

The Effect of Health, Education, Capital, Technology, Inflation, and Gross Regional Domestic Products on Poverty Levels In Papua Province

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Abstract

Poverty is a social problem. Currently in Indonesia, especially the problem of poverty is still concentrated in the eastern part of Indonesia, this is possibly due to various factors such as health, education, capital, technology, inflation, and gross regional domestic product. The purpose of this study was to analyze the effect of health, education, capital expenditure, technology, and gross regional domestic product inflation on poverty levels in Papua Province.

The object of this research is the poor population of Papua Province. The data used in this research is secondary data. The data analysis method uses a panel data regression model with an estimation model of the random effect model and the fixed effect model. Then the analysis technique used is the determination of the panel data estimation model, classical assumption test, and significance test.

The results of this study indicate that health does not affect the level of poverty in Papua Province. Education affects poverty levels in Papua Province. Capital affects the level of poverty in Papua Province. Technology affects poverty levels in Papua Province. Inflation does not affect the poverty level in Papua Province. Gross Regional Domestic Product (PDRB) affects the level of poverty in Papua Province.

Keywords: *Health, Education, Capital, Technology, Inflation and Gross Regional Domestic Product, Poverty Level, Papua Province.*

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I. Preliminary

Background

Poverty is a social problem that occurs due to various factors, including economic, social and cultural. This problem continues to occur in almost every developing country and the same case can also be found for countries that are already advanced in their economic systems. The problem of poverty is fundamental to developing countries like Indonesia, this occurs because of the gap between social and cultural life and ongoing economic activities. Various efforts have been made to overcome this problem of poverty, but until 2017 there were still more than 2 billion people in the world who live on less than one *dollar* per day, this shows that nearly 15% of the world's population is poor. The United Nations (UN) since 2001 has had a "*Millennium Development Goals (MDGs)*" program aimed at eradicating poverty and hunger, the declaration *MDGs* was outlined in October 2000 and agreed upon by 189 UN member countries, including Indonesia (Sukidjo 2009), and the program is sustainable until 2030 under the name *Sustainable Development Goals (SDGs)*.

Poverty has a very big impact on the chance of a crime or crime to occur, where the poverty rate shows that there are difficulties in fulfilling various aspects of life necessities, while on the other hand the means of satisfying needs are very limited. So that it can lead to social inequality, while social inequality can lead to social jealousy and then continue to social upheaval and end in social conflict which results in a crime (Prayetno, 2013). In addition, poverty can also be further explored as a multidimensional problem because it is related to the inability to access socially, economically, culturally, politically and in social activities. In principle, the standard of living in a society is not only fulfilled by the need for food, but also for the needs for health and education. Poverty is also considered a form of problem in the development of a country due to the negative impact of a country's economic growth at a certain period of time, this also results in differences in income which will widen the gap that occurs between communities so that it can lead to social conflicts that can result in criminalism.

The following in Table 1.1 will explain how the condition of the number of poor people in Indonesia in 2014-2018.

Table 1.1 Number of Poor People in Indonesia 2014-2018

Year	2014	2015	2016	2017	2018
Amount.Population Poor 27.73	(millions)	28.51	27.76	26.58	25.67
Percentage of People Poor(%)	10.96	11.13	10.70	10.12	9.66

Source: BPS data processed in 2014-2018

In Table 1.1, it can be seen that during the period 2014 to 2018 the number of poor people in Indonesia experienced conditions that tended to be fluctuating with a positive trend where in the 2018 period the number of poor people only reached 25.67 million people with a percentage of 9.66 percent of the population. people in Indonesia (BPS, 2019). This shows that the efforts that have been made by the Indonesian government have produced positive results where the gap between urban and rural communities both in terms of income and non-income has decreased. This can be indicated that people have a better life so that their needs can be met. The following in Table 1.2 will explain how the condition of the percentage of poor people by province in Indonesia during the 2014-2018 period.

