



Analysis of the Effect of Human Development Indeks (HDI) and Unemployment Proverty in South Kalimantan Province

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Abstract

Poverty has become a necessary problem that needs to be solved every year because it is such a complex and multifaceted problem. Poverty is not only related to the response and limitation of employment, but is also influenced by a number of other factors, both of a social and economic nature. This research is a quantitative research conducted in South Kalimantan. With secondary data from the South Kalimantan Central Statistics Agency website in 2022 and analyzed by multiple regression with the Human Development Index (HDI) and the number of unemployed as independent variables and the number of poor as dependent variables. The results showed that higher HDI will reduce poverty.. On the other hand, high unemployment indicates high poverty, which is why it is necessary to help reduce the number of people living below the poverty line.

Keywords: Human Development Index, unemployment, poverty, South Kalimantan, Effect

Literature Review

Poverty remains one of the significant social problems experienced by every country in the world, not least in Indonesia. Poverty is defined as a condition in which a person or group does not have access to resources that can meet basic needs. Poverty has become a necessary problem that needs to be addressed every year because it is such a complex and multifaceted problem. Poverty is not only related to the response and limitation of employment, but is also influenced by a number of other factors, both social and economic .HDI covers aspects such as

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health, education and living standards that can affect poverty. At the same time, unemployment can limit the availability of resources and hinder a decent standard of living.

Table 1. Data on the Human Development Index (IPM), Unemployment, and Poverty in South Kalimantan Province in 2022

Regency	HDI	Unemployed Residents	Poor Residents
Tanah Laut	70.35	7675.00	13541
Kotabaru	69.74	10762.00	15065
Banjar	70.72	8529.00	16711
Barito Kuala	67.37	6075.00	15055
Tapin	71.02	4289.00	6982
Hulu Sungai Selatan	69.76	2881.00	10804
Hulu Sungai Tengah	69.70	4676.00	16144
Hulu Sungai Utara	66.84	5688.00	15497
Tabalong	73.13	6219.00	15243
Tanah Bumbu	71.79	13217.00	17216
Balangan	69.73	2830.00	7825
Kota Banjarmasin	77.97	23987.00	34009
Kota Banjar Baru	79.68	7197.00	11610

Source: Central Kalimantan Statistics Agency data for 2022, processed

Reporting from data from the Central Statistics Agency (BPS), the poverty rate in South Kalimantan in September 2022 increased to 4.61%. This figure increased from the previous one in March 2022 by 3.94%. BPS also reported that efforts to improve education, health, and living standards can help reduce poverty. HDI and unemployment rate emerged as important issues in poverty alleviation in South Kalimantan. The Human Development Index (HDI) of South Kalimantan increased significantly from 2010 to 2022. This increase shows that South Kalimantan has improved the quality of life of its people through various development programs and policies. South Kalimantan HDI in 2022 reached 71.84, which indicates an increase of 6.64 points from 2010. The increase in HDI is mainly due to an increase in three dimensions of human development, such as health, education, and a decent standard of living. Further HDI growth can also be expected in the foreseeable future.

The unemployment rate in South Kalimantan decreased from 4.95 percent in August last year to 4.74 percent in August 2022. However, keep in mind that the unemployment rate can fluctuate over time. Even so, the decline in unemployment shows the government's efforts in creating more job opportunities for South Kalimantan residents.(Hidayat et al., 2021)

a. Poverty

Poverty is a condition when a person or household is unable to meet their basic needs. BPS also provides a definition of poverty based on the level of per capita expenditure per

month, which is when a person or household has expenditure below the poverty line set by the government (Badan Pusat Statistik). The poverty line varies in each region, depending on the level of prices and basic needs that must be met.

Poverty is a condition when a person does not have enough access to meet basic needs. Poverty is not only an economic problem, it is also linked to social and political injustice. Efforts to reduce poverty should include social welfare programs, increased access to education and health services, and inclusive economic development (Maipita, 2014).

