

# Analysis of the Influence of Economic Growth, Inflation and Unemployment on Poverty in the Regencies/Cities of North Sumatra Province

Benhard Keynes<sup>1</sup>, HB Tarmizi<sup>2</sup>, Tety Yuliaty<sup>3</sup>

<sup>1</sup>Posgraduate Students, Faculty of Economics and Business, Department of Economics, Universitas Sumatera Utara, Indonesia

<sup>2,3</sup>Postgraduate Lecturer, Faculty of Economics and Business, Department of Economics, Universitas Sumatera Utara, Indonesia

Corresponding Author: Benhard Keynes

DOI: <https://doi.org/10.52403/ijrr.20230717>

## ABSTRACT

The high poverty rate is a strategic problem faced by North Sumatra Province. Poverty is still a serious problem; this is indicated by the large number of people who are still lacking in meeting their basic needs. This study aims to analyze the effect of economic growth, inflation and unemployment on poverty in the districts/cities of North Sumatra province. The research method used is quantitative research using times series data and cross section. This study uses multiple linear regression analysis. Based on the results of the panel data regression with the random effect model, it is known that economic growth does not affect poverty, but inflation and unemployment have a positive and significant effect on the poverty rate t sig unemployment (-4.382) and inflation (-4.984).

**Keywords:** *Economic Growth, Inflation, Unemployment, Poverty.*

## INTRODUCTION

The Central Statistics Agency (BPS, 2021) reported that Indonesia's economic growth in the second quarter of 2021 increased by 7.07 percent on an annual basis (year on year/yoy). Furthermore, the Indonesian economy in quarter II-2021 experienced growth of 3.31 percent (quarter-to-quarter) from the previous quarter. Indonesia's economic improvement in quarter II-2021 was mainly driven by improved export

performance, household consumption, investment, and government consumption. This economic improvement shows that Indonesia has managed to rise after experiencing pressure over the past few quarters due to Covid-19.

The economic improvement is indeed a good sign, but it is still important to ensure that there will not be a decline again in the next quarter. One of the things that is quite instrumental in Indonesia's economic growth is investment. Investment performance as one of the growth engines began to increase, amounting to 7.54% (year on year/yoy).

Local governments realize one of the efforts to improve economic performance is by doing national development in order to be able to create jobs and organize a decent life in order to realize the welfare of the region. Various development programs and activities have been directed primarily at the development of districts/cities, especially districts/cities that have a high poverty rate. Regional development must certainly be carried out in an integrated and sustainable manner according to the priority needs of each region. Regional development targets have been set through long-term and short-term development. One of the main indicators in the success of regional development is the rate of decline in the

number of poor people (Dermoredjo, 2003). Movement of economic growth is uncertain; the level high unemployment and rising inflation affect the composition of society consisting of poor and non-poor people. The poor are classified to those who have an average per capita expenditure per month below the poverty line. Poor families basically consist of families whose income and economic level are low.

Indicators used by the Central Bureau of Statistics (2021) on the low level of income and economic income of families are seen from:

1. A non-permanent home,
2. The narrowness of the occupied land area,

3. Poor quality of Health,
4. Unhealthy family environment
5. The quality of food / calories consumed is inadequate from the health side,
6. Drinking water facilities,
7. Toilet/wc facilities
8. Family assets,
9. Status of residential land.

Indonesia is a developing country with a very keil income requires people to meet basic needs. The majority of the population living in the countryside with agricultural work that takes a long time. This is a continuing problem for Indonesia to fight poverty.

**Table 1 Percentage of poor people in Indonesia in 2022**

Province	2022 (%)	Ranks
KEP. BANGKA BELITUNG	4.45	1
KALIMANTAN SELATAN	4.49	2
BALI	4.57	3
DKI JAKARTA	4.69	4
KALIMANTAN TENGAH	5.28	5
SUMATERA BARAT	5.92	6
BANTEN	6.16	7
MALUKU UTARA	6.23	8
KEP. RIAU	6.24	9
KALIMANTAN TIMUR	6.31	10
KALIMANTAN BARAT	6.73	11
KALIMANTAN UTARA	6.77	12
RIAU	6.78	13
SULAWESI UTARA	7.28	14
JAMBI	7.62	15
JAWA BARAT	8.06	16
SUMATERA UTARA	8.42	17
SULAWESI SELATAN	8.63	18
JAWA TIMUR	10.38	19
JAWA TENGAH	10.93	20
SULAWESI TENGGARA	11.17	21
DI YOGYAKARTA	11.34	22
LAMPUNG	11.57	23
SULAWESI BARAT	11.75	24
SUMATERA SELATAN	11.90	25
SULAWESI TENGAH	12.33	26
NUSA TENGGARA BARAT	13.68	27
BENGKULU	14.62	28
ACEH	14.64	29
GORONTALO	15.42	30
MALUKU	15.97	31
NUSA TENGGARA TIMUR	20.05	32
PAPUA BARAT	21.33	33
PAPUA	26.56	34
Total	9.54	

Source: Central Bureau Of Statistics (2022)

Based On Table 1. the high poverty rate is a strategic problem (national problem) which is also faced by the province of North Sumatra. The poverty rate in North Sumatra when compared to other provinces in

Indonesia is still quite high. Poverty is still considered a serious problem, it is characterized by the number of people who still lack food, it is difficult to meet the basic needs of life and many people are

unemployed. This indicates that poverty in Indonesia still requires serious attention from the government because it is one of the measures of public welfare (Wijayanto,

2010), from the table we can see that North Sumatra province ranks 17th from the percentage of poor people in Indonesia in 2022.

