THE EFFECTS OF ECONOMIC GROWTH, MINIMUM WAGE, EDUCATION, AND HEALTH ON POVERTY IN KUDUS, CENTRAL JAVA

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ABSTRACT

Background: Poverty is a major problem from year to year for the central and local governments. Poverty makes the level of a government's economy not progress. This study aimed to analyze the effects of economic growth, education, health, and minimum wage on poverty in Kudus, Central Java.
Subjects and Method: A cross sectional study was conducted in Kudus, Central Java. The data were obtained from the Central Java Statistics Agency from 1996 to 2020. The dependent variable was poverty. The independent variables were economic growth, education, health, and minimum wage. The data were analyzed by a multiple linear regression.
Results: High economic growth (b= -0.18; 95% CI= -0.36 to -0.01; p= 0.014), higher education (b= -0.91; 95% CI= -1.58 to -0.28; p= 0.010), good health (b= -0.37; 95% CI= -0.49 to -0.25; p <0.001), and higher minimum wage (b= -1.35; 95% CI= -2.24 to -2.56; p= 0.018) were associated with decreased risk of poverty.
Conclusion: Economic growth, minimum wage, education, and health decrease the risk of poverty.

Keywords: economic growth, minimum wage, education, health.

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BACKGROUND

Indonesia is a developing country, and has the main problem that the government focuses on, namely poverty. It is undeniable that it is the government's concern that must be resolved immediately. Poverty has a negative impact on the government, one of which can cause delays in Indonesia's development.

Kudus Regency is a district in Central Java Province which has a population of 849,184 people. In 2020, the number of poor people reached 64.24 thousand people (7.31 percent),

an increase of 6.24 thousand people compared to the poor in 2019 which amounted to 58.00 thousand people (6.68 percent). In addition, the Poverty Line of the population of Kudus Regency also increased from Rp. 406.470 in 2019 to Rp. 429,666 in 2020 (Isknews, 02 December 2021).

In 2020, the population of Central Java, especially Kudus Regency, experienced an increase in poverty by 7.31 percent. This increase in poverty has occurred since the COVID-19 pandemic entered Indonesia in early 2020. Many workers were laid off

because companies had to reduce activities outside the home which could lead to increased transmission of COVID-19. This has had a tremendous impact, so that many people were laid off and resulted in a decrease in income (Kompas, 17 June 2021).

One of the efforts to overcome the level of poverty is through increasing income. For residents who work as workers, worker productivity can be increased through wages. The provincial minimum wage or commonly abbreviated as UMP is the minimum wage that applies to all districts/cities in one province. The UMP for each district/city in a province is the same. According to Kuncoro (2000), poverty occurs due to differences in the quality of human resources. Where low human resources mean low productivity, in turn wages are also low. To increase productivity, education can be one of the solutions in reducing the backwardness and backwardness of a region. High income will increase their consumption, and can avoid poverty.

In addition to the provincial minimum wage, the formal education undertaken by residents is also suspected as a cause of poverty. The average length of schooling in Kudus Regency always increases. Meanwhile, the average length of schooling fluctuated. The largest rate occurred in 2020, which increased by 8.75%. While the lowest rate occurred in 1996, which only increased by 6.0% (BPS Central Java.go.id).

Health is also a factor that affects the level of poverty. The life expectancy of the population of Kudu Regency is always increasing. Where the highest rate occurred in 2019 which was 76.5%.

This is due to the Indonesian population who are starting to pay attention to health such as maintaining a healthy diet, exercising and avoiding habits that can cause disease. This increase in life expectancy is the impact of an improvement in public health status, including increased access and quality of health services.

Based on this background, this study was conducted to analyze the effect of economic growth, minimum wages, education and health on poverty in Kudus Regency.

