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## The Effect of Economic Growth and Inflation and Unemployment Rate on Human Development Index and Poverty in East Kalimantan Province

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**Abstract.** This study aims to determine the Effect of Economic Growth and Inflation and Unemployment Rate on the Human Development Index and Poverty in East Kalimantan Province. Inferential data analysis techniques using Partial Least Squares (PLS). The results of the study indicate that the Human Development Index (HDI) has a significant effect on the unemployment rate in East Kalimantan Province, with a probability value smaller than the specified significance level. There are disparities that need to be considered in development in rural areas to ensure equal opportunities for all residents to achieve a better quality of life. Rural areas still face challenges in access to education and health services, as well as regional disparities in development, which need to be addressed through appropriate and sustainable policies. Assistance programs such as Direct Cash Assistance (BLT), National Health Insurance (JKN), and the Family Hope Program (PKH) have helped reduce the burden on the poor by providing access to basic needs. Efforts to improve the quality of education, health, and infrastructure in rural areas are the main focus to create a more prosperous and independent society. Although there has been progress in poverty alleviation, there are still challenges such as regional inequality, quality of education and health, and economic diversification that need to be addressed. Collaboration between the government, private sector, and civil society is needed to create sustainable and effective solutions to overcome poverty in East Kalimantan. Economic growth, inflation, and unemployment rates are interrelated and significantly affect the Human Development Index and poverty rates in East Kalimantan Province. Therefore, comprehensive and sustainable policies are needed to achieve inclusive and equitable development in this region.

**Keywords:** HDI, Poverty, Economic Growth, Inflation, Unemployment Rate

### 1. INTRODUCTION

Economic development in a region focuses on the process of continuous change towards better conditions, with the main goal of improving the economy of the region. This effort involves various strategies to encourage economic growth, create jobs, and overcome various economic development problems. By strengthening local economic sectors, improving infrastructure, and increasing access to education and health services, economic development seeks to improve the quality of life of the community. The ultimate goal is to create a more prosperous life for all people in the area, so that they can enjoy the benefits of economic progress evenly.

Every year, the population in a place or region tends to increase which is influenced by the birth rate. High birth rates cause the addition of new populations which gradually increase the total population. In addition, other factors such as improving health services that reduce infant mortality and extend life expectancy also contribute to population growth. This increase in population can have positive impacts such as increasing the productive workforce, but can

also pose challenges such as the need for adequate public facilities, jobs, and social welfare that must be considered by the government and local communities.

The poverty rate in East Kalimantan showed fluctuations during this period. In 2018, the poverty rate was recorded at 6.03%. This figure decreased slightly in 2019 to 5.94%, but then increased again to 6.10% in 2020. This increase continued to 6.54% in 2021. However, in 2022, the poverty rate decreased to 6.31%, and a significant decrease was seen in 2023 with a figure of 5.13%.

The HDI in East Kalimantan has increased every year from 2018 to 2023. In 2018, the HDI was at 75.83 and increased slightly in 2019 to 76.61. In 2020, this figure rose again to 76.74, and continued to increase in 2021 to 76.88. This increasing trend will continue to 77.44 in 2022, and reach 78.20 in 2023. The increase in the HDI indicates an improvement in the quality of life and welfare of the people in East Kalimantan.

Economic growth in East Kalimantan shows quite significant variations. In 2018, economic growth was recorded at 2.64%. In 2019, economic growth jumped to 4.70%. However, in 2020, there was an economic contraction with negative growth of -2.90%, most likely due to the impact of the COVID-19 pandemic. In 2021, the economy recovered with growth of 2.55%, and increased further to 4.48% in 2022. In 2023, economic growth reached its highest figure in this period, namely 6.22%. The inflation rate in East Kalimantan also varied during this period. In 2018, inflation was recorded at 3.24%. This figure decreased to 1.66% in 2019 and even lower to 0.78% in 2020. However, inflation increased again to 2.15% in 2021, and rose significantly to 5.51% in 2022. In 2023, inflation decreased slightly to 5.24%.

