



Determinants of Poverty Rates in Papua Province in 2011 - 2019

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Abstract

Indonesia is one of the countries with a high poverty rate. Throughout 2011 to 2019 Papua Province always occupied the province with the highest poverty rate in Indonesia. This study aims to identify the factors that influence the level of poverty in Papua Province. The independent variables in this study include economic growth, balancing funds, capital expenditures, life expectancy, and the average length of schooling. The type of data used is secondary data. The data collection technique used is literature study. The analysis method used is panel data regression analysis method using the Random Effect Model (REM). Furthermore, to overcome the problem of classical assumption testing is done using the WLS (Weighted Least Square) method on the GLS (Generalized Least Square). The results of this study indicate that economic growth has a positive but not significant effect on poverty levels. The balancing fund has a negative and significant effect on the poverty level. Capital expenditures and life expectancy also have a positive but not significant effect on the poverty level. Meanwhile, the average length of schooling has a negative and significant effect on the poverty level.

Keywords: Poverty Rates, Random Effect Model, Panel Data Regression

Abstrak

Indonesia merupakan salah satu negara dengan tingkat kemiskinan yang tinggi. Sepanjang tahun 2011 hingga 2019 Provinsi Papua selalu menduduki provinsi dengan angka kemiskinan tertinggi di Indonesia. Penelitian ini bertujuan untuk mengidentifikasi faktor-faktor yang mempengaruhi tingkat kemiskinan di Provinsi Papua. Variabel bebas dalam penelitian ini meliputi pertumbuhan ekonomi, dana perimbangan, belanja modal, angka harapan hidup, dan rata-rata lama sekolah. Jenis data yang digunakan adalah data sekunder. Teknik pengumpulan data yang digunakan adalah studi kepustakaan. Metode analisis yang digunakan adalah metode analisis regresi data panel dengan menggunakan Random Effect Model (REM) dan metode WLS (Weighted Least Square) pada GLS (Generalized Least Square). Hasil penelitian ini menunjukkan bahwa pertumbuhan ekonomi berpengaruh positif namun tidak signifikan terhadap tingkat kemiskinan. Dana perimbangan berpengaruh negatif dan signifikan terhadap tingkat kemiskinan. Pengeluaran modal dan harapan hidup juga berpengaruh positif namun tidak signifikan terhadap tingkat kemiskinan. Sedangkan rata-rata lama sekolah berpengaruh negatif dan signifikan terhadap tingkat kemiskinan.

Kata Kunci: Tingkat Kemiskinan, Random Effect Model, Regresi Data Panel

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INTRODUCTION

According to Todaro and Smith (2006) the goal of economic development is not only to pursue high economic growth, but also aims to reduce poverty, income equality, and expand employment. Poverty is a problem for most developing countries, not least Indonesia. Poverty is considered a development problem that is the result of an unbalanced Gross Regional Domestic Product. This imbalance resulted in a gap in people's income and income gap between regions wider (inter-region income gap) (Harahap, 2006).

Poverty is one of the problems of particular concern for the United Nations through its commitment to reducing poverty levels in the Millenials Development Goal's (MDG's) program which is considered not optimal so that it continues in the Sustainable Development Goals (SDGs) program starting in 2016 to 2030 (Bappenas, 2021). This indicates that the problem of poverty requires serious effort in overcoming it. In the SDGs own program, it is spelled out into 17 main goals that are expected to be achieved in 2030, where the first goal is without poverty (Bappenas, 2021).

Table 1. Ten Provinces with the Highest Poverty Rates in Indonesia in 2011 – 2019 (Percent)

Rank	Province	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average
1	Papua	31,98	31,11	31,13	30,05	28,17	28,54	27,62	27,74	27,53	27,92
2	West Papua	31,92	28,20	26,67	27,13	25,82	25,43	25,1	23,01	22,17	24,31
3	NTT	21,23	20,88	20,03	19,82	22,61	22,19	21,85	21,35	21,09	21,82
4	Maluku	23	21,78	19,49	19,13	19,51	19,18	18,45	18,12	17,69	18,59
5	Gorontalo	18,75	17,33	17,51	17,44	18,32	17,72	17,65	16,81	15,52	17,2
6	Bengkulu	17,50	17,70	18,34	17,48	17,88	17,32	16,45	15,43	15,23	16,46
7	Aceh	19,57	19,46	17,60	18,05	17,08	16,73	16,89	15,97	15,32	16,4
8	NTB	19,73	18,63	17,97	17,25	17,1	16,48	16,07	14,75	14,56	15,79
9	Central Sulawesi	15,83	15,40	14,67	13,93	14,66	14,45	14,14	14,01	13,48	14,15
10	Lampung	16,93	16,18	14,86	14,28	14,35	14,29	13,69	13,14	12,62	13,62
	Indonesia	12,49	11,96	11,37	11,25	11,22	10,86	10,64	9,82	9,41	10,39

Source: Central Bureau of Statistics Papua, 2021

In Indonesia, there are still many provinces with high poverty rates. The provinces with high poverty rates on average have poverty rates above the national poverty level. Here are the 10 provinces with the highest poverty rates in Indonesia. From table 1, it can be known that the province with the highest poverty rate in Indonesia is Papua province. Recorded from 2011 to 2019, Papua Province has always been ranked

first with the highest poverty rate in Indonesia. Followed by West Papua Province and East Nusa Tenggara Province in the second and third rank. When compared to the average national poverty rate, the poverty rate in Papua is still very high.

One of the macro benchmarks that describe the success of economic development is economic growth (Marsoit, 2015). The

economic growth of a region is measured through changes in Gross Regional Domestic Product (PDRB). In poverty alleviation, it is

necessary to ascertain whether economic growth occurs in sectors where many people work in those sectors, namely labor-intensive sectors.

