

Analysis of Inflation and Poverty Levels on the Climate of Economic Growth in Jambi Province

Ary Dean Amry*¹, Kasmiyati², Dwi Narti³

^{1,2,3}Universitas Jambi, Jl. Jambi - Muara Bulian No.KM. 15, Muaro Jambi, Indonesia

*ibrahimfar44@gmail.com

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ABSTRACT: *Inflation is the tendency of prices to rise generally and continuously. Based on data from BPS, the amount of inflation in Jambi City in 2022 is 0.79 %. CPI (Consumer Price Index) In Jambi City was 114.90. It shows that the growth of the Islamic economy is relatively low. The purpose of this study is to find out and analyze how the effect of inflation on the climate of Islamic economic growth in Jambi Province. This quantitative research was conducted in time series from 2011 to 2022. From the data obtained, the poverty rate influences 59% of the climate index of Islamic economic growth in Jambi Province. Showing that inflation does not affect Islamic economic growth because when the climate rate of Islamic economic growth increases by 1%, the inflation rate decreases by 1.55, which certainly has a very positive impact on the Islamic economic growth climate. Efforts are needed to increase the value of the Climate Index of Islamic economic growth, hoping that human progress will continue to develop.*

Inflasi adalah kecenderungan dari harga - harga untuk naik secara umum dan secara terus-menerus. Berdasarkan data dari BPS jumlah inflasi di kota jambi tahun 2022 sebesar 0,79 persen. IHK (Indexs Harga Konsumen) di Kota Jambi sebanyak 114,90. Menunjukkan bahwa pertumbuhan ekonomi syariah nya mssih sangat relatip rendah. Tujuan penelitian ini yang ingin dicapai yaitu Untuk mengetahui dan menganalisis bagaimna pengaruh Inflasi terhadap iklim pertumbuhan ekonomi syariah di provinsi jambi. Penelitian ini menggunakan metode kuantitatif dilakukan secara time series dari 2011 hingga 2022. Dari data yang di peroleh 59% indeks iklim pertumbuhan ekonomi syariah di Provinsi Jambi dipengaruhi oleh tingkat kemiskinan.Menunjukkan bahwa inflasi tidak berpengaruh terhadap pertumbuhan ekonomi syariah, Karena ketika tingkat iklim pertumbuhan ekonomi syariah meningkat sebesar 1%, tingkat inflasi turun sebesar 1,55, yang tentunya berdampak sangat positif terhadap iklim pertumbuhan ekonomi syariah. Diperlukan upaya untuk meningkatkan nilai Indeks Iklim pertumbuhan ekonomi syariah, dengan harapan kemajuan manusia terus berkembang.

Keywords: *Inflation Rate, Poverty Level, Economic Climate.*

I. INTRODUCTION

The economic development of a country generally aims to realize a high level of economic welfare marked by the level of full employment, which means there is less capacity for poverty and unemployment (Aktivani, 2021). However, sometimes the use of factors of production in the economy has the potential to cause other economic problems (Lin et al., 2022). Problems in the economy can be grouped into several parts, one of which is a short-term problem related to stability which teaches how to avoid inflation (Ali et al., 2020).

Inflation is an interesting issue to study in the long history of the world economy. Various studies and research have been conducted to reveal what is behind this one economic phenomenon and how to deal with it (Samsul et al., 2019);(Bambe, 2023). Inflation is an increase in the price of goods and services produced by the demand for more of the market's products (Cepni & Clements, 2023). Inflation is the tendency of prices to rise in general and continuously. Inflation can be briefly interpreted as something that tends to increase (Suriyani & Sudiarta, 2018);(Gemma et al., 2023);(Kim & Lin, 2023).

The inflation rate can have a positive or negative effect depending on the inflation rate itself. Excessive inflation impacts the entire economy. Collectively, this will put many companies out of business (Sánchez García & Cruz Rambaud, 2023);(Jordà & Nechio, 2023). High inflation will make market share prices fall, while deficient inflation levels will encourage prolonged Islamic economic growth, and finally, stock prices will also move slowly (Huang et al., 2023);(Lucotte & Pradines-Jobet, 2023). This inflation is average because there are significant variations in the rate of price increases (Fan et al., 2023);(Konchitchki & Xie, 2023). The public often views current inflation as a significant economic problem. According to (Ningsih & Andiny, 2018), Inflation is divided into four parts including:

First, moderate inflation, namely inflation that does not disrupt the economy. This inflation can be controlled because prices generally increase, but it does not cause an economic crisis. *Second*, moderate inflation below 10% per year. Moderate inflation has not harmed economic activity but reduced the welfare of those on fixed incomes. Average inflation from 10% to 30%. *Third*, severe inflation and disrupted economic conditions. At times of extreme inflation, people tend to save goods. People don't want to keep because bank interest is below the inflation rate. This inflation rate varies from 30% to 100% per year. *Fourth*, Hyperinflation, which disrupts the economy and is difficult to control even with monetary and fiscal measures. This severe inflation rate exceeds 100% every year.

According to BPS, in December 2022, Jambi City experienced inflation of 0.79 percent. CPI (Consumer Price Index) in Jambi City was 114.90. In addition to inflation, there is a poverty factor that determines economic stability and provides an even distribution of income. It is also helpful for increasing physical capital in an area such as infrastructure, improving health and education so that it can improve the economy and prosper the

community. According to (Ningsih & Andiny, 2018), one of them said poor or difficult Poverty is if the income or access to goods and services is relatively low compared to the average other person's economy. A person is declared poor if his income level or standard of living meets his needs. This kind of Livelihood measure can be used poverty line. Poverty is a situation of total deprivation that people experiencing poverty do not want.

A population is said to be poor if the level of education, work productivity, income, health and nutrition, and welfare is low, so it shows a circle of inability. Poverty is caused by limited ownership and use of human resources, especially from formal and non-formal education, and generates a low level of non-formal education (Harttgen & Klasen, 2012; Ravallion, 2010). According to the municipal government, currently, the poverty line in Jambi City is 9.02 percent, or around 54,000 residents. Of that amount, 1.09 percent or 6,500-7,000 residents are categorized as extremely poor. Meanwhile, the Jambi City poverty rate has decreased in 2022 compared to 2021.

Poverty is defined broadly as constraints brought by individuals, families, communities or even countries that result in unhealthy living conditions that threaten the enforcement of rights and justice, threats to bargaining position (bargaining) in world relations, loss of generations and the future of nations and peoples who gloomy. Another aspect of this poverty is that people experiencing poverty are human beings individually and collectively (Srisinto, 2019). Islamic economic growth, especially in the high Islamic investment factor, can increase the financial capacity of the Journal of Applied Business and Economics (JABE) Gross Domestic Product/GDP so that it can reduce poverty levels.

Islamic economic growth is the development of activities in the economy that causes goods and services to be produced. The increase in society increases the prosperity of society. Islamic economic growth can be seen as a severe financial problem, especially Islamic investment factors, because of the lack of Sharia investment in the area. We can see, together with data from the BPS explaining, that sharia investment in Jambi is still relatively low. From 2021, it will be 30 percent of the total population, from where it can be interpreted that the lack of sharia investment makes the unemployment rate in Jambi even higher.

The amount of investment in the districts and cities of Jambi Province from year to year. PMDN's good investment value FDI in 2011 amounted to Rp. 19.2 T and increased to Rp. 46.9 T. The realized investment value in 2015 decreased in 2013, namely only Rp. 25.2 T, where the value in 2013 was 27.4 tons of rupiah compared to the average investment in 2011. The Regent of Jambi Province and the City of Five Years of Observation was IDR 29.4 T (Wibisono et al., 2019).

In principle, investment is divided into "financial investment" and "non-financial investment". More financial assets are invested in the form of ownership of financial instruments such as cash, savings, deposits, capital and stocks, securities, bonds, etc., while non-financial investments are realized in the form of real investment) in the form of "capital" or capital goods, including inventories. Even so, financial investment in time can be realized as an investment in kind.

According to the 2008 SNA, an asset is a store of value representing a benefit or series of benefits that an economic owner derives from controlling or using it over a certain

period. Assets are classified into financial assets and non-financial assets. Non-financial assets are mainly used in economic activities and as a store of value. While the primary function of financial support is to store value, it can also be used for other purposes.