The unemployment rate in East Kalimantan also changed during this period. In 2018, the unemployment rate was recorded at 6.41%. This figure decreased to 5.94% in 2019, but increased to 6.87% in 2020. In 2021, the unemployment rate decreased slightly to 6.83%, and further decreased to 5.71% in 2022. In 2023, the unemployment rate increased again to 6.37%.

Overall, these data show that despite fluctuations in several indicators, such as poverty, economic growth, and inflation, the HDI in East Kalimantan tends to increase from year to year. The increase in the HDI indicates improvements in the aspects of education, health, and people's standard of living. However, there are still challenges in reducing poverty and unemployment rates, as well as maintaining economic stability amidst fluctuations in inflation. Continuous efforts are needed to ensure inclusive and sustainable economic growth that can benefit all levels of society in East Kalimantan. The problem of poverty continues to be a major problem throughout Indonesia's history as a country, reflecting that this problem is very complex and has not been optimally resolved. This is caused by various factors, such as unequal

income distribution, lack of access to education and health services, and uneven development between regions. In addition, structural problems in the economy, such as the dominance of the informal sector and low productivity, also exacerbate poverty conditions. Government efforts that include various social assistance programs and economic policies have not been fully effective in addressing the root causes of poverty. Therefore, a more holistic and sustainable approach is needed, including improving the quality of human resources, structural reform, and empowering the local economy, to reduce poverty significantly and evenly throughout Indonesia.

In East Kalimantan Province, despite the large economic potential of the mining, forestry, plantation, fisheries, and agriculture sectors, poverty remains a pressing issue. The latest data shows fluctuations in the poverty rate, which in 2023 was at 5.13%. Despite significant increases in economic growth and the Human Development Index (HDI), the efforts made have still not been able to reduce poverty consistently and significantly. This indicates that more strategic and coordinated steps are needed to overcome poverty, including improving human resource capabilities, implementing technology, and strengthening physical and economic infrastructure to ensure that the benefits of economic growth are felt by all levels of society. Although economic growth, inflation, and unemployment rates are important indicators in assessing the economic conditions of a region, their impact on the Human Development Index (HDI) and the state of human resources (HR) must also be considered. High economic growth may not always translate into increased welfare if it is not balanced by improvements in health, education, and income. High inflation can reduce purchasing power and affect quality of life, while high unemployment rates can hinder people's access to productive economic opportunities. Therefore, it is important to not only focus on macroeconomic indicators, but also consider how economic changes affect the HDI and the quality of life of the community as a whole, so that development policies and strategies can be designed more effectively to improve overall welfare.

By understanding the relationship between economic growth, inflation, and unemployment rates on the HDI and human resource conditions, more effective policies can be designed to improve the welfare of the people of East Kalimantan. This research can also help identify areas that need intervention to reduce the still high poverty rate in the region. Therefore, this research is very important in supporting inclusive and sustainable development in East Kalimantan.

The phenomena that are the focus of this research include the imbalance between economic potential and social challenges in East Kalimantan Province. Although this province

is rich in natural resources that should support economic growth and increased welfare, in reality there are often problems with high inflation and significant unemployment rates. Economic growth that is not balanced with inflation management and unemployment reduction can worsen social inequality, hinder the increase in the Human Development Index (HDI), and worsen poverty conditions. Given this situation, it is important to understand how economic growth, inflation, and unemployment interact with each other and affect the HDI and poverty, in order to formulate more effective policies in improving the quality of life of people in East Kalimantan.

## **2. LITERATURE REVIEW**

### **Poverty Theory**

According to the Big Indonesian Dictionary (KBBI), poverty is defined as a condition in which the population or part of the population is only able to meet basic needs such as food, clothing, and shelter that are essential to maintain a minimum standard of living. This definition emphasizes that poverty involves significant limitations in access to the resources needed to live at an adequate standard of living, resulting in very simple and inadequate living conditions. According to Supriatna in Islami & Anis (2019), poverty is defined as a condition in which a person is unable to meet their basic needs, and this situation does not occur based on the will of the individual. This definition emphasizes that poverty is not the result of personal choices or decisions, but rather a condition caused by limited resources or opportunities. In other words, poverty is the result of the inability to access or utilize basic needs such as food, shelter, and health, which are often caused by external factors such as an unfair economic system or lack of job opportunities. This definition describes poverty as a condition that requires attention and solutions from wider parties, not just an individual problem that can be solved alone.