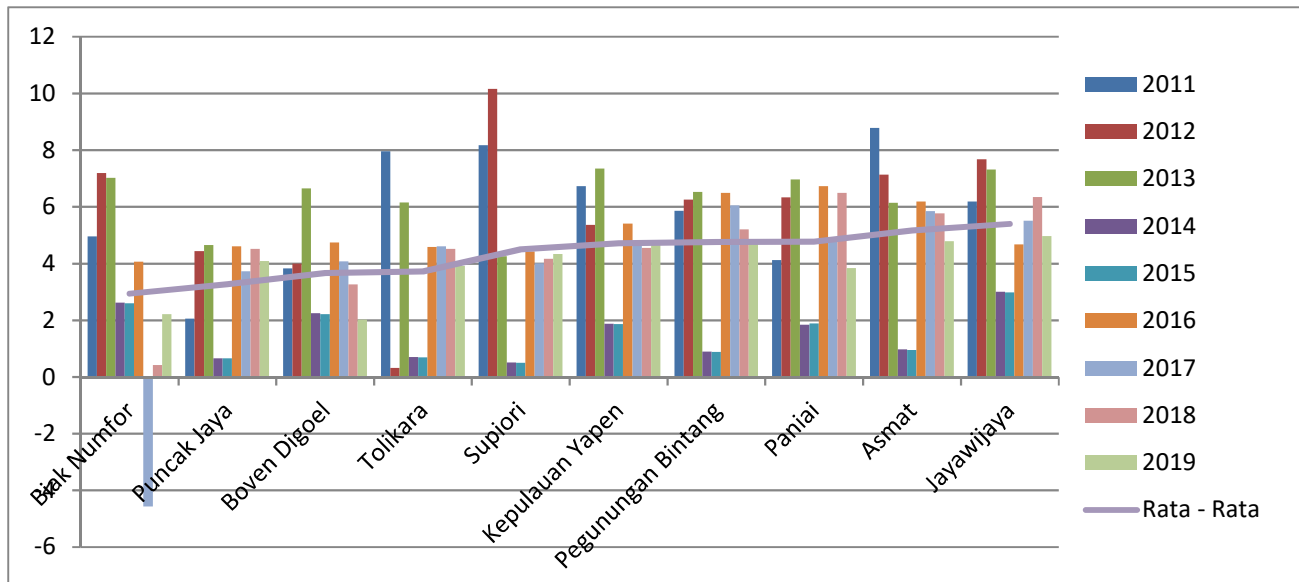


Figure 1. Ten Districts / Cities with the Lowest Economic Growth (Percent) based on Constant Prices (By Mine) in Papua in 2011-2019

Source: Papua Central Statistics Agency, 2020

Figure 1 shows the ten districts/cities with the lowest economic growth rates in Papua Province during 2011 – 2019. The 7 of the 10 districts are classified as lagging districts, including Boven Digoel, Tolikara, Supiori, Bintang Mountains, Paniai, Asmat, and Jayawijaya Regency. The districts have an average economic growth below 6%.

The first rank is occupied by Biak Numfor Regency with an average economic growth of 2.94% and in the tenth rank, Jayawijaya regency with an average economic growth of 5.4%. This figure is quite lame when compared to districts/cities with the highest average economic growth in Papua Province, namely Jayapura City with an average economic growth of 9.18%. Another

factor that is suspected to affect the poverty level is regional decentralization in the form of regional autonomy. According to Ismail dan Hakim (2014) the existence of fiscal decentralization is sufficient to overcome income gaps between groups of people that will generally reduce poverty levels.

Based on Law No. 32 and 33 of 2004 on Local Government and Financial Balance between the Central Government and Local Government, the central government gives authority to the local government to explore the potential of financial resources in its area. To help the local government in this regard, the central government provides balance funds to the region. The balanced fund is a fund sourced from state budget revenues allocated to

the region to fund regional needs in the framework of decentralization implementation.