Problem Formulation

1. How does health affect poverty levels in Papua Province?
2. How does education affect poverty levels in Papua Province?
3. How does capital affect poverty levels in Papua Province?
4. How does technology affect poverty levels in Papua Province?
5. How does inflation affect the poverty rate in Papua Province?
6. How does the Gross Regional Domestic Product affect the poverty rate in Papua Province?

Research Objectives

Based on the formulation of the problem above, the objectives to be achieved from this study are to analyze each variable examined in this study as follows:

1. Analyzing the influence of health on poverty levels.
2. Analyzing the effect of education on poverty levels.
3. Analyze the effect of capital on poverty levels.
4. Analyze the effect of technology on poverty levels
5. Analyzing the effect of inflation on the poverty rate
6. Analyzing the effect of Gross Regional Domestic Product (GRDP) on poverty levels.

II. Literature Review

The Concept of Development and Economic Growth

There are two concepts that are not separated between the notions of economic growth and economic development. What is used as the basic guide for a country in development is a theory and model of economic growth, while economic development is an effort resulting from continuous development using its resources which is economic development. In the concept of development and economic growth discussed in this study is economic development and critical analysis by looking at and adapted to the context of a region in Indonesia.

Arsyad (2006) said that it is an increase in the ability of processing natural resources, the number of workers and their quality, funders, quality of infrastructure such as infrastructure and facilities for development, transportation and communication, industrial progress, technological developments, community economic conditions and trade between regions, regional income in regional development financing, entrepreneurial development and regional institutionalization are the notions of economic development.

Definition of Economic Growth

According to Rostow (1960), economic growth can be defined as a process that causes changes in people's lives, namely changes in politics, social structures, social values and structures of economic activity.

According to Prof. Simon Kuznets (1966), economic growth is defined as the long-term increase in the ability of a country to provide more types of economic goods to its population where this ability grows according to technological advances, and the institutional and ideological adjustments it requires.

Todaro (2016) says an increase in the ability of a country or region to meet the needs of economic goods for its population, and can realize a continuous increase in national output accompanied by technological advances that are owned by the formation of institutions and the ability to understand ideology. what it needs is the definition of economic growth.

In measuring the progress of economic growth, it can be calculated by comparing the GRDP in a certain year (GRDP) with the GRDP of the previous year

Economic Growth Rate = $\frac{GRDP - GRDP_{t-1}}{GRDP_{t-1}} \times 100\%$

There are several factors that affect economic growth according to Arsyad (2006) as follows:

1. Accumulated Capital

The addition of all tangible investments such as land or land, fiscal equipment and human quality, in a production process will increase productivity and people's income, if there is a portion of this income to be deposited in the bank and then used for investment to increase the amount of production for the future. . This accumulation of capital will add new resources and will increase existing resources.

2. Population Growth Population

growth is an increase in the number of the workforce which is a supporting factor that can stimulate economic growth. However, it all depends on the ability of a region's economy to absorb and employ existing labor productively.

3. Technological Progress Technological

progress is how processing is done in new ways or old ways which always experience improvements in doing jobs. Technological progress is essential for economic growth.

Economic Growth Theory The economic

progress of a region shows the success of a development even though it is not the only indicator of development success (Todaro: 2006). There are three kinds of measures to assess economic growth, namely output growth, output growth per worker, and output per capita growth. Output growth is used to assess the growth in production capacity which is affected by an increase in labor and capital in the region. Output growth per worker is often used as an indicator of changes in the competitiveness of the region (through productivity growth). Meanwhile, per capita output growth is used as an indicator of changes in economic welfare (Bhinadi: 2003).

There are several theories regarding growth as described below:

Rostow and the Harrod-Domar Theory

Rostow's theory explains that there are stages a country goes through in economic growth. One of the ways to accelerate economic growth is to strengthen national saving. This theory is further clarified by the Harrod-Domar theory which states that the more portion of GDP saved will increase the *capital stock*, thereby increasing economic growth.