### **Human Development Index**

To support national development, human resources are needed who have skills, knowledge, and competence in various fields of expertise. This qualification is very important because skilled and knowledgeable human resources are able to drive innovation, increase productivity, and accelerate economic growth. In addition, competence in various fields allows individuals to adapt to technological changes and global market dynamics, which are increasingly complex. Thus, investment in comprehensive education and training is crucial to creating a competent and competitive workforce, which will ultimately drive sustainable and inclusive development. (Sutyanto in Zainuddin et al, 2022).

## **Economic Growth**

The economy plays a crucial role in the lives of most people around the world because of its direct impact on the well-being and quality of life of individuals. Economic growth, as measured by the increase in the number of goods and services produced in a region, is often a leading indicator of the economic success of that region. When the economy grows, it is usually followed by an increase in employment opportunities, incomes, and living standards of the people. Stable and sustainable economic growth can also increase the capacity of governments to provide better public services, such as education, health, and infrastructure. Thus, economic growth not only reflects the economic success of a region but also contributes significantly to improving the quality of life of its people. (Nisa & Handayani, 2021).

## **Inflation**

Inflation is an economic phenomenon that indicates a general increase in the prices of goods and services over a period of time, resulting in a decrease in the purchasing power of money. Inflation can be influenced by various factors, including high demand for goods and services, rising production costs, or loose monetary policy. According to Mankiw (2021), inflation is often seen as a signal of a booming economy, but if left unchecked, it can disrupt economic stability and reduce people's welfare.

## **Unemployment Rate**

Unemployment is a complex and multi-dimensional economic issue, and various scholars have made important contributions to our understanding of this phenomenon. According to Blanchard and Johnson (2022), unemployment can be categorized into several types, including structural, cyclical, and frictional unemployment. Structural unemployment occurs when there is a mismatch between workers' skills and the skills required by the industry, which is often caused by technological change or industry shifts. Cyclical unemployment is caused by fluctuations in the business cycle, where the economy experiences periods of recession or slowdown in growth. Frictional unemployment, on the other hand, occurs when workers are temporarily unemployed because they move from one job to another.

## **3. METHOD**

Data analysis is a crucial process in research that involves collecting, processing, and interpreting information to identify patterns, trends, and relationships. The process begins with

the collection of relevant data through methods such as surveys, interviews, or observations, which are then organized and prepared for analysis. Clean, well-structured data is an essential foundation for accurate analysis, so it is important to ensure that the data is free from errors and inconsistencies before proceeding to the analysis stage.

Once the data is collected and prepared, analysis is performed using a variety of statistical techniques or analytical methods depending on the purpose of the study. These techniques can include descriptive analysis, such as means and medians, to provide an overview of the data, or inferential analysis, such as regression and hypothesis testing, to identify relationships and influences between variables. In addition, data analysis often involves creating visualizations, such as graphs and tables, to facilitate understanding and communication of the results to stakeholders.

The results of the data analysis are then interpreted to provide meaningful insights. This process involves drawing conclusions from the analyzed data and explaining how the findings answer the research questions or support the hypotheses. Careful interpretation helps in making data-driven decisions and developing policy or strategy recommendations. With proper data analysis, researchers can provide a deep understanding of the phenomena studied and make valuable contributions to the development of knowledge and practice in the field. In quantitative research, the data analysis technique used has been determined, namely to answer the problem formulation or test the hypothesis that has been formulated in the proposal. Because the data is quantitative, the data analysis technique uses existing statistical methods. The data used in this study came from the Central Statistics Agency (BPS) of East Kalimantan Province. The inferential data analysis technique using Partial Least Squares (PLS) is a statistical method used to model the relationship between latent variables and measured variables in a study. PLS is a structural model-based approach that allows researchers to test and estimate complex relationships between variables, both at the measurement level and at the construct level.