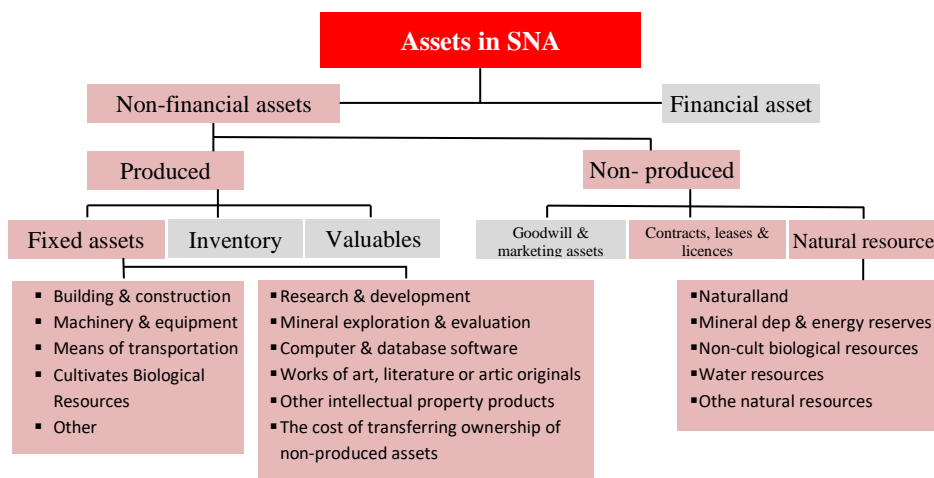


Figure 1. Chart of SNA Assets in 2008

II. METHOD

Researchers took a quantitative approach with a quantitative approach because the research was carried out numerically and fact-finding. While in this study used data from a certain period or known as time series data. To complete the research data taken from the Indonesian Central Statistics Agency (BPS), known as secondary data (Wibisono et al., 2019), analyzed using multiple linear regression tests and their equations: $Y = \alpha + \beta_1 \cdot X_1 + \beta_2 \cdot X_2 + \epsilon$.

Information:

Y = Sharia Economic Growth Climate

X1 = Inflation

X2 = Poverty

$\beta_1 \beta_2$ = Slopes

α = Constant (intercept)

ϵ = Standard Error

III. RESULT AND DISCUSSION

The data used in this study is a time series (secondary) from 2011 to 2022 (Time Series). Data formats are inflation data, poverty data and Islamic economic growth data. Indonesian Central Bureau of Statistics and Indonesian Economic and Financial Statistics. Data analysis in analyzing this study Uses a Quantitative analysis method, which describes all data and information processed (estimates). Related to statistical econometric research objects, in the form of classic hypothesis testing are Normality, Multicollinearity, Autocorrelation, and heteroscedasticity and statistical tests, namely T Test, F Test, R2

Test (Fikri et al., 2014). research presented in the form of graphs, tables, or descriptive. Analysis and interpretation of these results are necessary before they are discussed.

Classic assumption test

A model is suitable as a predictor if it has the best linear unbiased properties of an estimator. In addition, a model is said to be good enough and can be used to predict if it has passed a series of classical assumption tests that underlies it. The classic assumption test in this study consists of.

1. Normality test

Normality testing is done to test whether the dependent variable and variables or both have a normal distribution in a research method. A good model is normally distributed or close to normal. Identifying whether there is a normality problem is done by looking at the Jarque-Bera value. To see if the data is normally distributed, if the Jarque-Bera value $< X^2$, then the data is usually spread. Vice versa, if Jarque-Bera $> X^2$, then the data is not normal. After the data is processed using the Eviews 12 SV application, the results are as follows.