**Table 2 Poverty percentage of eight provinces on the island of Sumatra Year 2018-2022 (percent)**

Province	Year (%)					Average	Ranks
	2018	2019	2020	2021	2022		
ACEH	15,97	15,32	14,99	15,33	14,64	15,25	1
SUMATERA UTARA	9,22	8,83	8,75	9,01	8,42	8,85	5
SUMATERA BARAT	6,65	6,42	6,28	6,63	5,92	6,38	8
RIAU	7,39	7,08	6,82	7,12	6,78	7,04	7
JAMBI	7,92	7,6	7,58	8,09	7,62	7,76	6
SUMATERA SELATAN	12,8	12,17	12,66	12,84	11,9	12,47	3
BENGKULU	15,43	15,23	15,03	15,22	14,62	15,11	2
LAMPUNG	13,14	12,62	12,34	12,62	11,57	12,46	4

Source: Central Bureau Of Statistics (2022)

When compared with seven other provinces on the island of Sumatra, the average poverty rate in North Sumatra is in fifth position below D.I Aceh with an average percentage of poverty of 15.25 percent.

The problem of poverty in Indonesia is influenced by several factors. Factors include slow economic growth, low Human Development Index, high inflation, and rising unemployment.

As we know that economic growth is one indicator of success in development. While the most important goal of economic growth is to increase production capacity. Increased production capacity requires additional labor so that the number of unemployed down and the poverty rate will be reduced (Wijayanto, 2010).

According to (Wiguna, 2013) in a process of economic growth, one of the indicators used to see the symptoms of economic growth in a country or region is using the Gross Regional Domestic Product (GRDP). Through GRDP, it can be seen the economic activities that have been carried out and achieved by a country or region during a certain period.

Weak economic growth, high unemployment and minimum wages that have not been able to meet the needs of society can be classified into poor and non-poor people. The poor are classified as those who have an average per capita expenditure below the poverty line.

To measure poverty, BPS uses the concept of the ability to meet basic needs (basic needs approach). This concept refers to the Handbook on Poverty and Inequality published by the Worldbank. With this approach, poverty is seen as the inability of the economic side to meet the basic needs of food and not food as measured from the expenditure side. The population is categorized as poor if it has an average per capita expenditure per month below the poverty line.

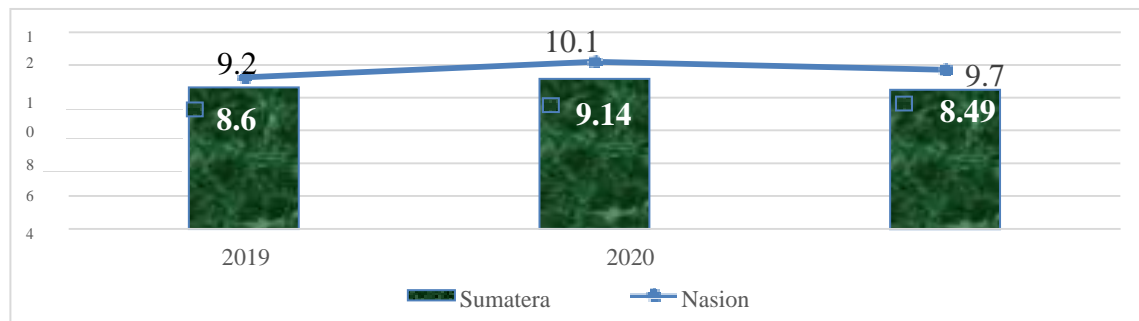
The diversity of Indonesia as a developing country shows that the standard of living and material well-being are low. For developing countries, very little income requires that people meet basic needs. People below the poverty line still live in small spaces with inadequate sanitation facilities.

North Sumatra province as one of the largest provinces in Indonesia is also experiencing poverty problems. Although from year to year the level of poor people in Indonesia, especially North Sumatra, has decreased where the number is still in large numbers. The government has done various ways to help reduce the poverty line by providing direct cash assistance to poor people, small and medium enterprises, and private sector employees to increase people's purchasing power. However, this has not yet had a major impact on the percentage of poor people in Indonesia.

Based on data from the 2023 North Sumatra provincial government work plan, it is explained that the percentage of the poor population of North Sumatra has decreased by 0.52 points, from 9.01 percent from March 2021 to 8.49 percent in September 2021. This poverty rate is equivalent to 1.27 million people in September 2021, or a decrease of around 70.8 thousand people in the last semester, as well as the National number of poor people in Indonesia in September 2021 reached 26.50 million people. Compared to March 2021, the number of poor people in Indonesia

decreased by 1.04 million people. Meanwhile, compared to September 2020, the number of poor people in Indonesia decreased by 1.05 million people. The percentage of poor people in September 2021 was recorded at 9.71 percent, decreased by 0.43 percent points against March 2021 and decreased by 0.48 percent points against September 2020. When compared with the National, the achievement of the percentage of poverty in North Sumatra province is better than the National as shown in the graph below

Graphic 1 Poverty percentage of North Sumatra province and National in 2019-2021



Source: BRS, bps North Sumatra and National 2022

Economic growth will positively affect the demand for Labor which will reduce the unemployment rate. The relationship between poverty and the level of economic growth and economic growth is related to the level of labor education in terms of productivity assuming the higher the quality of education, the higher the labor productivity which will increase wage increases that have an impact on the increase in people's purchasing power and inflation in Indonesia.

Inflation is also one of the variables that can determine the poverty level of a society, because inflation is a tendency to increase in prices of goods in general and continuously. The increase in prices makes the government conduct various monetary and fiscal policies. When inflation occurs, the government must reduce the deficit to control inflation and reduce people's purchasing power.