In PLS analysis, a measurement model is first developed to evaluate how well the measured indicators describe the latent variables in question. This model is then used to assess reliability and construct validity. Once the measurement model is validated, the structural model is evaluated to test the causal relationships between the latent variables. PLS is able to handle data with small sample sizes and has the ability to handle non-normally distributed data, making it a flexible choice for various types of research. One of the main strengths of PLS is its ability to provide robust results even when the data used do not fully meet the classical assumptions of statistical analysis such as normality or linearity. In addition, PLS also allows

researchers to evaluate multiple paths of effect simultaneously, which provides deeper insight into the dynamics of the relationships between variables in the model. Thus, PLS is a useful tool in inferential data analysis, especially in the context of research involving complex models with many latent variables and indicators.

#### 4. RESULTS AND DISCUSSION

**Table 1 Test Results (T Statistic)**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
PE -> IPM	0.581	0.579	0.068	8.495	0,000
INF -> IPM	0.392	0.391	0.075	5.249	0,000
PNG -> IPM	0.245	0.239	0.110	2.232	0,026
PE -> KMS	0.001	0.000	0.068	0.009	0,993
INF -> KMS	0.245	0.249	0.086	2.835	0,005
PNG -> KMS	0.247	0.253	0.093	2.667	0,008
IPM -> KMS	0.225	0.229	0.073	3.062	0,002

Source: Data processing results

The figure shown is the "Path Coefficients" table showing the results of data processing in the Partial Least Square (PLS) model. This table displays various relationships between the independent and dependent variables analyzed, including path coefficients, T-statistic values, and p-values to determine the significance of the influence between variables. The results of the table show that economic growth and inflation have a positive effect on HDI, while inflation and unemployment have a significant effect on poverty. Interestingly, economic growth does not have a significant direct effect on poverty in the context of this sample. Therefore, policies aimed at increasing HDI and reducing poverty must consider these factors carefully.

**Table 2 Determinant Coefficient (R Square)**

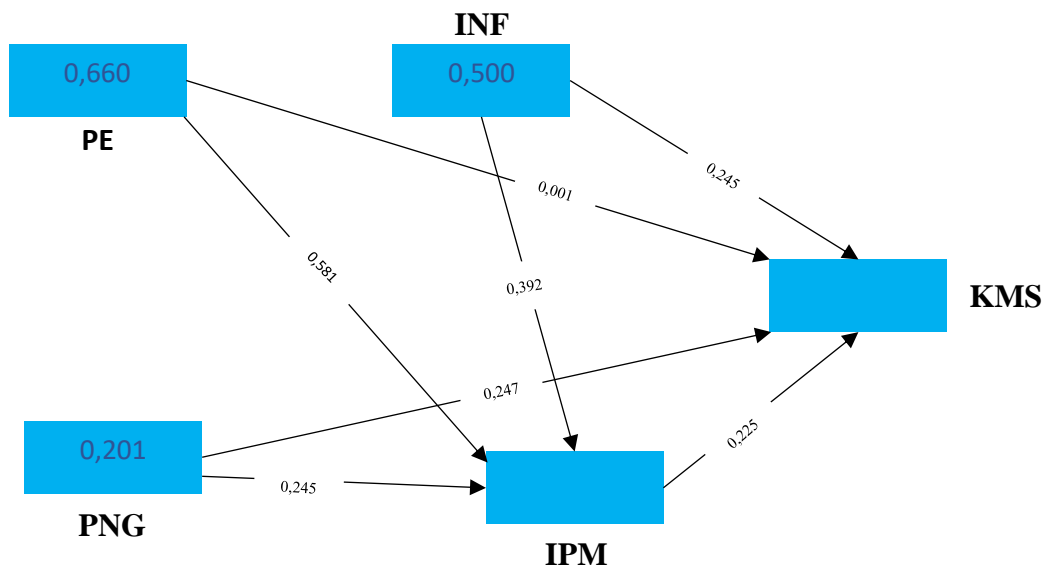
	R Square	R Square Adjusted
PE	0,660	0,652
INF	0,500	0,491
PNG	0,201	0,192

Source: Research Data

R Square measures the proportion of variance in the dependent variable that can be explained by the independent variables.