Factors that cause poverty include The Human Development Index (HDI), unemployment and access to productive resources such as agricultural land and business capital. HDI includes access to education, health, and decent living standards, so improving HDI can help reduce poverty levels. Meanwhile, unemployment and limited access to productive resources can exacerbate poverty. Therefore, it is important to improve access to education, health, as well as social welfare programs and inclusive economic development to reduce poverty (Maipita, 2014).

b. Human Development Index (HDI)

HDI or Human Development Index is a measurement of the level of progress of a country or region based on three main dimensions, namely health, education, and income. The HDI was developed by the United Nations in 1990 as an alternative to classical measures such as Gross Domestic Product (GDP) that only measure a country's economic prosperity.(Yankovskaya et al., 2023)

HDI is used to indicate the extent to which a country or region can meet basic human needs, such as access to education, health, and a good livelihood. HDI can also be used to show disparities between social and economic groups within a country or region (Maipita, 2014).

In the book macroeconomic theory Sadono Sukirno (2012) Human Development Index (HDI) takes into account three basic human well-being: longevity and healthy, access to information and a decent standard of living. HDI is calculated by combining measures of life expectancy, education (years of schooling), and income (GNI per capita) into one index. The HDI ranges from 0 to 1, with a higher score indicating a higher level of human development. HDI is often used to compare the level of human development in different countries and to track changes in human development over time. According to Indra Maipita (2014), the Human Development Index (HDI) can have an impact on poverty because the HDI covers three main dimensions of human well-being: health, education and a decent standard of living. When the HDI increases, it shows that the country has progressed in all three dimensions. This can reduce poverty levels because increased access to health and education services can help improve the skills and qualifications of the population. Thus, increasing HDI can help reduce the poverty rate in the country.(Tse et al., 2023)

Improving HDI can help reduce poverty by improving access to health and education services, creating better job opportunities, and increasing income. Poverty reduction does not

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always go hand in hand with an increase in HDI, as there are other factors that influence poverty such as income inequality and access to resources. However, increasing HDI remains an important factor in efforts to reduce poverty (Ravallion, 2016).

c. Unemployment

The Central Statistics Agency (BPS) defines unemployment as a condition that indicates a person who is in or does not have a job but is in a job search and is willing to work.

According to Indra Maipita (2014) unemployment can lead to poverty through several ways. First, unemployment can reduce the income of individuals and families, resulting in difficulties when meeting basic needs such as food, clothing, and shelter. Second, unemployment can cause individuals and families to lose access to resources and social networks that are essential for obtaining employment and improving well-being. Third, unemployment can affect the mental and physical health of individuals and families, as well as increase the risk of stress and depression. Therefore, high unemployment can be an important factor in exacerbating poverty in a country.

Research Method

The type of research used for this study is quantitative research methods. In this study the data used in the form of numbers and analyzed using statistics. Then used SPSS version 22 in processing this research data. Data collection comes from secondary data. Secondary Data is sourced from the website of the Central Statistics Agency of South Kalimantan, namely 2022 data. The population in the study is as many as 13 districts in the province of South Kalimantan. With a total of 39 samples that have included independent and dependent variables for this study. The study was analyzed with multiple regression in which the independent variable is the HDI (x1) and the number of unemployed (x2) and the number of poor(y) as the dependent variable. Here is a model overview of the research conducted.

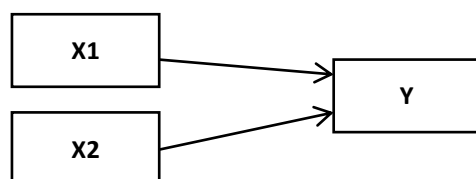


Figure 1. Research Model

Then the double regression equation is :

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

Where:

Y= Poverty

α = constant

$\beta_{1,2}$ = regression coefficient

X1= IPM

X2 = Unemployment

e = standard *error*

For the research conducted, data analysis tools were used. Through determination coefficient test or R-Square, simultaneous test, normality test, multicollinearity test, heteroscedasticity Test, t test (partial test), normality test, and autocorrelation test.