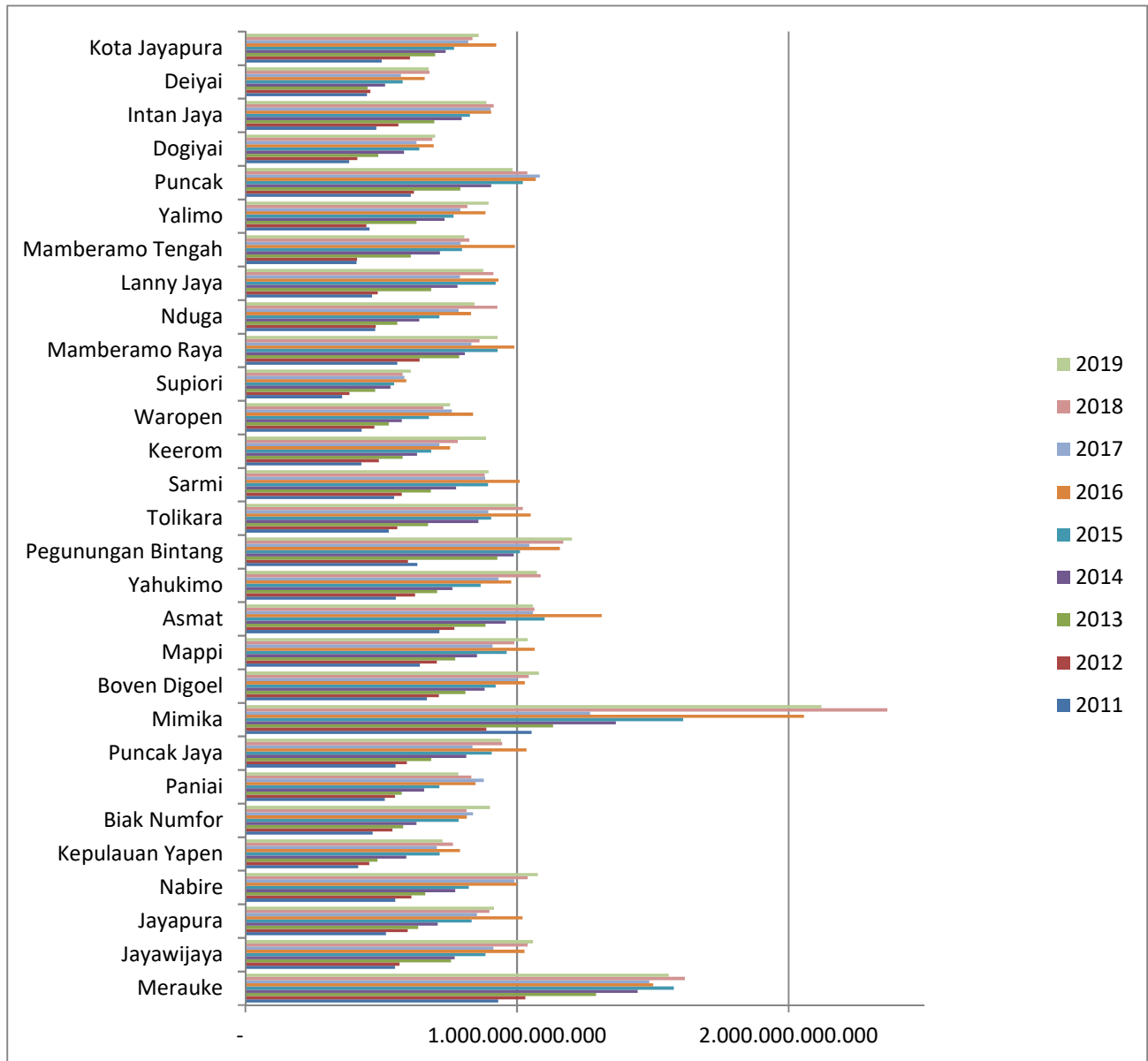


Figure 2. District/City Balance Fund in Papua Province 2011 – 2019 (IDR)

Source: Directorate General of Financial Balance, 2021

From the figure 2 it can be seen that the balance funds received by each district/city in Papua Province are not the same. This is in accordance with the basic allocation, regional fiscal capabilities, and other things contained in the laws and regulations. In general, the balance funds received by each district / city in Papua

from 2011 to 2019 experienced an increase and decrease every year. The highest increase occurred in 2018 in Mimika Regency, where the total balance fund received by Mimika Regency in that year amounted to 2.3 trillion IDR.

According to Safitri and Saleh (2020) one of the important components in

overcoming poverty is regional spending where regional spending is a government distribution. The government uses local

spending to manage the economy in its area. According to Nurmainah (2013) one type of government spending is capital expenditure.

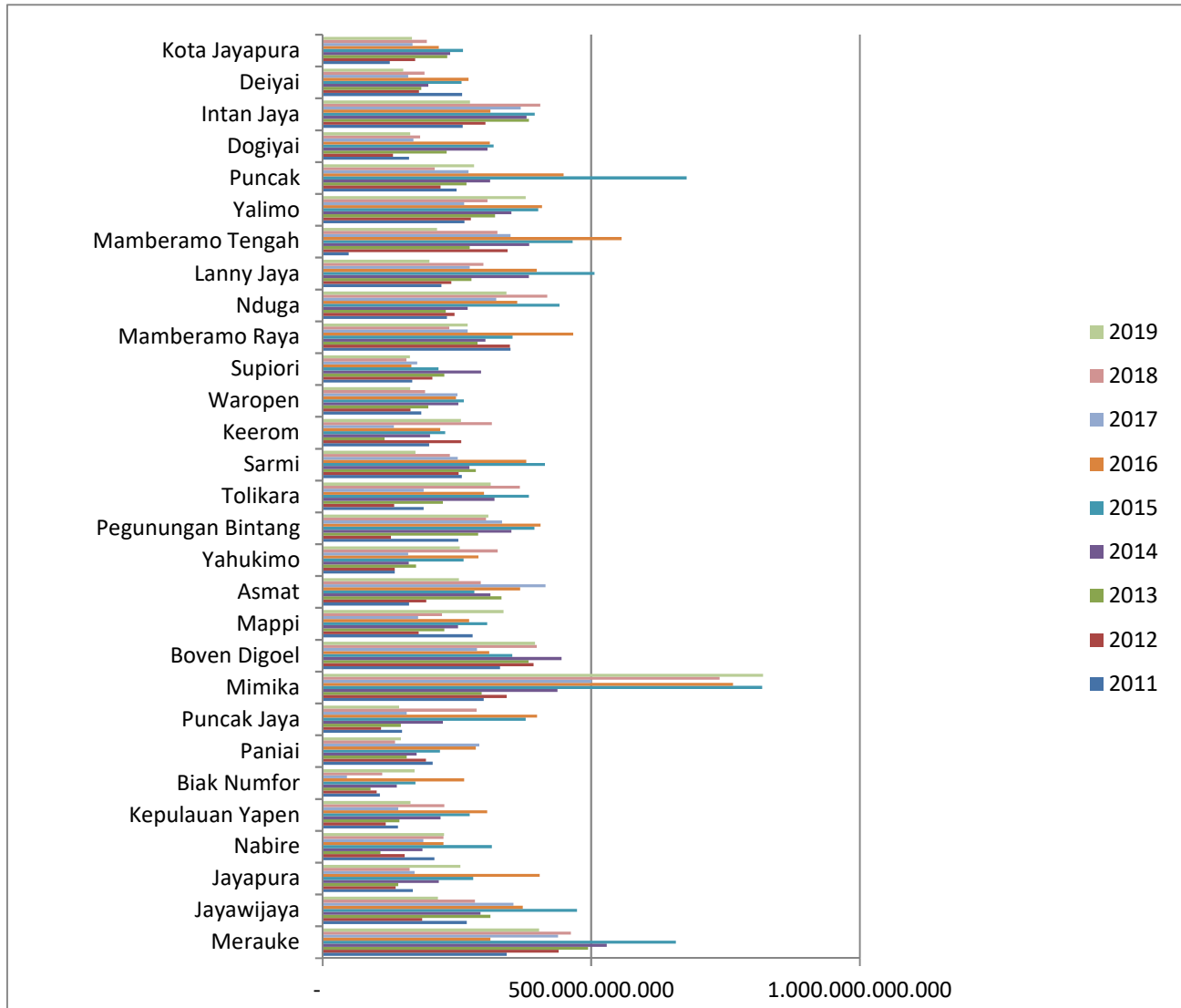


Figure 3. District/City Capital Expenditure in Papua Province 2011 – 2019 (IDR)