## LITERATURE REVIEW

### Poverty

Poverty is defined as a state of lack of money and goods to ensure survival (proper). In a broad sense, Chambers said that poverty is an integrated concept that has five dimensions, namely poverty (proper), helplessness (powerless), vulnerability to emergency situations (state of emergency), dependence (dependence) and isolation (isolation) both geographically and sociologically (Suryawati, 2005).

### Economic Growth

The economy is said to experience growth or develop if the level of economic activity is higher than what was achieved in the previous period (Kuncoro, 2003). Prof. Simon Kuznets defines economic growth as a long - term increase in the capacity of a country to provide a large number of economic goods to its population. The existence of technological progress or adjustments, institutional (institutional), and

ideology to the various demands of existing circumstances determine the increase in capacity itself (Boediono, 1999).

### Inflation

Inflation is an important indicator in macroeconomics and has a wide impact on various sectors of the economy. Inflation is related to the phenomenon of interaction between supply and demand but can not be separated from other factors such as trade system and the smooth distribution of goods and services, government policy is not related to the behavior of the monetary sector. Inflation in the narrow sense is an increase in prices for goods and services that people need on average. According to Sukirno (2004) inflation can be defined as an increase in prices prevailing in an economy. The rate of inflation differs from

one period to another. And inflation rates differ from country to country. Where the level of inflation is divided into three, the first is a low inflation rate that is below 2 or 3 percent. Second, moderate inflation rate if the price increase can reach 4 to 10 percent, and third is a serious inflation rate, serious inflation rate occurs if the increase reaches the level of tens or hundreds of percent in a year.

### Unemployment

Unemployed is someone who is already classified in the labor force, who is actively looking for work at a certain wage level, but can not get the desired job. According to Sukirno, 2010 unemployment is a situation where a person belonging to the labor force wants to get a job but has not been able to obtain it.

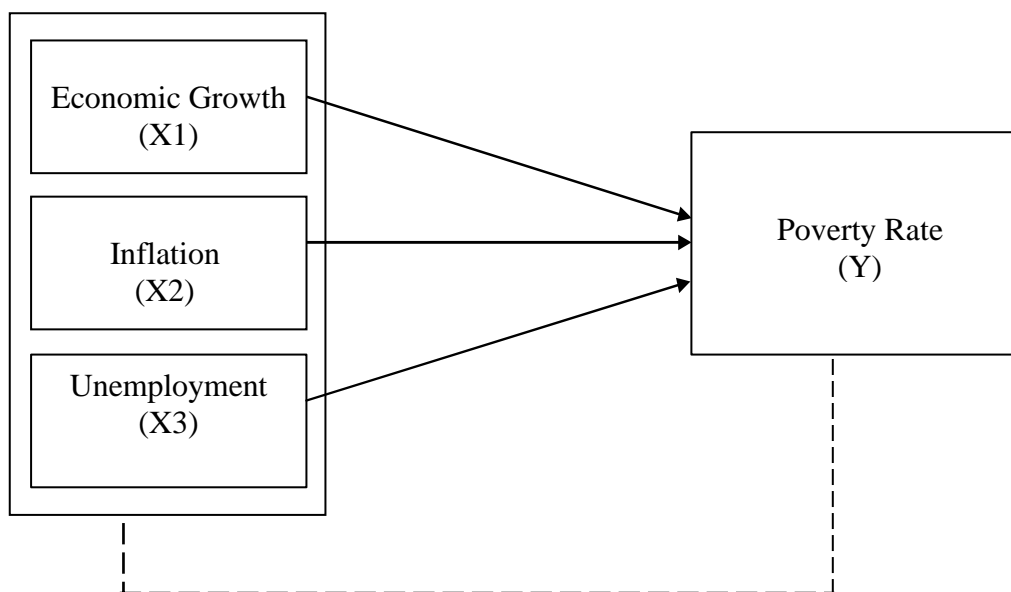


Figure 1. Conceptual Framework

### Hypothesis

Based on background research and the relationship between variables, the research hypothesis:

1. It is suspected that partial economic growth has a significant effect on poverty levels in North Sumatra.
2. It is suspected that inflation partially has a significant effect on poverty levels in North Sumatra.

3. It is suspected that partial unemployment has a significant effect on the poverty rate in North Sumatra.
4. It is suspected that economic growth, inflation and unemployment simultaneously have a significant effect on the poverty rate in North Sumatra.

### MATERIAL AND METHODS

The types and sources of data used in this study are secondary data from the Central

Bureau of Statistics (BPS). The secondary Data used in this study is a combination of cross section data from 39 districts/cities in North Sumatra province and times series from 2012 to 2021 or more commonly referred to as panel data. This study aims to determine whether the independent variables in the form of economic growth, inflation, and unemployment have a relationship that is interrelated with each other with the dependent variable, namely the level of poverty.

The method of data collection in this study is quantitative data whose source is classified as secondary data, where the source data is collected through various intermediaries both from books, previous journals and from existing evidence. The data sources used in this study are various sources that are sought through the Central Bureau of Statistics (BPS) of North Sumatra province as well as from books, previous

journals, and websites that can support the course of this research well. The use of secondary data was chosen in order to maximize the accuracy of the data to be processed because for researchers the lack of data can lead to failure of research conducted. The collected Data is then processed and analyzed quantitatively multiple regression.