Both of these theories explain the level of savings and *capitalstock* highwill increase economic growth. However several Empirical studies show different results between countries in Eastern Europe and in Africa. This shows that there are other factors that affect economic growth, such as the quality of human resources and supporting infrastructure (Todaro: 2016).

Structural Transformation Theory

This theory focuses on the mechanisms by which poor and developing countries can increase economic growth by transforming the structure of their economy from a traditional agricultural sector to a dominant industrial sector to a more modern manufacturing and services sector. This theory was pioneered by W. Arthur Lewis.

According to Lewis, in an underdeveloped economy there are 2 sectors, namely the agricultural sector and the manufacturing industry sector. The agricultural sector is a traditional sector with marginal labor productivity at zero. In other words, if the workforce is reduced, it will not reduce the output of the agricultural sector. The modern industrial sector is a modern sector and the output of this sector will increase if labor from the agricultural sector moves to this modern sector. In this case there is a transfer of labor, an increase in output and an expansion of employment opportunities. The entry of labor into the modern sector will increase productivity and increase output.

Solow

Theory This theory explains how the level of saving and investment, population growth and technological progress affect the level of economic output and growth over time (Mankiw: 2010). In this theory, technological developments are assumed to be exogenous variables. the influence between output, capital and labor can be written in the form of a function as follows.

$$y = f(k) \dots\dots\dots (1)$$

From equation 1, it can be seen that output per worker (y) is a function of *capitalstock* per worker. In accordance with the production function that applies the law of "the law of diminishing return", where at the initial point of production, the addition of capital per labor will increase output per worker more, but at a certain point the increase in *capital stock* per worker will not increase output per worker and will even reduce output per worker. Meanwhile, the investment function is written as follows.

$$i = sf(k) \dots\dots\dots (2)$$

In this equation, the level of investment per worker is a function of *capitalstock* per worker. *Capital stock* itself is influenced by the amount of investment and depreciation where the investment will increase the *capital stock* and depreciation will reduce it.

$$k = i - \gamma k_t \dots\dots\dots (3), \gamma \text{ is the depreciation portion of the } \textit{capital stock}.$$

A high saving rate will have an effect on increasing *capital stock* and will increase income so that it raises rapid economic growth. However, in a certain period of time, economic growth will experience a slowdown if it has reached the so-called *steady-state level of capital*. This condition occurs when investment equals depreciation, resulting in capital accumulation.

Apart from the saving rate, growth is also influenced by population growth. Population growth can better explain sustainable economic growth. Population increases the number of labor and by itself will reduce the *capital stock* per worker. The population growth rate and the depreciation rate together will reduce the *capital stock*. The effect of population growth can be written mathematically as follows.

$$= sf(k) - (\gamma + n) k_t, \dots\dots\dots (4)$$

Where n is the rate of population growth. In this theory it is predicted that countries with high population growth will have a low GDP per capita (Mankiw: 2000).

Technological progress in Solow theory is considered an exogenous factor. In the next formulation, the production function is $Y = f(K, L, E)$, where E is the efficiency of labor. Furthermore, y is Y / LE where LE shows the number of effective workers. The effect of technological advances on changes in capital can be formulated as

$$k = sf(k) - (\gamma + n + g) k_t, \dots\dots\dots (5)$$

Where g describes technological progress through labor efficiency. The impact of technological advances is that it can lead to sustainable economic growth by optimizing the efficiency of a growing workforce.

According to Solow's theory, there are several things that are done to spur economic growth. Increasing the portion of savings will increase capital accumulation and accelerate economic growth. In addition to increasing appropriate investment in the economy both in physical and non-physical form. Encouraging technological advances can increase income per worker so that providing opportunities to innovate in the private sector will have a major impact on economic growth.