SUBJECTS AND METHOD
1. Study Design
This research is a cross-sectional study conducted in Kudus Regency, Central Java Province.
2. Population and Sample
The number of population and samples in this study are economic growth rates, minimum wages, education, health and poverty in Kudus Regency whose data were obtained from the Central Java Statistics Agency from 1996 - 2020.
3. Variable
The dependent variable is poverty. The independent variables used in this study are economic growth, minimum wages, education, and health.
4. Operational Definition
Poverty is the inability from an economic, material and physical point of view to meet the basic needs of food and non-food which is measured by expenditure. The measure of poverty is using the poverty line (BPS, 2016).
Economic growth is the development of activities in the economy that causes goods and services produced in society to increase and the prosperity of society to increase. So economic growth

measures the achievement of the development of an economy from one period to another (Sukirno, 2011).

The minimum wage is a minimum standard used by entrepreneurs or industry players to provide wages to workers in their business or work environment.

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves and society (UU SIDIKNAS No. 20 2003).

Health is a resource that is owned by all humans and is not a life goal that needs to be achieved. Health is not focused on physically fit but includes a healthy soul where individuals can be tolerant and can accept differences (Robert, 2017).

5. Instrument
The instrument used in this study was through observation by collecting data from the Central Java Statistics Agency

in 1996 −2020. The research data collection method was carried out by using various sources of literature review, books, articles and research journals.

6. Data Analysis
Univariate analysis was used to describe the characteristics of the subject. Bivariate analysis was performed using the chi-square test. Then proceed with multivariate multiple linear regression.

RESULTS

1. Sample Characteristics
Based on Table 1 shows that the variable economic growth has a mean value of 3.72 with a range from -3.53 to 8.39. The education variable has a mean value of 7.50 with a range from 6.00 to 8.75. The health variable has a mean value of 71.63 with a range from 64.80 to 76.50. The minimum wage variable has a mean value of 847,580.24 with a range from 252,000 to 2,290.995. The poverty variable has a mean value of 10.84 with a range from 6.68 to 15.33.

Table 1. Sample Characteristics

Variable	Mean	Median	Min.	Max.
Economy	3.72	11.92	-3.53	8.39
Education	7.50	2.75	6.00	8.75
Health	71.63	11.70	64.80	76.50
Minimum wage	847,580,24	2,038,995	252,000	2,290,995
Poverty	10.84	8.65	6.68	15.33

The economy has an effect on poverty, but it is not statistically significant (r= 0.24; p= 0.243). Education (r= -0.86 p < 0.001), health (r= 0.24; p= 0.243),

and minimum wages (r= 0.24; p= 0.243) were associated with poverty and were statistically significant (Table 2).

Table 2. Effect of Economy, Education, Health, Minimum Wage on Poverty

Variable	Poverty	
	r	**p**
Economy	0.24	0.243
Education	-0.86	<0.001
Health	-0.95	<0.001
Minimum wage	-0.88	<0.001

High economic growth (b= -0.18; 95% CI= -0.36 to -0.01; p= 0.014), higher education (b= -0.91; 95% CI= -1.58 to -0.28; p= 0.010), good health (b= -0.37; 95% CI= -0.49 to -0.25; p < 0.001), and a higher minimum wage (b= -1.35; 95% CI= -2.24 to -2.56; p= 0.018) was associated with decreased poverty risk (Table 3).

Table 3. Results of Linear Regression The Effect of Economy, Education, Health, Minimum Wage on Poverty

Independent variable	b	95% CI		p
		Lower limit	**Upper limit**	
Economy	-0.18	-0.36	-0.01	0.014
Education	-0.91	-1.58	-0.28	0.010
Health	-0.37	-0.49	-0.25	<0.001
Minimum wage	-1.35	-2.24	-2.56	0.018

DISCUSSION

1. The Effect of Economic Growth on Poverty

Economic growth from 1996 – 2020 fluctuated every year, until there was a decline in 2020 when COVID-19 hit all over the world and even the impact reached Kudus Regency with a decline of -3.53. This study shows that the results are significant, which means that economic growth has an effect on poverty. Thus, the higher the economic growth, the poverty rate will decrease, on the contrary if the economic growth decreases, the poverty level will increase.

