ANALYSIS OF FACTORS AFFECTING THE POVERTY RATE IN CENTRAL JAVA PROVINCE IN 2018-2021

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KEYWORDS	ABSTRACT
affecting; poverty; central java	Poverty is one of the fundamental issues that is the center of the government's attention. Reducing the poverty rate is one of the Central Java government programs. By Therefore, it is necessary to know what factors can affect the poverty rate in Central Java. This study aims to analyze the influence of the human development index (HDI), gross regional domestic product (GRDP), population, unemployment rate, Government expenditure on the poverty rate in Central Java Province. This research uses data from 2018-2021 sourced from the central statistics agency (BPS) by using panel data regression using three models pooled least squares (PLS) models, fixed effect model (FEM), and random effect model (REM). The best model specification results is the fixed effect model (FEM). The results of this study indicate that the human development index has a negative and insignificant effect on the poverty rate, gross domestic product has a negative and insignificant effect on the poverty rate, population has a significant negative effect on the poverty rate, the unemployment rate has a negative and insignificant effect on the poverty rate, and government spending has a positive and insignificant effect on the poverty rate

1. Introduction

Poverty is a multidimensional problem that is still often found in Indonesia, as well as countries in the world (Wahyudi & Rejekingsih, 2013). Poverty is divided into two criteria, the first is relative poverty and the second is absolute poverty, where the definition of relative poverty is a state of poverty that is influenced by government development policies, but does not cover all regions and classes of society, resulting in uneven distribution of per capita income from the community (Tisniwati, 2012). The definition of absolute poverty itself is the minimum standard of life support that It is needed to meet the basic needs for survival, both food and the

need for food. This standard is commonly referred to as the poverty line (BPS, 2019). Poverty is a condition in which a person is unable to achieve a standard of group life and is also unable to exert energy, mentally, and physically on a group (Rafizar, 2019). Poverty can be defined as a condition in which a person or group, both men and women, are unable to fulfill their basic rights to maintain continuity and thrive in a dignified life. Basic rights that should be obtained by the community include the fulfillment of food needs, physical and mental health, formal education, employment, housing boards, the availability of clean water, land, natural resources and a symbiotic environment, a sense of security from treatment or threats of physical or psychological violence, and the right to participate in social and political life. Rights for women as well as men (Nalle, 2018).

Poverty can be said to be a condition of economic inability to meet the average standard of living of people in an area. According to poverty, it can be caused by a lack of income and assets to meet basic needs, namely in the form of clothing, food, and shelter (Doriza, Purwanto, & Maulida, 2013). This poverty problem has become a common problem faced by developing countries such as Indonesia. Poverty is often associated with social problems or a condition that is viewed by some people in society as something that is not expected. Lowering poverty is just as important as lowering unemployment. According to him, if people are not unemployed, it means having a job and income, with the income obtained from work, it is expected to meet the needs of life (Jajuli & Daryono Soebagyo, 2015). If the needs of life are met, it is not included in the category of poor people. One of the necessities of life that must be met is the basic needs in the form of food. The quality of food consumption will determine the quality of intake and nutritional adequacy which will ultimately determine the level of public health. Poor health can result in decreased productivity and quality of life, leading to poverty (Putri, 2014).

Poverty occurs because poor people generally have business capabilities and limitations to economic activities that are not the same, so that these problems can cause lagging between one community and another in the development process and enjoy the results of development (Endrayani, 2016). The main objective of economic development in addition to creating the highest possible growth, must also be able to eliminate and reduce poverty, income inequality, and unemployment. So it can be said that the priority of development is to eliminate poverty (Todaro, Kånneby, Dal Zotto, & Jondelius, 2011).

Based on data from the Satistik Central Agency (BPS), of the 34 provinces in Indonesia, Central Java Province is a province with a population of 36.74 people and ranks third in the province with the largest population in Indonesia (Merakati, Rusdarti, & Wahyono, 2017). With the large population in Central Java Province, it causes problems in the social sector such as poverty. The number of poor people in Central Java Province in 2021 is 3.394 million people and ranks second in the province with the highest number of poor people after East Java Province (Adam et al., 2019). Reducing the number of poor people is one of the priority programs of the Central Java Provincial government, targeting a poverty reduction in 2021 below 10 percent (Central Java Regional Poverty Reduction Coordination Team, 2021). Therefore, research on poverty is very important to be carried out with the aim of knowing what factors affect the poverty rate in Central Java Province (Pratama, 2014).