Source: Directorate General of Financial Balance, 2020

From figure 3 it can be known that the realization of capital expenditure for each district/city in Papua throughout 2011 – 2019 is different. In general, the realization of capital expenditures of each regency/city in Papua changes every year. The realization of capital

expenditure will certainly affect the implementation of government activities in general.

The lowest realization of capital expenditure occurred in 2017 in Biak Numfor Regency amounting to IDR 45,531,533,345.

Meanwhile, the realization of the highest capital expenditure occurred in 2019 in Mimika Regency amounting to IDR 820,338,290,347. According to Suryawati (2005)

another thing that causes poverty is health. In succeeding economic development, health is one of the important factors to improve the welfare of the community.

Table 2. Regencies / Cities with the Lowest Life Expectancy in Papua Province in 2011 – 2019

No.	District/City	Life Expectancy									Average	Average of Papua
		2011	2012	2013	2014	2015	2016	2017	2018	2019		
1	Nduga	53,09	53,42	53,54	53,6	53,6	54,5	54,6	54,82	55,12	54,03	65
2	Asmat	54,45	54,73	54,91	55	55,5	55,9	56,32	56,88	57,53	55,69	
3	Mamberamo Raya	56,06	56,37	56,37	56,37	56,57	56,74	56,9	57,18	51,55	56,68	
4	Jayawijaya	57,48	51,56	57,71	57,79	58,29	58,48	58,67	58,99	59,39	58,26	
5	Boven Digoel	57,32	57,51	57,6	57,64	58,24	58,51	58,77	59,16	59,64	58,27	
6	Pegunungan Bintang	63,5	63,52	63,56	63,58	63,78	63,84	63,9	64,08	64,34	63,79	
7	Mappi	63,41	63,48	63,51	63,52	64,02	64,16	64,3	64,56	64,91	63,99	
8	Puncak Jaya	63,63	63,67	63,74	63,77	64,17	64,29	64,41	64,65	64,98	64,15	
9	Dogiyai	64,24	64,3	64,34	64,36	64,86	64,99	65,12	65,32	65,6	64,79	
10	Tolikara	64,45	64,59	64,64	64,66	64,86	64,98	65,1	65,3	65,58	64,9	

Source: Central Bureau of Statistics of Papua Province, 2020

The table 2 is the ten districts/cities with the lowest Life Expectancy (AHH) in Papua Province throughout 2011 – 2019. From the table 2 it can be known that the Life Expectancy of each district in general increases every year. But the average life expectancy of each district is still quite low when compared to the average life expectancy of Papua Province which is 65 (years).

Of the ten districts with the lowest life expectancy in Papua Province, nine of them are lagging areas. Another factor that affects Papua's poverty rate is education. In pursuing social and economic lags, the education sector is the right means to become one of the government's concerns to be able to deliver the nation to achieve prosperity, prosperity and a decent quality of life.

The table 3 shows the ten districts/cities with the lowest average length of schooling in

Papua Province throughout 2011-2019. Of the ten districts/cities, nine of them are lagging districts in Papua Province. On average, the average length of school in ten districts/cities throughout 2011 – 2019 is still very low, which is less than 5 years.

This means that the average population who attends school in the district/city is only able to complete their education below the 5th grade of elementary school or can be said not to finish elementary school. This figure is very far compared to districts/cities that have the highest average length of school in Papua Province, jayapura city of 11.08 (year).

Based on the background described, the purpose of this study is to analyze the influence between: (1) Economic growth on poverty levels in Papua Province. (2) Balance funds to the poverty level in Papua Province. (3) Capital expenditure on poverty levels in Papua Province.

(4) Health to the poverty level in Papua Province. (5) Education on poverty levels in Papua Province. (6) The most influential factor on the poverty rate in Papua Province.

Table 3. Ten Districts / Cities with Average – Lowest School Length in Papua 2011 – 2019

No.	District/City	Average Length School									Average
		2011	2012	2013	2014	2015	2016	2017	2018	2019	
1	Nduga	0,37	0,49	0,6	0,63	0,64	0,7	0,71	0,85	0,97	0,66
2	Puncak	1,21	1,37	1,4	1,43	1,61	1,78	1,94	1,95	1,96	1,63
3	Pegunungan Bintang	1,64	1,76	1,88	1,97	2,06	2,19	2,32	2,49	2,61	2,1
4	Intan Jaya	2,02	2,09	2,16	2,32	2,48	2,49	2,5	2,51	2,64	2,36
5	Mamberamo Tengah	2,12	2,15	2,18	2,4	2,49	2,51	2,67	2,78	2,9	2,47
6	Lanny Jaya	2,11	2,35	2,55	2,6	2,75	2,92	3,17	3,18	3,19	2,76
7	Deiyai	2,16	2,51	2,87	2,95	2,96	2,97	2,98	2,99	3	2,82
8	Puncak Jaya	2,24	2,53	2,86	3,04	3,19	3,38	3,5	3,51	3,61	3,09
9	Tolikara	2,76	2,88	3	3,04	3,06	3,21	3,5	3,62	3,63	3,19
10	Yahukimo	2	2,94	3,78	3,97	3,98	3,99	4	4,01	4,02	3,63

Source: Central Bureau of Statistics of Papua Province, 2020

In the theory of vicious circles explained the chains of poverty. Figure 4 is an overview of the poverty circle theory proposed by Ragnar Nurkse in Kucoro (2010: 70).