The results of the study are in line with the results of previous studies that economic growth has a significant effect on poverty. The higher the level of economic growth in an area, the lower the poverty rate (Syafuridar 2017; Hidayat, 2018; Hertzmark and Chavez, 1976). However, this is not in line with previous research which showed that economic growth had no effect on poverty due to high economic growth, but it was not evenly distributed so that it did not reduce poverty (Pangiuk, 2018; Pahlawan and Yaumul, 2018; Araujo et al., 2017) .

2. The Effect of Education on Poverty

Education from 1996–2020 in Kudus Regency experienced a growth of 2.75%. This study shows that the results are significant, which means that education has an effect on poverty. In addition, the Kudus Regency education index is not far away from the education index in Central Java Province in 2020. This means that the Kudus Regency education level will have an influence on reducing poverty levels. By improving the quality and facilities of education, it

will form quality human resources that can have an impact on reducing poverty.

The results of the study are consistent with Pervez (2014) showing the results that education has a negative effect on poverty in Takalar Regency. Research from and Cloud et al. (2011) also found that education has a negative effect on poverty. This means that the higher the level of education it will reduce poverty. The existence of a high level of education will increase productivity in an area. In contrast to the results of research conducted by Rahman and Alamsyah in 2019, Suripto and Subayil (2020) that education does not have a significant effect on poverty.

3. The Effect of Health on Poverty

Health in 1996–2020 in Kudus Regency experienced a growth of 11.70%. This shows that the people of Kudus Regency are open about the importance of maintaining health. However, in recent times when COVID-19 hit the whole world, Kudus had a huge impact on this virus. Until the Central Java Health Office noted that the occupancy rate of the referral hospital for handling COVID-19 in Kudus Regency had reached 90%. This is due to a spike in COVID-19 cases in Kudus Regency, which currently has a red zone status (Kompas.com). This study shows that the results are significant, so that health has an effect on poverty. It can be interpreted that the higher the health rate will reduce the poverty rate, but it does not have a real impact on poverty reduction. One way to improve people's welfare is to improve their health status. Because improving health status is the main factor to build quality resources and improve the quality of human development in a region. So with a

healthy body can do all positive activities so as to reduce poverty.

The results of this study support the study by Yuliani et al. (2019); Jajua and Kamal (2014) who show that health has an effect on poverty. The better the facilities and equitable health development, it will reduce poverty because people are more productive, if their health is guaranteed. However, it is different from the results of research conducted by Permana and Ariyani (2012) which shows that health has no effect on poverty.

4. Minimum Wage on Poverty

The Minimum Wage in 1996 – 2020 has increased every year, this is in line with the increase in inflation which continues to increase. So that the consumption power and the level of community needs also increase. This study shows a significant result, which means that the minimum wage has an effect on poverty. The higher the minimum wage can trigger a decrease in the poverty rate. This result is in accordance with the objectives of setting the minimum wage as stated by Kaufman (2000) and in the Regulation of the Minister of Manpower Number: Per-01/Men/1999 and the Manpower Act No. 13 of 2003, namely to improve the welfare of workers, so that they are free from poverty. The determination of a minimum wage that is close to the KHM (Minimum Living Needs) and above the poverty line is appropriate because it is able to reduce poverty levels in Central Java.

The results of the study are in line with Kuswantoro et al. (2016) show that the regional minimum wage has a significant influence on the poverty rate in the province of Banten. the same study was also conducted by Sari et al.

(2021), the results show that the minimum wage has a significant negative effect on poverty in the province of Central Java. The higher the minimum wage, the lower the poverty rate.

The advice given for further research is that researchers are expected to do more comparisons between the two in the region to find out whether the poverty rate can affect the rate of economic growth, with the provision of an inappropriate minimum wage will also reduce the level of Education and Health in an area. And in the next research, it is expected to add the Digital Economy and Business variables, so that the research results obtained can be maximized and can add to the novelty of the research.

REFERENCES

Araujo, Andrade - Marinho J, Emerson - Campêlo, Lima G (2017). Economic growth and income concentration and their effects on poverty in Brazil. Cepal Review. 123: 34–53. https://doi.org/10.-18356/F61073EF-EN.