2. Materials and Methods

The analysis method in this study uses the panel data analysis method, which is a combination of cross section data with time series data which is then processed into Eviews9. Some forms of regression for panel data include:

$TK = \beta0 + \beta1IPM + \beta2\,PDRB + \beta3JP + \beta4TPng + \beta5PP + \mu + eit$

Kindergarten   : Total Poverty Level (soul unit)

HDI : Human Development Index (unit of percent)
GRDP : Gross Regional Domestic Product (rupiah unit)
JP   : Total Population (Million People)
TPng : Unemployment Rate (unit percent)
PP   : Government Expenditure (unit of percent)
B0   : Constant
β1 β2 β3 β4 : Multiple Regression Coefficients μ : Confounding Variables
          The data used is panel data, which is a combination of cross section data with time series data which is then processed into Eviews9. While the source of data obtained from the Central Statistics Agency (BPS) (Fajriyah & Rahayu, 2016).

3. Result and Discussion
          The results of estimating econometric models in advance with Pooled Least Square (PLS), Fixed Effect Model (FEM) and Random Effect Model (REM) approaches along with the results of the model selection test are summarized in the Table. (Arlina, Guntur, & Nain, 2021)

Table 1 Estimation Results of Panel Data Regression Econometric Model

Variable	Regression Coefficient					
	PLS	sig	FEM	sig	REM	sig
C	-6,328404	0,0000	9,237152	0,0000	-5,718747	0,0000
IPM	-0,046402	0,0000	-0,012767	0,2798	-0,045087	0,0000
LOG(PDRB)	-0,169031	0,0108	-0,004594	0,9673	0,185403	0,0140
LOG(JP)	1,199942	0,0000	-0,275882	0,0000	0,760768	0,0000
TPng	-0,005900	0,5497	-0,002867	0,1638	0,015473	0,0000
PP	0,012630	0,1608	0,001060	0,3004	-0,003046	0,1597
$R2$	0,923714		0,999726		0,675384	
Adjusted. R^2	0,920868		0,999607		0,663272	
Statistik F	324,5113		8413,486		55,75920	
Prob. Statistik F	0,000000		0,000000		0,000000	

Model Selection Test
          Chow Cross-Section F = 776,454605; Prob. F= 0,0000

(1) Hausmant Cross-Section random $\chi2$= 59,965803; Prob. $\chi2$ =0,0000
          Through the Chow test and the Hausmant test, the FEM model was chosen to be the best estimated model, as seen from the Chow test which has a Prob value. F is 0.0000 (< 0.01) and from the Hausmant test has a value of Prob. χ2 of 0.0000 (<0.01) (Asmawi, 2021). Therefore, from these results, the FEM model was chosen to be the best model.

Table 2 Fixed Effect Model (FEM) Estimation Model

= 9,237152 – 0,012767IPM – 0,004594log($PDRB$) – 0,275882log(JP) – 0,002867$TPng$ + 0,001060PP
(0,2798)   (9,673)   (0,0000)*   (0,1638)   (0,3004)
R^2= 0,923714; F= 324,5113; Prob. F= 0,000000

Description: *Significant at α = 0.01.

From the results of the Fixed Effect Model (FEM) estimation model equation, namely the Human Development Index (HDI) with a probability value of 0.2798 (> 0.10), the HDI does not have a significant influence on the poverty level (Sitepu, Sinaga, Oktaviani, & Tambunan, 2009). Then the Gross Regional Dosmetic Product (GRDP) with a probability value of 0.9673 (>0.10) then the GRDP does not have a significant effect on the poverty level. Then the population (JP) with a probability value of 0.0000 (<0.01) then JP has a significant influence on the poverty rate. Furthermore, the unemployment rate (TPng) with a probability value of 0.1638 (>0.10) then TPng does not have a significant effect on the poverty rate. And government expenditure (PP) with a probability value of 0.3004 (>0.10) then PP does not have a significant effect on the poverty rate. In the econometric model, there is one significant variable, namely the number of population (JP) which has a negative influence on the poverty rate with a coefficient value of -0.275882 and a probability f of 0.0000 (<0.01). This means that every increase in population (JP) by 1 person will cause a decrease in the poverty rate by 0.275882 people assuming other variables remain (Pattinama, 2019).

4. Conclusion

Based on panel data analysis, the fixed effect model (FEM) was selected as the best estimated model through the chow and hausmant tests. From the analysis of the FEM model, one variable that has a significant effect on the poverty rate is selected, namely the number of population (JP) with a coefficient value of -0.275882, so if the population increases by 1 person, it will cause a decrease in the poverty rate by 0.275882 people. So the factor that affects the poverty rate is the number of population (JP), so this study pays more attention to the number of population (JP) to overcome the poverty level.

5. References

Adam, A., Rahayu, Sri, Muhajir, Ahmad, Widayat, Edy, Ismail, Ismail, & Sumartono, Sumartono. (2019). *Hasil Cek Turnitin: New Economic Politics and Institutional Approach for the Nation Problem*.