## RESULTS

### Classical Assumption Results

Classical assumption test in this study include normality test, multicollinearity test, heteroscedasticity test, autocorrelation test and linearity test with the following results:

### Normality Test Results

Normality test in this study was conducted by the First Difference Method with the following results;

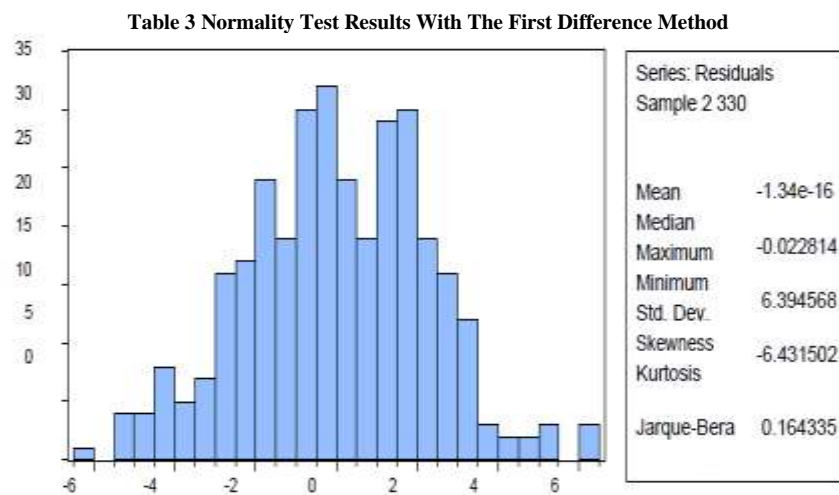


Table 3 shows that the probability value of JB = 0.921, greater than 0.05 so it can be concluded that the data is normally distributed.

### Multicollinearity Test Results

Multicollinearity test using Variance Inflation Factor (VIF) showed the following results;

**Table 4 Multicollinearity test results with Variance Inflation Factor**

Variable	CoefficientVariance	UncenteredVIF	CenteredVIF
C	0.015535	1.000033	NA
X1(Economic Growth)	0.000978	1.181174	1.181153
X2(Inflation)	0.000239	1.008107	1.008107
X3(unemployment)	0.000618	1.182249	1.182217

Table 4 shows that the VIF value of the 3 independent variables has a value smaller than 10, so it can be concluded that the study data are symptom-free multicollinearity.

**Table 5 Heteroscedasticity Test Results Heteroskedasticity Test: Breusch-Pagan-Godfrey**

F-statistic	2.259577	Prob. F(3,325)	0.0814
Obs*R-squared	6.721956	Prob. Chi-Square(3)	0.0813
Scaled explained SS	6.380727	Prob. Chi-Square(3)	0.0945

Table 5 shows that the value of prob. Chi-square (p) = 0.08 > 0.05, so it can be concluded that the study data are symptom-free heteroskedasticity.

### Linearity Test Results

Linearity test using Ramsey Reset Test showed the following results;

**Table 6 Linearity Test Results**

t-statistic	0.203398	324	0.8390
F-statistic	0.041371	(1, 324)	0.8390
Likelihood ratio	0.042007	1	0.8376

Table 6 shows that the probability value of F-statistic = 0.839, greater than 0.05, so it can be concluded that there is a linear relationship between the independent variable and the dependent variable Y Research.

### Autocorrelation Test Results

Autocorrelation test using Serial Correlation showed the following results:

**Table 7 Autocorrelation Test Results Breusch-Godfrey Serial Correlation LM Test:**

F-statistic	1.025195	Prob. F (2,324)	0.3599
Obs*R-squared	2.075227	Prob. Chi-Square (2)	0.3543

Table 7 shows that the value of chi-square probabilities = 0.353 is smaller than 0.05, so it can be concluded that the study data are symptom-free autocorrelation.

### Best Model Test Results

#### Chow Test Results

Chow test was conducted to select the best model between Cem (Common Effect Model) and FEM (Fixed Effect Model)

### Heteroscedasticity Test

Pagan Godfrey's Beusch heteroscedasticity test showed the following results;

**Table 8 Chow Test Results Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.963407	(32,294)	0.5278
Cross-section Chi-square	32.907331	32	0.4225

Table 8 shows that the value of cross-section probabilities Chi-square = 0.422, greater than 0.05, so the right model is CEM (Common Error Model)

### Hausman Test Results

Hausman test is a test to select REM (Random Effect Model) or FEM (Fixed Effect Model)

**Table 9 Hausman Test Results Correlated Random Effects-Hausman Test Equation: Untitled Test cross-section random effects**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.774312	3	0.2869

\*\* WARNING: estimated cross-sectional random effects variance is zero.

Table 9 shows that the value of probabilities F = 0.286, greater than 0.05, so the right model is Fem Fixed Effect Model

### LaGrange Test Results

Lagranger multiplier test is used to compare the best model between Cem (Common Effect Model) and REM (Random Effect Model) with the provision that if the probability value of Breusch-Pagan < 0.05 then the best model is REM and if the probability value of Breusch-Pagan > 0.05 then the best model is CEM

**Table 10 Lagrange Test Results Lagrange Multiplier Tests for Random Effects Null hypotheses: No effects Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives**

	Cross-section	Test Hypothesis Time	Both
Breusch-Pagan	0.089253	2.773881	2.863134
	(0.7651)	(0.0958)	(0.0906)

Table 10 shows that the value of T-calculate BP (Breusch-Pagan) is 0.089 with probability value = 0.765, greater than 0.05, so the best model is the Cem model (Common Effect Model)

### Hypothesis Test Results

Based on the results of the model test where the best model is produced CEM (Common Effect Model), then the hypothesis test in

this study was conducted with the CEM model for multiple linear regression analysis with the following results:

**Table 11 Multiple Linear Regression Test Results**

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	10.68877	0.247589	43.17149	0.0000
X1(Economic Growth)	-0.121202	0.027654	-4.382790	0.0000
X2(Inflation)	-0.075168	0.015081	-4.984422	0.0000
X3(unemployment)	-0.383754	0.025157	-15.25445	0.0000
R-squared	0.527973	Mean dependent var		6.266424
Adjusted R-squared	0.523629	S.D. dependent var		2.300913
S.E. of regression	1.588081	Akaike info criterion		3.774977
Sum squared resid	822.1727	Schwarz criterion		3.821027
Log likelihood	-618.8713	Hannan-Quinn criter.		3.793346
F-statistic	121.5463	Durbin-Watson stat		2.137232
Prob(F-statistic)	0.000000			

### F Test Results Simultaneously

Test F simultaneously the effect of variables X1 (economic growth), X2 (inflation) and X3 (unemployment) on the level of poverty (Y) showed the following results;

**Table 12 F Test Results Simultaneously**

F-hitung	Probabilitas (p)	F-tabel	Conclusion
121.546	0.000	8.53	Secara simultan, berpengaruh Signifikan

Table 12 shows the value of F-count = 121.54 with the value of sig-p=0.000, when

compared with the value of F-table = 8.53 (for N =330 or df= 327) and sig-p = 0.05, it can be concluded that simultaneously, the 3 independent variables have a significant effect on the dependent variable Y (poverty level).

### Partial t-test results

The partial t-test of the effect of variables X1 (economic growth), X2 (inflation) and X3 (unemployment) on the poverty level (Y) showed the following results;

**Table 13 Partial t-test results**

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	10.68877	0.247589	43.17149	0.0000
X1(Economic Growth)	-0.121202	0.027654	-4.382790	0.0000
X2(Inflation)	-0.075168	0.015081	-4.984422	0.0000
X3(unemployment)	-0.383754	0.025157	-15.25445	0.0000

Source: panel data analysis results, 2023.

### Interpretation:

#### Effect of economic growth (X1) on poverty rate (Y)

Table 11 shows the value of t-calculate X1 (economic growth) = -4.382 with significance value (p) = 0.000. When compared with the value of t-count = 1.96 (for N = 330 or df= 327), and sig-p = 0.05, it can be seen that t-count X1 (4.382) > t-

table (1.96) and sig-p (0.000) < 0.05, so it can be concluded that the variable X1 (economic growth) has a significant negative effect on the dependent variable Y (economic growth). In other words, the lower the economic growth, the higher the poverty rate.



**Effect of inflation (X2) on poverty rate (Y)**

Table 12 shows the calculated t-value X2 (inflation)= -4.984 with significance value (p) = 0.000. When compared with the value of t-count = 1.96 (for N = 330 or df= 327), and sig-p = 0.05, it can be seen that t-count X2 (-4.984) > t-table (1.96) and sig-p (0.000) < 0.05, so it can be concluded that the variable X2 (inflation) has a significant negative effect on the dependent variable Y (poverty level). In other words, the higher the inflation rate, the higher the poverty rate.

**Effect of unemployment (X3) on poverty rate (Y)**

Table 13 shows the value of t-calculate X3 (unemployment)= -15,254 with significance value (p) = 0.000. When compared with the value of t-count = 1.96 (for N = 330 or df= 327), and sig-p = 0.05, it can be seen that t-count X3 (-15,254) > t - table (1.96) and sig-p (0.000) < 0.05, so it can be concluded that the variable X3 (unemployment) gives a significant negative effect on the dependent variable Y (poverty level). In other words, the greater the unemployment rate, the higher the poverty rate.

**The Result Of The R Test**

Determination test r the effect of variables X1 (economic growth), X2 (inflation) and X3 (unemployment) on the poverty rate (Y) showed the following results;

**Table 14 The Result Of The R Test**

R-square	Adjusted R-square
0.527973	0.523629

The test results of determination of R in Table 14 shows that the value of adjusted R-square = 0.5236. This means that the magnitude of the influence of the 3 independent variables to the dependent variable Y is equal to 0.5236 x 100% = 52.36%. This means that 52.36% of poverty variables can be explained by the 3 independent variables, while the rest (67.74%) is explained by other factors that are not studied.

**Panel Data Regression Equation**

Based on the coefficient value of each independent variable, the panel data regression equation can be described as follows;

**Table 15 Result Of Multiple Linear Regression Equation**

Variable	Coefficient
C	10.68877
X1 (Economic Growth)	-0.121202X2
(Inflation)	-0.075168
X3 (unemployment)	-0.383754

Based on the value of the constant and the coefficients of the 3 variables, the multiple linear regression equation can be structured as follows;

$$Y = a + b1X1 + b2X2 + b2X3 + e$$

$$Y = 10.68 - 0.12X1 - 0.075X2 - 0.38X3 + e$$

**Interpretation:**

1.  $Y = 10.68 - 0.12X1$   
This regression equation shows that every increase in economic growth by 1%, can reduce the poverty rate by 0.12%.
2.  $Y = 10.68 - 0.075X1$   
This regression equation shows that every increase in inflation by 1%, can raise the poverty rate by 0.075 k%.
3.  $10.68 - 0.38X1$   
This regression equation shows that every increase in unemployment by 1%, can increase the poverty rate by 0.38%.