Awan M, Malik N, Sarwar H, Waqas M (2011). Impact of education on poverty reduction. Int J Acad Res. 3(1): 659–664. https://mpra.-ub.uni-muenchen.de/31826/.

Didu S, Fauzi F (2016). Pengaruh jumlah penduduk, pendidikan dan pertumbuhan ekonomi terhadap kemiskinan di Kabupaten Lebak (The influence of population, education and economic growth on poverty in Lebak Regency). Jurnal Ilmu Ekonomi. 6 (1): 1-16. http://dx.doi.org/10.35-448/jequ.v6i1.4199

Hertzmark E, Chavez A (1976). The effect of economic growth on nutrition. Ecol Food Nutr. 4(4): 257–259. https://doi.org/10.10-80/03670244.1976.9990437

Hidayat W (2018). The impact of Economic growth on income disparity and poverty. Iseth. 293–301.

Pahlawan PY, Ratna (2018). The effect of education level, unemployment rate and economic growth on poverty rate in Indonesia 2012-2017 Period. Journal of Maliksussaleh Public Economics. 01(02): 44–49.

Pangiuk A (2018). Kata kunci: pertumbuhan ekonomi, pengurangan kemiskinan, Jambi (Keywords: economic growth, poverty reduction, Jambi). 2(2): 44–66.

Pervez S (2014). Impact of agriculture growth on poverty : a co-integration analysis for Pakistan. JREIF. 3(4): 83–89.

Sari YA (2021). Pengaruh upah minimum tingkat penganguran terbuka Jawa Tengah (The effect of the minimum wage on the open unemployment rate in Central Java). 10(2): 121–130. http://-dx.doi.org/10.35906/je001.v10i2.785.

Safuridar (2017). Pengaruh pertumbuhan ekonomi terhadap kemiskinan di Kabupaten Aceh Timur (The effect of economic growth on poverty in East Aceh District). E Jurnal Ihtiyadh. 1(1). https://doi.org/10.32505/ihtiyath.v1i1.674

Pratomo DS, Saputra PMA (2011). Kebijakan upah minimum untuk perekonomian yang berkeadilan: tinjauan UUD 1945 (Minimum wage policy for a just economy: a review

of the 1945 Constitution). J Indones Applied Economics. 5(2),: 269-285. http://dx.doi.org/10.21776/ub/JIAE/2016/005.02.6

Simanjuntak PJ (2001). Pengantar ekonomi sumber daya manusia (Introduction to human resource economics). Jakarta: Lembaga Penerbit Fakultas Ekonomi UI.

Sugiyono (2016). Metode penelitian kuantitatif, kualitatif dan R&D (Quantitative, qualitative and R&D research methods). Bandung: PT. Alfabet.

Suripto, Subayil L (2020). Pengaruh tingkat pendidkan, pengangguran, pertumbuhan ekonomi dan indeks pembangunan manusia terhadap kemiskinan di Daerah Istimewa Yogyakarta Periode 2010-2017 (The effect of education level, unemployment, economic growth and human development index on poverty in the Special Region of Yogyakarta for the 2010-2017 period). Ilmiah Ekonomi Pembangunan. 1(2): 127–143.

Permana AY, Arianti F (2012). Analisis pengaruh PDRB, pengangguran, pendidikan, dan kesehatan terhadap kemiskinan Di Jawa Tengah Tahun 2004-2009 (Analysis of the influence of GRDP, unemployment, education, and health on poverty in Central Java in 2004-2009). Diponegoro Journal of economics (DJOE). 1(1): 25-32. Retrieved from: https://ejournal-3.undip.ac.id/index.php/jme/article/view/128

Yuliani TW, Suprapto, Setyorini CT (2019). The effect of health and education facilities on poverty in 33 provinces in Indonesia (2012-2016 Periods). International Conference on Rural Development and Enterpreneurship. 5(1): 662–669. Retrieved from: http://jp.feb.unsoed.ac.id/index.php/Icore/article/viewFile/1532/1543