Research Results and Discussion

1. Research result

a. Normality test

Table 2. Normality Test Results with

One- Sample Kolmogorov-Smirnov test

Unstandardized residual

N	35
<i>Asymp . Sig . (2-tailed)</i>	,200 ^{c .d}

Source: Processed Data (SPSS 22)

In table 2, it is known that the Asiymp.Sig (2- *tailed*) value is 0.200 , which means it is greater than 0.05. The table shows that the data used is normally distributed . So that the requirements for the normality test in the regression have been fulfilled.

b. Multicollinearity Test

Table 3. Multicollinearity Test Results

Model	tolerance	VIF
(Constant)		
IPM	,998	1,002
Open Unemployment Rate	,998	1,002

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Source: Processed Data (SPSS 22)

The HDI variable with the VIF value in table 3 is 1.002 and the *Tolerance value* is 0.998. The same is true for the unemployment variable. The HDI and unemployment variables show $VIF < 10$ and $tolerance > 0.1$. So there is no multicollinearity problem in this research data.

c. Heteroscedasticity Test with Glejser Test

Table 7. Result Heteroscedasticity Test with Glejser Test

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	28,784	74,183		388	,701		
	IPM	-,426	,988	-,067	432	,669	,998	,002
	Tingkat Pengangguran Terbuka	6,592	2,239	,460	945	,006	,998	,002

Source: Processed Data (SPSS 22)

Based on table 6 the significance value (Sig .) of HDI (x1) is 1.002. And the significance value (Sig .) of the unemployment rate variable (x2) is also the same, namely 1.002. In this case the significance value of the 2 independent variables is > 0.05 so that there is no heteroscedasticity in the regression .

d. Autocorrelation Test with *Durbin-Watson*

Table 5. Autocorrelation Test Results

Model	<i>Durbin-Watson</i>
1	1,974

Source: Processed Data (SPSS)

Table 5 with the SPSS program shows the *Durbin-Watson (d)* value of 1.974. When compared with using a table then (1; 105). So dL is 1.6627 & dU is 1.7011. So it can be concluded that there is no autocorrelation .

e. Multiple Analysis Results

Table 6. Multiple Linear Analysis Results

Model	Unstandardized Coefficients		standardized Coefficients	Q	Sig .
	B	std . Error	Betas		
(Constant)	298,231	18730,080		1,191	,261
IPM	228,930	272,466	-,129	-,840	,420
Number of Unemployed Population	1.137	, 179	,975	5,347	,000

Data Source: Processed Data (SPSS 22)

Through the table 6 multiple regression equation obtained as follows.

$$Y = 22298.231 + 228.930 X_1 + 1.137 X_2 + e$$

The meaning of the regression equation:

- The constant is 22298231. As a result, if the HDI and the number of unemployed, then the number of poor people will also increase.
- The IPM variable relation coefficient is -228,930. This means that there is a negative relationship between the HDI variable and the number of people living in poverty. The number of poor people will decrease by 228,930 if the HDI variable increases by 1%. Where the assumption of other factors remains the same.
- The coefficient of relation to the population variable has a positive value of 1.137. This means that if it is assumed that the number of unemployed people increases by 1%, then it is likely that the number will have an impact on an increase of 1.137 where the other independent variables are held constant. These results indicate that when the number of unemployed people increases by 1%, there will be an increase in the number of poor people by 1,137. A positive regression coefficient indicates an increase in the number of unemployed, which will have an impact on increasing the number of poor people in South Kalimantan.

f. Test the Coefficient of Determination or *R-Square*

Table 7. Test Results for the Coefficient of Determination

R	R Square
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,912a	,832
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Data Source: Processed Data (SPSS 22)