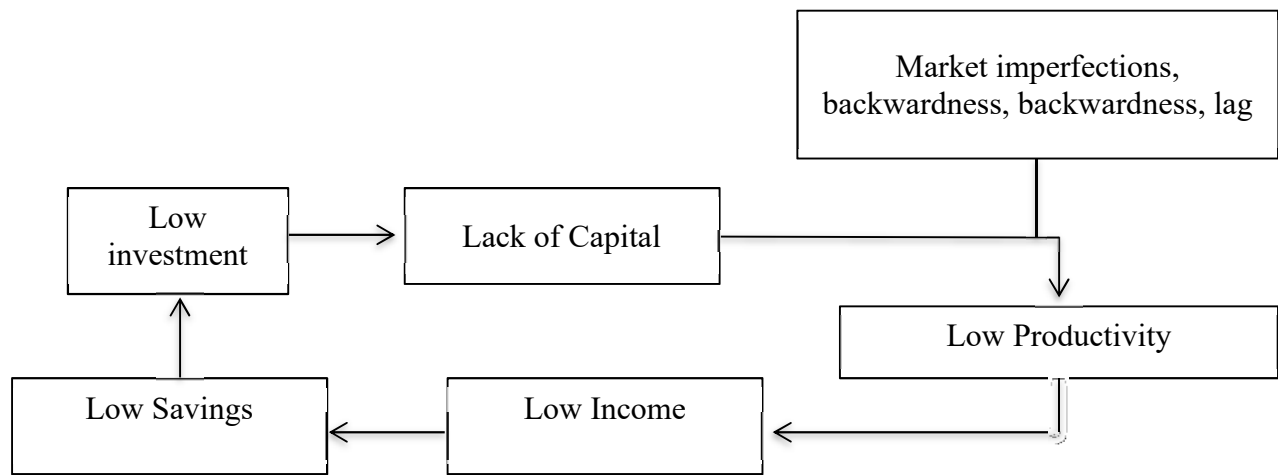


Figure 4. Of Nurkse's Version of The Cycle of Poverty

Source: Ragnar Nurkse in Kuncoro, 2010

From the figure 4 we can see that the existence of market imperfections, backwardness, lag, and lack of capital will lead to low productivity. Low productivity

results in low incomes received. Furthermore, this low income will result in low savings and investments that will eventually lead to backwardness and so on. This logic of thinking was conveyed by Ragnar Nurkse who said, "a poor country is poor because it is poor."

Economic growth provides an overview of economic development to achieve a better level of well-being (Panji and Indrajaya, 2016). The relationship of economic growth to poverty can be explained by the Kuznets hypothesis in Tambunan (2015: 107) which states that in the early stages of development, the poverty rate tends to increase, and in the final stages of development the number of poor people gradually decreases.

The provision of balance funds by the central government is part of fiscal decentralization that is useful to reduce fiscal inequality and assist local governments in exercising their authority. Decentralized systems implemented in each region are expected to make the region able to manage the potential of each region to the maximum to improve the welfare of the community which ultimately reduces the poverty level (Woyanti, 2013).

According to Rohima in (Rohima et al., 2020) the increase in regional spending will increase regional interests and have a significant impact on the regional economy which will ultimately reduce poverty. According to Safitri and Saleh (2020) regional spending can have an impact both directly and indirectly on poverty which includes spending in education, infrastructure, housing, health, subsidies, technology, and transfer.

Some types of regional spending or capital expenditures are carried out most importantly to improve the welfare of the community, especially for the economic community down.

So that the relationship between capital expenditure and poverty is with the issuance of capital expenditure budget by local governments every year able to reduce poverty in the area.

Lincoln in Wahyudi and Rejekingsih (2013) explained that government intervention in the field of health is a tool and policy that can reduce poverty levels. Interventions that can be done by the government one of them is to improve and improve the level of public health. When the level of public health is good this will have a positive impact on productivity that can ultimately reduce poverty.

Meanwhile, in the theory of the vicious cycle of poverty Nurkse also explained one of the causes of poverty is low productivity. This low productivity is one of them is caused by low levels of health. Furthermore, low levels of health will result in a low work ethic and decreased productivity. Low productivity will have an impact on low-income levels so that it will make a person vulnerable to poverty.

Education reflects the quality of human resources that are closely related to the level of community welfare. The higher the education achieved, the better the abilities and skills possessed that will ultimately improve well-being. According to (Zahra et al., 2019) programs that focus on improving human resources through equitable, quality, and inclusive education will be able to improve people's well-being and reduce poverty.

In the theory of the vicious cycle of poverty put forward by Nurkse, one of the links that must be broken is about backwardness and backwardness to overcome the existing poverty problem. As for backwardness and backwardness, this can be overcome by the education provided by the state for its citizens to

obtain knowledge to reduce backwardness and backwardness.

RESEARCH METHODS

The type of research that will be used in this research is quantitative research. This study uses descriptive analysis. Where the facts and phenomas collected will be presented by describing or describing systematically which in this case is about the condition of poverty in Papua. This study intends to find out things that affect the poverty rate in Papua in 2011 - 2019. The data analysis used in this study analyzed regression data panel using time series data starting from 2011 - 2019 and cross section data consisting of 29 districts/cities in Papua Province.

Research variables are everything set by researchers, to be further studied until information is obtained from it, then a conclusion can be drawn (Sugiyono, 2016: 38). The variety of operations in a study consists of two types, namely dependent variables, and independent variables. Dependent variables are variables that are affected or variables that are the result of a change in independent variables. Meanwhile, independent variables are variables that affect or cause changes from dependent variables.