**DISCUSSION**

**Effect Of Economic Growth On Poverty Rate**

The results of the panel data analysis prove that variable X1 (economic growth) has a significant and negative influence on the dependent variable Y (poverty level). In other words, the lower the economic growth rate, the higher the poverty rate. This is indicated by the value of t - count X1 (-4.382) > t-table (1.96) and sig-p (0.000) < 0.05.

The results of this study are in line with the research Harjana (2016) analysis of the influence of population, Open unemployment rate, and direct spending on

economic growth (Case Study in 38 districts/ cities in East Java) where the results of research show that the number of population and direct spending has a positive and significant effect while the open unemployment rate has a negative and significant effect on economic growth in 38 districts/cities in East Java.

Darmayanti research results (2022) the effect of open unemployment rate and population growth on the poverty rate in Malang City where the results of the study prove that open unemployment rate and population growth have a significant effect on the poverty rate. The level of open unemployment and the number of people simultaneously affect poverty. The increase in partial open unemployment did not have a significant impact on the poverty rate. Meanwhile, partial population growth has a significant effect on the value of the poverty rate in Malang

Unemployment is an employment problem which is often encountered in some countries, especially in developing countries. Unemployment is defined as a group of individuals who are 15 years of age or older and are members of the labor force, who are looking for work and have not yet obtained a job. When the problem is left unchecked and continues to increase every year, it can have a negative impact on a region or country. Some of the cases generated by unemployment are crime and poverty (Berliani, 2021)

Unemployment and underemployment are indicators that are selected based on the fact that they are related to a person's income. A person who does not yet have a job and is still looking for a job does not get income, while the unemployed half relates in summary the hours worked to the income received (Darmayanti, 2022).

Unemployment rate according to (Sumarsono, 2016), is the percentage of the number of unemployed to the number of labor force. People who are looking for a job but do not currently have a job are called unemployed

Reducing unemployment and reducing poverty are equally important. In theory, if people are not unemployed, it means they have a job and income, and with the income they have from working, they are expected to be able to meet the needs of life. If the needs of life are met, then it will not be poor. So it is said that with a low unemployment rate (high employment opportunities), the poverty rate is also low. The poverty rate is always in line with the unemployment rate. Because when the unemployment rate increases, the poverty rate increases (Berliani, 2021).

The development of a region basically not only focuses on economic growth but also takes into account how poverty is generated due to the formation of the area. The capability of a region in developing its regions is different, this is due to differences in resources owned, namely labor potential, natural potential, artificial potential and hidden potential. At the time of formation, there are some areas that have abundant natural potential but little employment potential. In contrast, there are areas with inadequate natural resources but abundant human resources in terms of quantity and quality. This raises the difference in the continuity of development that triggers inequality between the level of economic growth and welfare in each region

According to Putong (2016), economic growth is a meaningful increase in national income (with an increase in per capita income) in a given calculation period. According to the view of the classical theory of Adam Smith, explained about economic growth by looking at the laws of nature, increasing labor productivity; the process of accumulation of capital; the level of profit will decrease when the level of competition is higher; farmers, entrepreneurs, and producers are agents of growth in the economy; and the growth process is accumulative. Meanwhile, according to Keynesian theory in Irawan and Suparmoko (2012) which has the assumption that if the population increases, the real income per capita will decrease

unless real income also increases. Furthermore, when the labor force expands, output must also increase to maintain full employment opportunities. And if there is investment then real income must also increase to prevent idle capacity.

### **Effect Of Inflation On Poverty Rate**

The results of panel data analysis prove that variable X2 (inflation) has a significant and negative influence on the dependent variable Y (poverty level). In other words, the higher the inflation rate, the higher the poverty rate. This is indicated by the value of t-count X2 (-4.984) > t-table (1.96) and sig-p (0.000) < 0.05.

The results of this study are in line with Muandar's research (2022) the effect of inflation and The Open unemployment rate on economic growth in Indonesia where the results of the study prove that inflation and the open unemployment rate have a significant effect on economic growth in Indonesia.

The results of this study are also in line with Fadilia's (2018) research on the effect of inflation on Indonesia's economic growth where the results show that inflation has a calculated value of 3.532 > ttable 2.306 with a significant level of 0.039 < 0.05, which means that inflation affects Indonesia's Economic Growth/Gross Domestic Product (GDP).

Inflation is a phenomenon in which the general price level increases continuously. An increase in the price of one or two goods alone cannot be called inflation, unless the increase extends to (or results in an increase in) a large part of the price of other goods (Boediono, 2016:161). Inflation is the rise in commodity prices in general caused by the lack of synchronization between commodity procurement programs (production, pricing, printing money, and so on) with the level of income owned by the community (Putong, 2016:147).

For a country, economic growth is one of the focuses that must be achieved every year. The number of economic growth in a country will be one of the benchmarks of

success. This is also a focus for the country of Indonesia. Economic growth is a long-term problem that must be done by every country where it is expected that there will be very rapid economic growth. Every country has the same goal, which is how to accelerate economic growth. Economic growth is a process of continuous increase in per capita output in the long term. Economic growth is the cause of healthy or not the economy of a country and economic growth is an absolute requirement to promote and prosper the nation. If a country cannot increase its economic growth, it will cause new economic and social problems such as high levels of poverty. Economic growth can be measured by gross domestic product (GDP) (Fadilia, 2018).

Economic development is a multidimensional process that involves major changes in social structures, community attitudes, and national institutions, such as accelerating economic growth, reducing inequality and eradicating absolute poverty. High and sustainable economic growth is the main condition of a must for the continuity of economic development and welfare improvement. Because the population increases every year which itself needs daily consumption also increases every year, it takes additional income every year (Tambunan, 2016).

