cost credit , and slow down expansion of the business world , so that in a way direct impact on increasing number unemployment .

3. Influence Inflation and Interest Rates in general Simultan

simultaneous test (F test) show mark probability of 0.101153 (> 0.05), so can concluded that inflation and interest rates in general together No influential significant to unemployment . This is supported by an R-Squared value of 0.214292, which means only 21.43% variation level unemployment that can explained by both variables in the model. With Thus , there are about 78.57% other factors— such as growth economy , productivity power work , minimum wage , investment foreign , and global conditions —which are more influential to dynamics unemployment in Indonesia.

4. General Conclusion of the Research

In a way overall , results study This show that policy monetary through interest rates have role more significant in influence level unemployment compared to inflation . Research this also confirms that reason unemployment in Indonesia in the period 2015–2025 is not can explained only with see variables macro like inflation , but more Lots influenced by factors structural economy and labor market conditions work . Therefore that , stability policy monetary need synergized with policy fiscal and policy employment For reduce unemployment in a way sustainable .

REFERENCE

Angelia, S., & Nugraha , N.M. (2020). Effects of Monetary Policy on Inflation and National Economy Based on Analysis of Bank Indonesia Annual Report. TECHNIUM SOCIAL SCIENCES JOURNAL, 10.

Artati , L., Syuhada , N., Avika, N., & Hendra, J. (2025). Analysis Influence Inflation On Public Purchasing Power. BIMA: Journal of Business Inflation Management and Accounting, 2(1), 306–315.

Darmajaya . (nd). SIMPLE AND MULTIPLE LINEAR REGRESSION HYPOTHESIS TESTING. Institut Informatics Darmajaya Business .

Indah, SR, & Sininiri , T. (2021). Analysis unemployment and growth rate growth economy to inflation in the province Jambi (2005-2020) (Issue 1911021018).

Maulidya, AN, Rahim, A., Astuty , S., Bado, B., Retno, D., & Hastuti , D. (2025). A Comparative Analysis of the Determinants of Inflation in Indonesia. Airlangga Journal of Innovation Management, 06(03), 624–641.

Setiartiti , L., & Hapsari , Y. (2019). Determinants of Inflation Rate in Indonesia. Jesp | Journal of Economics & Development Studies DETERMINANTS, 3. https://doi.org/10.18196/jesp.20.1.5016

Toni, & Nasution, LN (2024). The Effect of Interest Rates, Inflation, Money Supply on Indonesian Economic Growth in the Digitalization Era. 1st International Conference Epicentrum of Economic Global Framework.

Utami, N. (2018). Unemployment . Muhammadiyah University of Semarang, 8–31.

Wulandari, D., & Woyanti , N. (2023). The Influence Education, Minimum Wage , and Opportunity Formal Sector Work Against Unemployment Educated in West Java Province . BISECER (Business Economic Entrepreneurship), 6(2), 90–104.