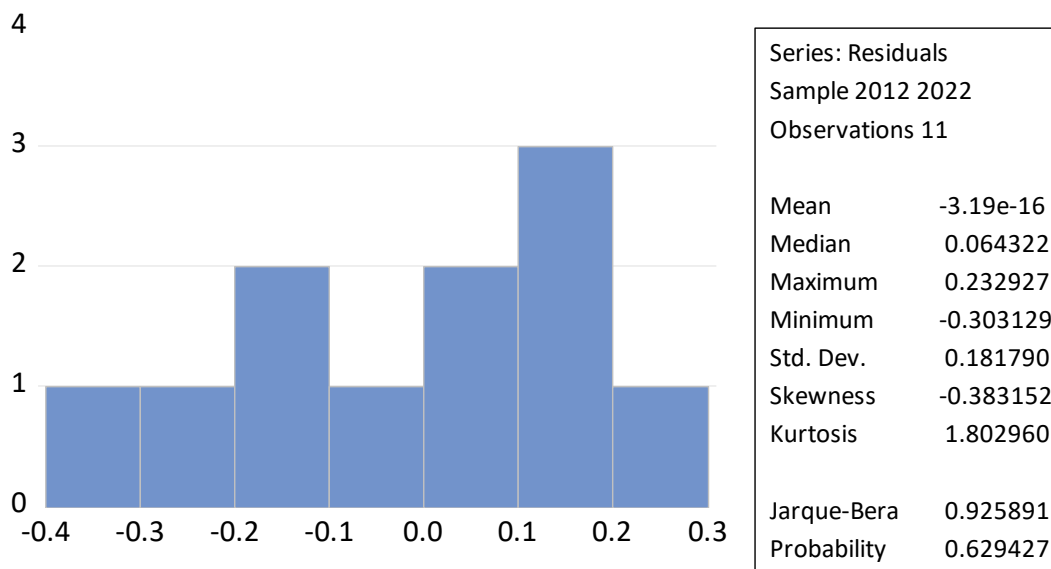


Figure 2. Normality Test Results

From table 3.1, it can be seen that the Jarque-Bera value is 0.925891. The X^2 value for this data is 0.577424. Based on the Jarque-Bera value ($0.925891 < X^2$), the data is declared to be normally distributed so that it can proceed to further tests.

2. Multicollinearity Test

This test aims to test whether the regression model found a correlation between the independent variables. If there is a correlation, there is multicollinearity (Multikol), where a good regression model should not correlate with the independent variables. This situation only occurs in multiple linear regression because the number of independent variables is more than one. In simple regression, this case is impossible because the independent variable only consists of one variable. If the relationship between one independent variable and another is above 0.6, then multicollinearity can be ascertained. After the data is processed using the eviews 12 LV application, the results are as follows.

Table 1. Multicollinearity Test Results

Variance Inflation Factors
Date: 05/15/23 Time: 02:53
Sample: 2012 2022
Included observations: 11

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	41.13845	10954.45	NA
X1	0.023679	244.5871	4.550493
X2	0.135748	13950.20	4.550493

Based on table 3.2, it can be seen that the correlation value between the independent variables (inflation) is 4.550493. Because the value of 4.550493 is far from 10, there is no collinearity between the independent variables. This informs that the proposed OLS model can be considered free from multicollinearity symptoms for further testing.

3. Autocorrelation Test

Autocorrelation testing was carried out to test whether there is a relationship between the residuals over time in the research model used so that the estimation becomes biased. For $n = 21$; $n=21$; $\alpha = 5\%$; $k = 2$, we obtained a DL value of 0.9273 and a DU of 1.324.

Table 2. Autocorrelation Test Results

Dependent Variable: Y
Method: Least Squares
Date: 05/15/23 Time: 02:47
Sample: 2012 2022
Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-19.24645	6.413926	-3.000728	0.0171
X1	-0.390736	0.153880	-2.539224	0.0348
X2	1.370777	0.368440	3.720493	0.0059
R-squared	0.671892	Mean dependent var		5.267273
Adjusted R-squared	0.589865	S.D. dependent var		0.317367
S.E. of regression	0.203247	Akaike info criterion		-0.121785
Sum squared resid	0.330476	Schwarz criterion		-0.013268
Log likelihood	3.669816	Hannan-Quinn criter.		-0.190189
F-statistic	8.191119	Durbin-Watson stat		2.056067
Prob(F-statistic)	0.011590			

From the Eviews program calculation, the Durbin-Watson (D-W) value is 2.056067. Meanwhile, from the D-W table, the DL value is 0.9273, and DU is 1.3241, so the 4-DL value is 3.0727, and the 4-DU value is 2.6759. After looking at these numbers, it is known that the D-W value is greater than the DU value and less than 4 - DU, so it can be concluded that there is no autocorrelation problem in the model. Can be seen in the table below:

Table 3. Durbin-Watson

n	K=1	
	dL	dU
6	0.6102	1.4002
7	0.6996	1.3564
8	0.7629	1.3324
9	0.8243	1.3199
10	0.8791	1.3197
11	0.9273	1.3241
12	0.9708	1.3314
13	1.0097	1.3404
14	1.0450	1.3503
15	1.0770	1.3605
16	1.1062	1.3709
17	1.1330	1.3812
18	1.1576	1.3913
19	1.1804	1.4012
20	1.2015	1.4107