The economic development of a country can be seen from several economic indicators. One of them is the unemployment rate. Based on the unemployment rate can be seen the condition of a country, whether its economy is developing or slow and or even regressing. In addition to the unemployment rate, it can also be seen the inequality or gap in the distribution of income received by a society of the country. Unemployment can occur as a result of the high rate of change in the labor force that is not offset by the existence of jobs that are wide enough and employment tends to be a small percentage, this is due to the low growth rate of job creation to accommodate a workforce that is ready to work

### **Effect Of Unemployment On Poverty Rate**

The results of panel data analysis prove that variable X3 (unemployment) has a significant and negative influence on the dependent variable Y (poverty level). In other words, the greater the unemployment rate, the higher the poverty rate. This is indicated by the value of t-count X3 ( $-15.254 > t\text{-table } (1.96)$  and  $\text{sig-p } (0.000) < 0.05$

The results of this study are in line with Novriansyah's (2018) research on the effect of unemployment and poverty on economic growth in Gorontalo province where the results show that unemployment and poverty negatively affect economic growth. Poverty is a problem faced by all countries in the world, especially developing countries. Poverty is a complex problem that is influenced by various interrelated factors, including people's income level, unemployment, health, education, access to goods and services, location, geography, gender, and environmental location. an environmental location. Poverty is no longer understood only as economic incapacity, but also as the failure to fulfill basic rights and differences in treatment for a person or group of people in living life with dignity. Generally recognized basic rights include the fulfillment of food, health, education, employment, housing, clean water, land, natural resources, the environment, a sense of security from treatment or the threat of violence, and the right to participate in socio-political life

Temporary poverty is a major problem that can be found in several regions and countries, especially in developing countries. Poverty is a condition of inequality between the property owned by the social life of the community so that a person lives at a low limit of adequate life size, or a situation when the person faces relative inequality compared to others in community life.

Poverty is described as the most difficult basic social problem, until now it continues to receive attention from the government.

Poverty arises when people are experiencing both material and non-material shortages of nutritious food that resulted in declining public health, low education, lack of access to information obtained. There are several other factors of poverty that occur especially in some metropolitan cities in Indonesia, namely many people are still struggling to find food and drink, have inadequate settlements and environments such as occupying riverbanks and close to railways that are still active, thousands of workers who protest related to the termination of employment (layoffs), arbitrary attitudes and attitudes that are still – arbitrariness to some female workers in several countries, the existence of arbitrariness in the socio-economic sphere, and also occasional acts of misappropriation, conspiracy, and nepotism (Darmayanti, 2022).

The decrease in poverty is the main indicator of achieving the successful formation of the economy. The effectiveness of poverty alleviation is a major factor in choosing a development strategy. The poverty level is described as a measure of low life, that is, the standard of living that is common to the respective society such as health, morale, and so on. In some parts of Indonesia, especially in big cities, poverty is still a discussion. The facts show that economic development has not been able to reduce poverty in various regions, especially in areas whose poverty levels have increased relatively from year to year (Nabawi 2020).

In the end, unemployment and economic growth will affect the poverty level of a country or region, this is clear considering that economic growth is one of the most important indicators in assessing the performance of an economy, especially to analyze the results of economic development that has been carried out by a country or region. The economy is said to experience growth if the production of goods and services increases from the previous year. Economic growth shows the extent to which economic activity can generate additional income or welfare of the

community in a given period. The economic growth of a country or a region that continues to show an increase illustrates that the economy of the country or region is developing well

## **CONCLUSIONS AND RECOMMENDATIONS**

### **CONCLUSIONS**

Based on the results of the study it can conclude as follows:

Economic growth has a significant negative impact on poverty. In other words, the greater the rate of economic growth, the lower the rate of poverty. This is indicated by the value of t-count X1 (-4.382) > t-table (1.96) and sig-p (0.000) < 0.05

Inflation has a significant negative impact on the poverty rate. In other words, the higher the inflation rate, the higher the poverty rate. This is indicated by the value of t-count X2 (-4.984) > t-table (1.96) and sig-p (0.000) < 0.05

Unemployment has a significant negative effect on the poverty rate. In other words, the greater the unemployment rate, the higher the poverty rate. This is indicated by the value of t-count X3 (-15.254) > t-table (1.96) and sig-p (0.000) < 0.05

### **RECOMMENDATIONS**

Suggestions researchers from research that has been done are as follows:

It is expected that the city / district government to facilitate the publication of data so that each researcher can obtain the data needed in the study.

It is suggested that similar research can be followed up with a wider scale of research such as the addition of variables so that more perfect and accurate research results are obtained.