The dependent variables used in the study were poverty rates while independent variables used included economic growth, balance funds, capital expenditure, health, and education. This study used the panel's data regression analysis method. Regression panel analysis is a regression analysis that combines time series data and cross section data. According to Widarjono (2018: 363) one of the advantages of using panel data is being able to provide more data, so that a

greater degree of freedom will be obtained. There are three techniques that can be used in estimating panel data regression models, namely the OLS (Common Effects Model), Fixed Effects Model (FEM), and Random Effects Model (REM) methods. Here's the equation:

$$Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + e \dots \dots \dots (1)$$

Information:

Y	:	Poverty Level
β_0	:	Constant
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$:	Coefficients of each independent variable
X ₁	:	Economic Growth
X ₂	:	Balance Fund
X ₃	:	Capital Expenditure
X ₄	:	Life Expectancy
X ₅	:	Average - Average Length of School
i	:	Regency/City Areas in Papua Province
t	:	Indicates the period to - t
e	:	variable error/variables

From the three model estimates in the regression data panel, the best model will be selected by comparing one model with another model using several tests, including chow test, hausman test, and LM test. To obtain the most appropriate regression model, it is necessary to test whether there are deviations to the classical assumption test or not. The classic assumption tests in this study

are, multicollinearity tests, normality tests, heterocity tests, and autocorrelation tests.

RESULTS AND DISCUSSION

Testing the significance of individual parameters can be done by comparing the

probability value of t-statistics with the alpha value of 0.05. If the probability value of t-statistics < the alpha value of 0.05, then H_a is accepted and H_o is rejected. Similarly, if the probability value of t-statistics > the alpha value of 0.05, then H_o is accepted, and H_a is rejected.

Table 4. Random Effect Model Estimation Results (Cross Section Weighted)

Variable	T-Statistics	Probability	Conclusion
Economic Growth (PE)	0.040461	0.1188	Insignificant
Balance Fund (DAPER)	-5.95E-12	0.0000	Significant
Capital Expenditure (BM)	3.80E-13	0.8168	Insignificant
Health (KES)	0.231856	0.3605	Insignificant
Education (PEND)	-2.626040	0.0000	Significant

Source: Output Using E-Views 9

Test the first hypothesis to determine the effect of economic growth on poverty levels. From the table 4 it is known that the probability value of t-statistical economic growth of 0.1188 > alpha 0.05. Thus, it can be concluded that economic growth does not significantly affect the poverty rate. Thus, H_o is accepted, and H_a is rejected. The coefficient is 0.040461. This means that economic growth has a positive but insignificant effect on the poverty level.

Test the second hypothesis to determine the effect of balance funds on poverty levels. The t-statistic probability value on the balance fund is 0.0000. Since 0.0000 < alpha 0.05, it can be concluded that the balance fund significantly affects the poverty rate. Thus, H_a is accepted and H_o is rejected. The coefficient of the balance fund is -5.95E-12. This means that the balance fund has a negative and significant effect on the poverty level.

The third hypothesis test was conducted to determine the effect of capital expenditure on poverty levels. The probability value of t-statistical capital expenditure is 0.8168. Since

0.8168 > alpha 0.05, it can be concluded that capital expenditure has no significant effect on the poverty rate. Thus, H_o is accepted, and H_a is rejected. Capital expenditure coefficient of 3.80E-13. This means that capital expenditure has a positive but insignificant effect on the poverty level.

Test the fourth hypothesis to determine the effect of health on poverty levels. The t-statistical probability value of health is 0.3605. Since 0.3605 > alpha 0.05, it can be concluded that health has no significant effect on the poverty rate. Thus, H_o is accepted, and H_a is rejected. Health coefficient of 0.231856. This means that health has a positive but insignificant effect on the poverty rate.

Test the fifth hypothesis to determine the effect of education on poverty levels. The t-statistical probability value of education is 0.0000. Since 0,000 < alpha 0.05, it can be concluded that education has a significant effect on the percentage of the poor population. Thus, H_a is accepted and H_o is rejected the coefficient of education is -2.626040. This means that

education has a negative and significant effect on the poverty level.

Based on the results of the individual parameter significance test or t-statistic test for the first research hypothesis stated that H_0 was accepted, and H_a was rejected or in other words economic growth had a positive but insignificant effect on the poverty rate in Papua Province in 2011 - 2019.

Economic growth has a strong relationship with poverty. This can be explained by the Kuznets hypothesis in Tambunan (2015: 107) which states that in the early stages of development, the poverty rate tends to increase and in the final stages of development the number of poor people gradually decreases.

The largest contributor sector of PDRB in Papua Province is the mining and quarrying sector followed by the construction sector. In 2019 the contributor to the mining sector in Papua Province reached 23.56% and the construction sector by 16.13%. The amount of contribution is expected to absorb a lot of labor. But the people of Papua province are dominated by working in the agricultural sector.

According to bps papua publication data in 2020 figures, in 2019 as many as 1,202,183 people worked in the agricultural sector, 102,392 people worked in the manufacturing sector, and 470.455 people work in the service sector. This shows that there has been no fulfillment of the availability of jobs in the sector that is the largest contributor to the PDRB.

The addition of economic growth without the availability of jobs will result in income inequality that will eventually increase the amount of poverty. This could be the reason economic growth has a positive effect on poverty levels. This is in line with the theory presented

in chapter 2 where in the early stages of development, economic growth will increase poverty levels.

The results of the individual parameter significance test or the t-statistical test for the second research hypothesis stated that H_a was accepted and H_0 was rejected. This means that the balance fund variable has a negative and significant effect on the poverty rate in Papua Province in 2011-2019. The coefficient value on the balance fund variable has a negative number, so this is in accordance with the existing theory that balance funds can reduce the poverty rate.