So it is known as follows:

$$DW = 2.056067$$

$$DU = 1.3241$$

$$DL = 0.9273$$

$$4-DU = 4-1.3241 = 2.6759$$

$$4-DL = 4-0.9273 = 3.0727$$

After doing the DW table, the DW value can be seen where it is located which can be seen in the image below:

Table 4. Processed Durbin-Watson

Positive	Doubtful	No Autocorrelation	Doubtful	Negative	
0	DL	DU	4-DU	4-DL	4
	↓	↓	↓	↓	
	0,9273	1,3241	2,056067	2,6759	3,0727

Based on the results of Durbin-Watson calculations, the position of DW is between DU and (4-DU). So that in this model there is no autocorrelation.

4. Heteroscedasticity Test

Heteroscedasticity testing was carried out to test whether the variances of the two observations in the study were the same (homogeneous) for all the dependent variables and the independent variables so that the estimation results were not biased. Identification of whether there is a heteroscedasticity problem is carried out through the White Heteroskedasticity test.

Table 5. Heteroscedasticity Test Results

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

F-statistic	3.893018	Prob. F(2,8)	0.0660
Obs*R-squared	5.425453	Prob. Chi-Square(2)	0.0664
Scaled explained SS	1.152112	Prob. Chi-Square(2)	0.5621

Based on the table above, it can be seen that the probability value for OBS*R-squared is 5.425453. because the matter is $5.425453 >$ the degree of error (α) = 5 percent (0.05), then there is no heteroscedasticity. This tells us that the proposed OLS model has no heteroscedasticity so that further testing can be continued.

OLS Method Multiple Linear Regression Results

Results of Multiple Linear Regression OLS Method The results of multiple linear regression tests with a climate of Islamic economic growth as the dependent variable and the inflation rate and poverty rate as independent variables can be seen in the table below (Sunarsi, 2020):

Table 6. Multiple Linear Regression Results

Dependent Variable: Y
Method: Least Squares
Date: 05/15/23 Time: 02:59
Sample: 2012 2022
Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-19.24645	6.413926	-3.000728	0.0171
X1	-0.390736	0.153880	-2.539224	0.0348
X2	1.370777	0.368440	3.720493	0.0059
R-squared	0.671892	Mean dependent var		5.267273
Adjusted R-squared	0.589865	S.D. dependent var		0.317367
S.E. of regression	0.203247	Akaike info criterion		-0.121785
Sum squared resid	0.330476	Schwarz criterion		-0.013268
Log likelihood	3.669816	Hannan-Quinn criter.		-0.190189
F-statistic	8.191119	Durbin-Watson stat		2.056067
Prob(F-statistic)	0.011590			

From the table above, multiple linear regression can be formulated as follows $Y = 19.24645 * C + 0.390736 * X1 - 1.370777 * X2$ Description: Y = Sharia Economic Growth Climate Value C = Constant Value (α) X1 = Inflation X2 = Poverty.

The multiple linear regression equation above shows that if the inflation rate increases by 0.01 (1%), the Islamic economic growth climate will increase by 0.390736. Then if there is

an increase in the poverty rate of 0.01 (1%), the Islamic economic growth climate will decrease to 1.370777. Based on the F statistical test of 8.19119 and a probability value (Prob) of 0.0011590 <0.05. According to the F-statistic test, it is 8.19119 with a probability value (Prob) of 0.0011590 <0.05. This states that the inflation and poverty factors together positively impact the Islamic economic growth climate with a certainty level of 0.671892 (67.2%). While variations in changes in the ups and downs of the Sharia economic growth climate can be influenced by inflation and poverty by 67.2%, then by 32.8%, the rest is explained by other factors. R2 adjusts the figure to 589865, indicating that the probability level of the Islamic economic growth climate from the model used is 59%, including all.

IV. CONCLUSION

In this study, up to 59% of the climate index of Islamic economic growth in Jambi Province is influenced by inflation and poverty rates. Then the inflation rate of 0.39 does not affect the Sharia economic growth climate index. When the level of the Islamic economic growth climate increased by 1%, the inflation rate fell by 1.55, which positively impacted the environment of Islamic economic growth. At the same time, the poverty variable harm the Islamic economic growth climate. Efforts are needed to increase the value of the Climatic Index for Sharia economic growth, to be precise, by reducing inflation and poverty rates in Jambi Province.

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