1. R Square for PE: 0.660, indicating that 66% of the variance in Economic Growth can be explained by other constructs.
2. R Square for INF: 0.500, indicating that 50% of the variance in Inflation can be explained by other constructs.
3. R Square for KMS: 0.201, indicating that 20% of the variance in Poverty can be explained by other constructs.

A higher R Square value indicates a better model in explaining the variance in the dependent variable. In this case, this model is quite good in explaining the variance of inflation and human development index, but less effective in explaining the variance of poverty.



**Figure 1 Results of the T Statistics test**

The figure is a path diagram of the structural model analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This diagram shows the relationship between latent variables (marked with blue circles) and their indicators (marked with yellow boxes), as well as the relationship between latent variables in the research model.



## 5. CONCLUSION

The Human Development Index (HDI) has a significant effect on the unemployment rate in East Kalimantan Province, with a probability value that is smaller than the established significance level. There are disparities that need to be considered in development in rural areas to ensure equal opportunities for all residents to achieve a better quality of life. Rural areas still face challenges in access to education and health services, as well as regional disparities in development, which need to be addressed through appropriate and sustainable policies. Assistance programs such as Direct Cash Assistance (BLT), National Health Insurance (JKN), and the Family Hope Program (PKH) have helped reduce the burden on the poor by providing access to basic needs. Efforts to improve the quality of education, health, and infrastructure in rural areas are the main focus to create a more prosperous and independent society. Although there has been progress in poverty alleviation, there are still challenges such as disparities between regions, the quality of education and health, and economic diversification that need to be addressed. Collaboration between the government, private sector, and civil society is needed to create sustainable and effective solutions to overcome poverty in East Kalimantan. Economic growth, inflation, and unemployment rates are interrelated and significantly affect the HDI and poverty rates in East Kalimantan Province. Therefore, comprehensive and sustainable policies are needed to achieve inclusive and equitable development in this region.

## REFERENCES

- Amalia et al. (2022). *Ekonomi Pembangunan*. Bandung: Penerbit Widina Bhakti Persada Bandung.
- An Nisa, & Handayani, H. R. (2021). Pengaruh Pertumbuhan Ekonomi, Kemiskinan, dan Belanja Modal Terhadap Kesejahteraan Masyarakat di JawaTengah Tahun2012 - 2018. *Diponegoro Journal of Economics*, 10(1), 1–13.
- Ardiansa. 2021. Pengaruh pertumbuhan ekonomi dan pertumbuhan Penduduk serta inflasi terhadap pengangguran dan Kemiskinan di Kalimantan Timur
- Ari Kristin Prasetyoningrum. 2018. Analisis Pengaruh Indeks Pembangunan (IPM), Pertumbuhan Ekonomi dan Pengangguran Terhadap Kemiskinan di Indonesia.
- Azriyansyah, Z. (2022). Analisis Pengaruh IPM, PDRB dan Tingkat Pengangguran Terhadap Tingkat Kemiskinan di Indonesia Periode Tahun 2017-2021. *Jurnal Ekonomi, Bisnis Dan Manajemen*, 1(3), 225–238.
- Boediono. 2019. *Ekonomi Mikro : Seri Sinopsis Pengantar Ilmu Ekonomi No.1, Edisi 5*. Yogyakarta : BPF