Table 7 explains the value of the multiple correlation coefficient (R) is 0.912 and also the value of the multiple regression coefficient is 0.832. This means that the HDI variable and the total of 83.2% of the poor population are influenced by HDI and the number of unemployed people in South Kalimantan. The remaining 16.8% is outside of the research variables.

g. Simultaneous Test (*F- test*)

Table 8. Simultaneous Test Results

	F	Sig .
<i>Regression</i>	24,842	,000 ^b
<i>residual</i>		
Total		

Data Source: Processed Data (SPSS 22)

Table 3 explains that the simultaneous test obtained the _{calculated} F value of 24.842 and F_{table} for $\alpha = 0.05$; db1=2;db2=10, ie F_{tab} (0.05;2;10) = 4.102. So that F_{hit} (24,842) > F_{tab} (4,102). So in this case there is a significant effect of the HDI and the number of unemployed on the number of poor people in South Kalimantan with an α level of 5%.

h. Partial Test (*t- test*)

Table 9. Partial Test Results

	Q	Sig .
(Constant)	1,191	,261
	-,840	,420
Number of Unemployed Population	6,347	,000

Source: Processed Data (SPSS 22)

a) Partial regression of X1 to Y

The effect of HDI on the number of poor people adjust the variable number of responses received $t_{count} = -0.840$. Then compare with $t_{table} (0.05, 10) = 2.228$, so T_{hit} is 5%.

b. Partial regression of X2 to Y

The effect of the number of unemployed on the number of poor people by adjusting the HDI variables obtained $t_{hitung} = 6.347$. Then compare with $t_{table} (0.05, 10) = 2.228$ so that $t_{hitung} > t_{table}$ then H_0 or hypothesis is rejected. That is, the number of partially unemployed has a positive and significant effect on the number of poor people $\alpha 5\%$.

2. Discussion

South Kalimantan has the 2nd lowest poverty rate in Indonesia, with a percentage of 4.61% as of September 2022. The HDI for South Kalimantan is still below the national average, which can lead to poverty.

Based on the research that has been done, it can be concluded that the analysis of the effect between HDI shows a significant negative effect on poverty in South Kalimantan, while unemployment shows a significant positive effect on the amount of poverty. Therefore, to reduce the poverty rate in South Kalimantan, it is necessary to make efforts to improve human development and reduce the unemployment rate in the area .

This is in line with research Andykha et al., (2018); Kristin et al., (2018); dan Mukhtar et al., (2019), whose research results show that there is a significant relationship between the Human Development Index (IPM) and poverty levels. The study found that as the HDI increased, the poverty rate decreased. In addition, the study found that the open unemployment rate also has a significant impact on the poverty rate, with higher unemployment leading to an increase in poverty.

The research was carried out highlighting the importance of increasing the HDI and reducing the unemployment rate to overcome poverty in South Kalimantan. Efforts to increase access to education and health services, provide social assistance programs, and promote economic growth can all contribute to increasing the HDI and reducing the poverty rate in South Kalimantan.

Conclusion

The research results show that the higher HDI will reduce poverty. This is due to the fact that a higher HDI indicates better economic and social development in a society, which can help improve the welfare of its population. On the other hand, high unemployment indicates high poverty, therefore it is necessary to help reduce the number of people living below the poverty line. The government must continue to encourage economic development and create new jobs to help reduce poverty in South Kalimantan.

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The research conducted may not be able to accurately and in-depth describe the situation as a whole. One year's use alone may provide a limited description and may not show changes in long-term trends. Therefore, researchers who wish to deepen this research are expected to use data from several years or certain periods to obtain more representative results.

Declaration of conflicting interest

The research was carried out highlighting the importance of increasing the HDI and reducing the unemployment rate to overcome poverty in South Kalimantan. Efforts to increase access to education and health services, provide social assistance programs, and promote economic growth can all contribute to increasing the HDI and reducing the poverty rate in South Kalimantan.

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