Arlina, Arlina, Guntur, Muhammad, & Nain, Umar. (2021). Impelementation Of Conditional Cash Transfer (CCT) in Improving Family Welfare at Lilirawang Village Bengo District Bone Regency (Case Study: PKH In Education). *Jurnal Ilmu Sosiologi Dialektika Kontemporer*, *9*(2), 70–80.

Asmawi, Mohammad. (2021). PROBLEMS OF THE ISLAMIC WORLD ECONOMY. *El-Arbah: Jurnal Ekonomi, Bisnis Dan Perbankan Syariah*, *5*(1), 1–10.

Doriza, Shinta, Purwanto, Adi, & Maulida, Ernita. (2013). *Fiscal decentralization and disparity of access to primary education in Indonesia*.

Endrayani. (2016). Analisis Faktor-Faktor Yang Mempengaruhi Tingkat Kemiskinan Kabupaten/Kota di Provinsi Bali. *E-Jurnal Ekonomi Dan Bisnis Universitas Undayana*, *07*, 112–117.

Fajriyah, Nur, & Rahayu, Santi Puteri. (2016). Pemodelan Faktor-Faktor yang Mempengaruhi Kemiskinan Kabupaten/Kota di Jawa Timur Menggunakan Regresi Data Panel. *Jurnal Sains dan Seni ITS*, *5*(1), D45–D50.

Jajuli, Rahmat, & Daryono Soebagyo, Mec. (2015). *Analisis Faktor-faktor yang Mempengaruhi Kemiskinan di Jawa Tengah Tahun 1991-2013*. Universitas Muhammadiyah Surakarta.

Merakati, Indah, Rusdarti, & Wahyono. (2017). Pengaruh Orientasi Pasar,Inovasi, Orientansi Kewirausahaan melalui Keunggulan Bersaing Terhadap Kinerja Pemasaran. *Journal of Economic Education*, *6*(2), 114–123.

Nalle, Frederic Winston. (2018). Analisis faktor-faktor yang mempengaruhi tingkat kemiskinan di Kecamatan Insana Kabupaten Timor Tengah Utara (TTU). *Jurnal Dinamika Ekonomi Pembangunan*, *1*(3), 35–45.

Pattinama, Marcus J. (2019). Poverty Reduction through Local Wisdom (A Case Study from Buru Island-Maluku and Surade-West Java). *Makara Human Behavior Studies in Asia*, *13*(1), 1–12.

Pratama, Yoghi Citra. (2014). *Analisis faktor-faktor yang mempengaruhi kemiskinan di Indonesia*.

Putri, Agustina Mega Puspitasari. (2014). Faktor-Faktor Yang Mempengaruhi Tingkat Kemiskinan Di Provinsi Jawa Timur Tahun 2008-2012. *Jurnal Ekonomi Pembangunan*, 1–9.

Rafizar, Rafi. (2019). *ANALISIS PELAKSANAAN PROGRAM KELUARGA HARAPAN DI KECAMATAN PULAU MERBAU KABUPATEN KEPULAUAN MERANTI*. UNIVERSITAS ISLAM NEGERI SULTAN SYARIF KASIM RIAU.

Sitepu, Rasidin Karo Karo, Sinaga, Bonar M., Oktaviani, Rina, & Tambunan, Mangara. (2009). The research objectives are to analyze impact of human capital investment on income distribution and poverty incidence using the computable general equilibrium (CGE) Model. The model is combine d with beta distribution function and Foster-Greer-Thorbecke. The human capital investment is approached by government expenditure for education and health. The simulation result shows that human capital investment is able to increase economic growth and household income. Income distribution especially in rural area becomes more equal which is shown by the beta distribution move to the right side of poverty line. Poverty incidence, poverty gap and poverty severity also decrease except for non-labor household group in the urban area. Human capital investment gives more benefit to household in rural area than those in urban area especially for farm-

laborer and agriculture entrepreneur household group in the rural area. Key words: CGE model, Foster-Greer-Thorbecke, beta distribution function, human capital investment, poverty line. *Forum Pasca Sarjana*, *32*(2).

Tisniwati, Baiq. (2012). Analisis faktor-faktor yang mempengaruhi tingkat kemiskinan di Indonesia. *Jurnal Ekonomi Pembangunan*, *10*(1), 33–46.

Todaro, M. Antonio, Kånneby, Tobias, Dal Zotto, Matteo, & Jondelius, Ulf. (2011). Phylogeny of Thaumastodermatidae (Gastrotricha: Macrodasyida) inferred from nuclear and mitochondrial sequence data. *Plos one*, *6*(3), e17892.

Wahyudi, Dicky, & Rejekingsih, Tri Wahyu. (2013). Analisis Kemiskinan di Jawa Tengah. *Diponegoro Journal of Economics*, *2*(1), 83–97.