The results of this study show that balance funds can reduce poverty. This is because there are still many districts/cities in Papua Province that need transfer funds from the central government in supporting development in their regions, especially in the fields of infrastructure, education, and health. Kuncoro (2004) mentioned that in realisainya, the maximum limit of government spending that can be financed with PAD is 20%, so additional funds are needed as a source of development spending for regions where one of the largest contributors is balance funds.

The dependence of districts/cities on balance funds is also supported by the fact that there are still many districts/cities in Papua Province that fall into the lagging category. Based on Presidential Regulation No. 63 of 2020 on The Determination of Disadvantaged Areas in 2020-2024, there are 22 out of 29 districts/cities in Papua Province that fall into the lagging category. This indicates that the need for sources of development financing in Papua Province is still high enough to realize equitable development and improve the welfare of its people. This can be the reason the balance

fund has a negative and significant effect on the poverty rate.

In addition, districts/cities in Papua Province itself are the largest contributors to the PDRB sector, namely the construction sector. As for development in Papua Province is majority held by the government, so it becomes natural if the balance fund can reduce the poverty level because development is labor intensive. Both economic growth and balance funds can be the reason the balance fund has a negative and significant effect on the poverty level.

Based on the results of the individual parameter significance test or the t-statistical test for the third research hypothesis it is stated that H_0 is accepted, and H_a is rejected. The results of the regression analysis of capital expenditure variables are not in line with existing theories. Capital expenditure can have a direct or indirect effect on poverty. The coefficient value of variable capital expenditure has a positive number, so this shows that the higher the allocation of capital expenditures will further increase the poverty rate.

According to Kotambunan et al. (2016) the positive influence of capital expenditure on poverty levels is caused by government programs that have not been on target and have not succeeded in completing the possibility. The program is considered not to touch the poor, so it is considered ineffective. This is the reason capital expenditure has a positive effect on the poverty rate. Although it has a positive coefficient, this influence is not significant. This is because there has not been a consistent increase in capital expenditure allocation during 2011 - 2019 so that capital expenditure does not have too much impact on poverty.

Based on the results of the individual parameter significance test or the t-statistical

test for the fourth research hypothesis it is stated that H_0 is accepted, and H_a is rejected. This means that the results of regression panel data showed results that health variables had a positive but insignificant effect on the poverty rate in Papua Province in 2011-2019.

Throughout 2011 - 2019 the number of life expectancy in Papua Province tends to increase every year. In 2011 the life expectancy in Papua Province was at 64.46 continued to increase until in 2019 it was at 65.65. This figure increased by 0.44% compared to the previous year. In 2018 the life expectancy in Papua Province of 65.36 increased also when compared to the previous year by 0.38%. Meanwhile, the poverty rate in Papua Province in 2018 stood at 27.74% increased by 0.43% when compared to the previous year.

This shows that life expectancy does not always negatively affect poverty levels. The same thing happened in 2013, 2015, and 2016 where the poverty rate increased at a time when life expectancy was also increasing. Based on the results of regression analysis obtained the result that the health variable in this case is a positive but insignificant life expectancy on the poverty rate, so that if the life expectancy increases it will also increase the poverty rate.

This influence is due to the lack of absorption of society in the world of work so that it will increase the number of unemployed and increase the poverty rate. The lack of absorption of society in the world of work can be caused by lack of ability or limited employment. This is the reason that life expectancy has a positive effect on poverty levels. But the study showed an insignificant influence between life expectancy and poverty rates.

This means that life expectancy has little effect on the poverty level. This can be because

the increase in life expectancy every year is not too large. In addition, this can happen because of other indicators of health that are likely to have more influence on the poverty rate in Papua Province.

Although in this study health variables have an insignificant influence on the poverty rate in Papua Province, the existence of these health variables cannot be ignored. This is because health factors also affect a person's productivity level which will ultimately affect his income level. The results of the individual parameter significance test or the t-statistical test for the fifth research hypothesis stated that H_a was accepted and H_o was rejected.

This means that the results of regression panel data showed the results that education variables had a significant negative effect on poverty levels in Papua in 2011-2019. The indicator of education variables used is the average length of school. As for the average length of school is the average level of education that can be achieved by the population. The coefficient values on educational variables have negative numbers, so this is in accordance with the existing theory that education can reduce poverty levels.

According to Zahra et al (2019) programs focused on improving human resources through equitable, quality, and inclusive education can improve people's well-being and ultimately reduce poverty. This quality human resource will be the capital for the state to improve the welfare of its people. Regression results show that education variables have a negative and significant relationship to the poverty rate, so if the education variable increases it will reduce the poverty rate.

Based on data from the Central Static Agency, in 2011 - 2019 the average length of school in all districts/cities in Papua Province has an upward trend every year. In line with this, Papua Province itself also has an upward trend regarding the average length of schooling. In 2019, the average length of schooling in Papua province reached 6.69 years. The highest growth in average school length in Papua Province occurred in 2018, where the average growth of school length in Papua Province reached 3.99% when compared to the previous year.

With the average trend of school lengths that continue to increase in all districts/cities in Papua, it has a significant influence on the poverty rate in Papua Province in that period. The average length of school describes the number of years the population uses in undergoing formal education. The longer or more years on average school length, the higher the education taken by residents in an area.

A better level of education will open opportunities for people to improve their skills and get better jobs. Furthermore, if people in general have adequate skills productivity will increase and the opportunity to increase income becomes greater. The high level of income received by the community will affect the level of consumption and will ultimately get people out of poverty. This is the reason education negatively affects the poverty rate.

CONCLUSION

Based on the results and discussions in the research, several conclusions were obtained as follows: (1) Economic growth variables have a positive but not significant effect on the poverty rate in Papua Province. (2) Balance fund variables have a negative and significant effect

on the poverty rate in Papua Province. (3) Variable capital expenditures have a positive but insignificant effect on the poverty rate in Papua Province. (4) The health variable in this case is the number of life expectancy positively but not significantly on the poverty rate. (5) The educational variable in this case is the average length of schooling negatively and significantly affects the poverty rate in Papua Province. (6) Variables of economic growth, balance funds, capital expenditure, health, and education together – both have a significant effect on the level of poverty in Papua Province from 2011 to 2019.