- Elvina. 2018. Pengaruh Pertumbuhan Ekonomi dan Inflasi Terhadap Pengangguran Dan Kemiskinan Di Kalimantan Timur.
- Fahmi, Irham. 2015. Analisis Kinerja Keuangan. Bandung: Alfabeta.
- Halim, R. dan Sutriyawan, A. 2022, 'Studi Retrospektif Gaya Hidup Dan Kejadian Hipertensi Pada Usia Produktif', *Journal Of Nursing And Public Health*, 10(1),Pp. 121–128. Available At:<https://doi.org/10.37676/jnph.v10i1.2376>.
- Ishaq, H, 2017, Metode Penelitian Hukum dan Penulisan Skripsi, Tesis, serta Disertasi, ALFABETA, Bandung.
- Kuncoro, Murdijat. 2006. "Ekonomi Pembangunan", Penerbit Salemba Empat, Jakarta.
- Kuncoro. 2020. Pengaruh Kemiskinan, Upah Minimum, dan IPM terhadap Tingkat Pengangguran Terbuka di Provinsi Kalimantan Barat. *Journal of Islamic Economy and Business (JIsEB)*, 1(1), 53–62.
- Leasiwal, Teddy Christianto. 2013. Determinan Dan Karakteristik Kemiskinan Di Provinsi Maluku. Vol.7 No.2 Hal.196-303 ISSN:1978-3612.
- Lina Marlina. 2022. Analisis Pengaruh Indeks Pembangunan Manusia, Pertumbuhan Ekonomi dan Upah Minimum terhadap Tingkat Pengangguran Terbuka di Indonesia
- Mokoagow, H., & Pateda, L. (2019). Pengaruh gaya hidup hedonisme dan dampaknya terhadap hasil belajar PAI di SMAN 1 Pinolosian Kab. Bolaang Mongodow Selatan. *Jurnal Pendidikan Agama Islam & Budi Pekerti*. 1(2), 12-27.
- Mukaramah, Cindy Yolanda, Muhammad Zulkarnain. 2019. Analisis Pengaruh Belanja Modal dan IPM terhadap pertumbuhan ekonomi dan kemiskinan di kabupaten Aceh Timur.
- Nurine Syarafina Khawaja Chisti. 2018. Analisis pengaruh indeks pembangunan manusia, tingkat pengangguran, pertumbuhan ekonomi, dan upah minimum provinsi terhadap tingkat kemiskinan (Studi Kasus pada 6 Provinsi di Pulau Jawa).
- Rahardja dan Manurung. 2018. Teori Ekonomi Mikro: Suatu Pengantar. Jakarta: Lembaga Penerbitan Fakultas Ekonomi Universitas Indonesia.
- Riska, Nazaruddin, Yulindawati. 2020. Pengaruh Pertumbuhan Ekonomi, Indeks Pembangunan Manusia (IPM) Dan Kemiskinan Terhadap Tingkat Pengangguran Terbuka Di Provinsi Aceh.
- Rizky Dewinda. 2017. Analisis Pengaruh Indeks Pembangunan Manusia (Ipm), Pertumbuhan Ekonomi, Upah Minimum Dan Tingkat Pengangguran Terhadap Kemiskinan Di Kabupaten/Kota Di Kalimantan Barat.
- Sadono, Sukirno. 2010. Makroekonomi. Teori Pengantar. Edisi Ketiga. PT. Raja Grafindo Persada. Jakarta.
- Sanny FERIA JULIANA, YULIAN RINAWATY TAAHA, FELIKS ARFID GUAMPE. 2023. Pengaruh Laju

Pertumbuhan Penduduk Dan Inflasi Terhadap Kemiskinan di Indonesia Tahun 2001-2021.

Setyo Novanto 2018. Pengaruh pertumbuhan ekonomi, IPM, Inflasi, dan Pengangguran terhadap Tingkat Kemiskinan di Kabupaten/Kota Jawa Tengah 2011-2016

Sugiyono. 2019. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Sukirno, Sadono. 2015. Makro Ekonomi, Teori Pengantar. Penerbit PT. Raja Grafindo Persada, Jakarta.

Sukirno, Sadono. 2018. Makro Ekonomi, Teori Pengantar. Penerbit PT. Raja Grafindo Persada, Jakarta.