### **Declaration by Authors**

**Acknowledgement:** None

**Source of Funding:** None

**Conflict of Interest:** The authors declare no conflict of interest.

## **REFERENCE**

1. Berliani, K. (2021). Pengaruh Tingkat Pengangguran, Tingkat Pendidikan dan Laju Pertumbuhan Penduduk Terhadap Tingkat Kemiskinan Penduduk Provinsi Jawa Barat Tahun 2015-2020. *Syntax Literate; Jurnal Ilmiah Indonesia*, 6(2), 872. <https://doi.org/10.36418/syntax-literate.v6i2.2244>
2. Boediono. (1999). *Seri Sinopsis Pengantar Ilmu Ekonomi No.4: Teori Pertumbuhan Ekonomi*. Yogyakarta: BPFE Yogyakarta.
3. Boediono. 2016. "Ekonomi Moneter". Yogyakarta : BPFE
4. Darmayanti (2022) Pengaruh Tingkat Pengangguran Terbuka Dan Pertumbuhan Penduduk Terhadap Tingkat Kemiskinan Di Kota Malang
5. Dewi, N. K. (2016). Analisis Faktor - Faktor Yang Mempengaruhi Tingkat Kemiskinan Kabupaten/Kota Di Provinsi Bali. *E Jurnal Ekonomi dan Bisnis Universitas Udayana*, 63 - 68.
6. Dermoredjo, P. S. (2003). *Produksi Domestik Bruto, Harga, dan Kemiskinan, Media Ekonomi dan Keuangan Indonesia (Vol. 51)*.
7. Fadilia (2018) Pengaruh Inflasi Terhadap Pertumbuhan Ekonomi Indonesia
8. Ghozali, I. (2005). *Aplikasi Analisis Multivariate dengan program SPSS*. Semarang: Universitas Diponegoro.
9. Girsang, Leonard Bastian, 2015. Analisis Pengaruh Pertumbuhan Ekonomi, upah minimum, tingkat pengangguran terbuka terhadap kemiskinan di provinsi Sumatera Utara Tahun 2009-2019.
10. Irawan, Suparmoko. 2012. *Ekonomi Pembangunan, Edisi Keenam*. Yogyakarta. BPFE
11. Mahsunah, D. (2013). Analisis Pengaruh Jumlah Penduduk, Pendidikan, dan Pengangguran Terhadap Kemiskinan di Jawa Timur. *Jurnal Mahasiswa Unesa*.
12. Mubyarto. (2004). *Kemiskinan, Pengangguran, dan Ekonom Indonesia*. *Jurnal Dinamika Masyarakat*, III.
13. Nurmainah, S. (2013). Analisis Pengaruh Belanja Modal Pemerintah Daerah, Tenaga Kerja, dan Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi dan Kemiskinan (Studi Kasus 35 Kabupaten/Kota di Provinsi Jawa Tengah). *Jurnal Bisnis dan Ekonomi (JBE)*, XX, 131 – 141.

14. Novriansyah (2018). Pengaruh Pengangguran dan Kemiskinan Terhadap Pertumbuhan Ekonomi di Provinsi Gorontalo
  15. Nguyen Hoang Quy (2016). Relationship between Economic Growth Unemployment and Poverty: Analysis at Province Level in Vietnam.
  16. Kuncoro, Mudrajat. 2003. Analisis Spasial dan Regional: Studi Aglomerasi dan Kluster Industri Indonesia. Yogyakarta: AMP YKPN.
  17. Putong, Iskandar. 2016. Economics: Pengantar Mikro dan Makro, Edisi Ketiga. Jakarta: Mitra Wacana Media.
  18. Sebayang, R. d. (2013). Faktor - Faktor Yang Mempengaruhi Tingkat Kemiskinan di Provinsi Jawa Tengah. Jurnal *Economia*, IX.
  19. Sirojuzilam, dan Mahalli. Kasyful. 2011. Regional: Problematika Wilayah Kota dan Daerah. Medan: USU Press.
  20. Sukirno, S. (2000). Makroekonomi Modern: Perkembangan Pemikiran Dari Klasik Hingga Keynesian Baru. Raja Grafindo Pustaka.
  21. Sumarsono, Sonny. 2016. Teori dan Kebijakan Publik Ekonomi Sumber Daya Manusia. Yogyakarta: Graha Ilmu. Todaro, MP dan Steph
  22. Suryawati, C. (2005, September 03). Memahami Kemiskinan Secara Multidimensional. *JPMK*, 08.
  23. Tambunan, Tulus. 2016. Perekonomian Indonesia, Teori dan Temuan Empiris. Ghalia ; Jakarta.
  24. Widarjono, A. (2013). Ekonometrika Pengantar dan Aplikasinya: Disertai Panduan Eviews. Yogyakarta: UPP STIM YKPN.
  25. Wijayanto, R. D. (2010). Analisis Pengaruh PDRB, Pendidikan, dan Pengangguran Terhadap Kemiskinan di Kabupaten/Kota Jawa Tengah Tahun 2005 - 2008. <http://eprints.undip.ac.id/23008/1/SKRIPSI.PDF>, 17.
  26. Wiguna, V. I. (2013). Analisis Pengaruh PDRB, Pendidikan, dan Pengangguran Terhadap Kemiskinan di Provinsi Jawa Tengah 2005 - 2010.
  27. Wulandari, F. H. (2015). Pengaruh Pertumbuhan Ekonomi, Inflasi, Pengangguran, dan Pendidikan Terhadap Kemiskinan di Indonesia Tahun 2008 - 2012. *E- Journal UAY*.
  28. Zuhdiyaty, Noor, and David Kaluge. "Analisis Faktor - Faktor Yang Mempengaruhi Kemiskinan Di Indonesia Selama Lima Tahun Terakhir." *Jurnal Ilmiah Bisnis dan Ekonomi Asia*, vol. 11, no. 2, 2017, pp. 27-31.
  29. <https://www.bkpm.go.id/id/publikasi/detail/berita/pertumbuhan-ekonomi-di-indonesia>
  30. <https://www.bps.go.id/indicator/23/192/1/persentase-penduduk-miskin-p0-menurut-provinsi-dan-daerah.html>.
  31. <https://kemensos.go.id/> (2005)
- How to cite this article: Benhard Keynes, HB Tarmizi, Tety Yuliaty. Analysis of the influence of economic growth, inflation and unemployment on poverty in the regencies/cities of north Sumatra province. *International Journal of Research and Review*. 2023; 10(7): 110-123.  
DOI: <https://doi.org/10.52403/ijrr.20230717>

\*\*\*\*\*