REFERENCES

- BAPPENAS. (2020). Sekilas SDGs. <http://sdgs.bappenas.go.id/sekilas-sdgs/>.
- Badan Pusat Statistik. (2021). Angka Harapan Hidup Menurut Kabupaten/Kota di Provinsi Papua Tahun 2011 – 2019. Badan Pusat Statistik Provinsi Papua
- Badan Pusat Statistik. (2021). Persentase Penduduk Miskin Menurut Kabupaten/Kota di Provinsi Papua Tahun 2011 – 2019. Badan Pusat Statistik Provinsi Papua
- Badan Pusat Statistik. (2021). Pertumbuhan Ekonomi Menurut Kabupaten/Kota di Provinsi Papua Tahun 2011 – 2019. Badan Pusat Statistik Provinsi Papua
- Badan Pusat Statistik. (2021). Rata – Rata Lama Sekolah Menurut Kabupaten/Kota di Provinsi Papua Tahun 2011 – 2019. Badan Pusat Statistik Provinsi Papua
- Direktorat Jenderal Perimbangan Keuangan. APBD, Realisasi APBD, dan Neraca Setelah TA 2006 <http://www.djpk.kemenkeu.go.id/?p=5412>
- Harahap, Sofyan, (2006). *Analisis Kritis Atas Laporan Keuangan*. Edisi Pertama, Raja Grafindo Persada, Jakarta.
- Ismail, A dan Hakim. (2014). [Peran Dana Perimbangan Terhadap Kemiskinan di Provinsi Bali]. *APLIKASIBISNIS* Vol 16, No 9 September 2014
- Kotambunan, Sutomo Wim Palar, Richard L.H Tumilaar. (2016). [Analisis Pengaruh Belanja Modal dan Indeks Pembangunan Manusia (IPM) Terhadap Kemiskinan di Provinsi Sulawesi Utara (Dalam Tahun 2005-2014)]. *Jurnal Berkala Ilmiah Efisiensi*, 16(01), 925 – 933
- Kuncoro, Mudrajad. (2004). *Otonomi dan Pembangunan Daerah: Reformasi*.
- Kuncoro, Mudrajad. (2010). *Dasar-Dasar Ekonomika Pembangunan*. Edisi 5. Yogyakarta: UPP STIM YKPN
- Marsoit, Christine Martha Sihotang, Rosalina Koleangan, Dan Richard Tumilaar. (2015). [Pengaruh Investasi Swasta Dan Belanja Modal Terhadap Kemiskinan di Kota Manado Tahun 2004-2012]. *Jurnal Berkala Ilmiah Efisiensi*, 15(01).
- Nurmainah, Santi. (2013). [Analisis Pengaruh Belanja Modal Pemerintah Daerah, Tenaga Kerja Terserap Dan Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Dan Kemiskinan (Studi Kasus 35 Kabupaten / Kota Di Provinsi Jawa Tengah)]. *Jurnal Bisnis dan Ekonomi (JBE)*, 20(2), 131 – 141.
- Panji, I Putu Barat dan I Gusti Bagus Indrajaya. 2016. Pengaruh Dana Perimbangan Terhadap Pertumbuhan Ekonomi Dan Tingkat Kemiskinan Di Provinsi Bali. *E-Jurnal EP Unud*, 5 [3]: 316 – 337
- Rohima, Siti, Liliana, Aning Kesuma Putri. 2020. Reduksi Kemiskinan pada Kabupaten/Kota di Provinsi Sumatera Selatan. *Society*, 8(2), 612-627, 2020
- Rosyadah, J. (2021). Determinan Indeks Pembangunan Manusia (IPM) Provinsi Nusa Tenggara Timur (NTT). *Efficient: Indonesian Journal of Development Economics*, 4(1), 1080-1092. <https://doi.org/10.15294/efficient.v4i1.41076>
- Safitri, Hanifah, dan Muhammad Saleh. (2020). [Pengaruh Belanja Modal, Belanja Non-Modal, Penanaman Modal Asing, Dan Penanaman Modal Dalam Negeri Terhadap Kemiskinan Kalimantan Selatan]. *JIEP: Jurnal Ilmu Ekonomi dan Pembangunan*, 3(1), 229-242
- Sugiyono. 2016. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta
- Suryawati, Chriswardani. (2005). [Memahami Kemiskinan Secara Multidimensional]. *JMPK* 08(03), September 2005.
- Tambunan, Tulus T.H. (2015). *Perekonomian Indonesia*. Bogor: Penerbit Ghalia Indonesia
- Todaro, Michael P & Stephen C. Smith. (2006). *Pembangunan Ekonomi Edisi 9*. Jakarta: Erlangga
- Wahyudi, Dicky dan Tri Wahyu Rejekingsih. (2013). [Analisis Kemiskinan Di Jawa Tengah]. *Diponegoro Journal of Economics*, 2(1), 1 - 15
- Widarjono, Agus. (2018). *Ekonometrika (Pengantar dan Aplikasinya Disertai Panduan Views)*. Yogyakarta: UPP STIM YKPN

Woyanti. (2013). [Pengaruh Pertumbuhan Ekonomi Dan UMP Terhadap Kemiskinan di Jawa Tengah Pra dan Pasca Desentralisasi Fiskal]. *Media Ekonomi dan Manajemen*, 28(2), 28 - 43

Zahra, Afifatuz, Aulia Fatin A, Hanifah Afuwu, dan Rintan Auliyah R. (2019). [Struktur Kemiskinan Indonesia: Berapa Besar Pengaruh Kesehatan, Pendidikan dan Kelayakan Hunian?]. *Jurnal Inovasi Ekonomi*, 04(02), 67-74