Endogenous Growth Theory

The following theories are the theory of the development of the Solow model. Among them is the theory of endogenous growth which tries to explain that the sources of growth are the increase in capital accumulation in a broad sense. Capital in this case is not only physical but also non-physical in the form of science and technology. These technological developments will develop innovations so as to increase productivity and lead to increased economic growth.

The existence of new discoveries originates from the process *learning by doing*, which can lead to new discoveries that increase production efficiency. This efficiency can increase productivity. So that in this case the quality of human resources is a factor that affects economic growth.

Trickle Up Effect The

trickle-up effect or fountain effect is an economic theory used to describe the ability of the middle class as a whole to drive and support the economy.

This theory was founded by John Maynard Keynes (1883–1946). This is sometimes referred to as a Keynesian economy where economic growth is enhanced when the government reduces taxes on the middle class and increases government spending.

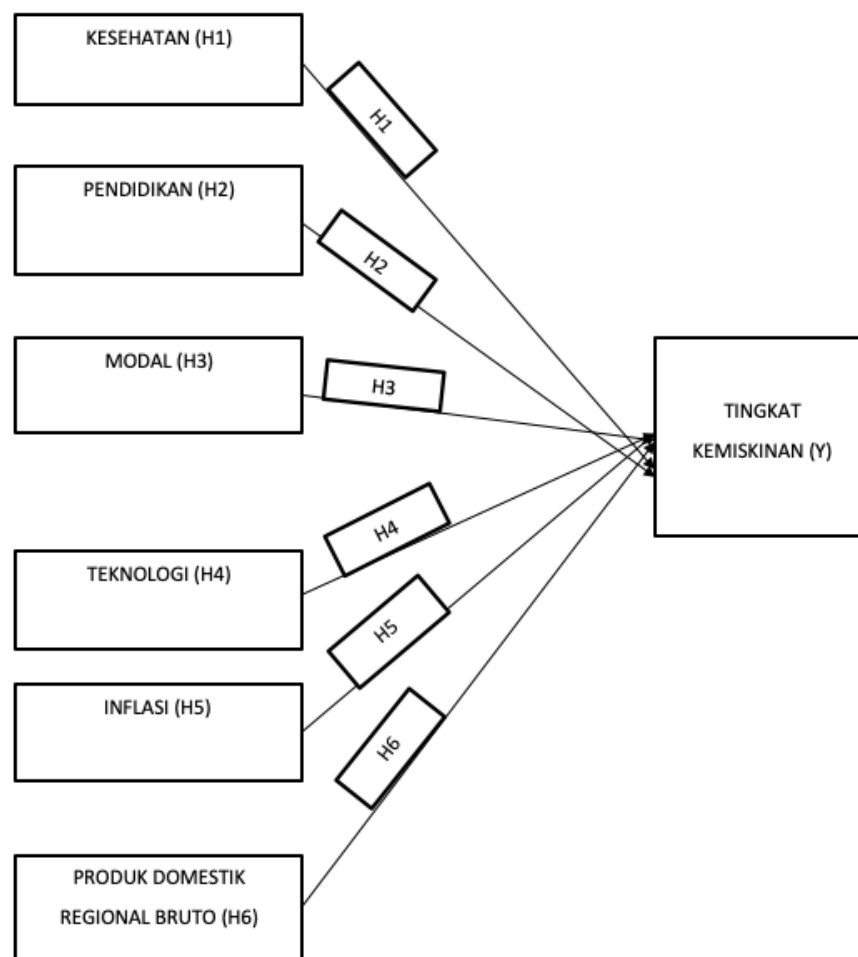


Figure 2.1 Research Model

Hypothesis

Based on Figure 2.1, researchers can make theoretical research hypotheses, among others:

- H1: Health affects poverty levels;
- H2: Education has an effect on poverty levels;
- H3: Capital affects the level of poverty;
- H4: Technology affects poverty levels;
- H5: Inflation affects the level of poverty;
- H6: Gross Regional Domestic Product (GRDP) affects the poverty level;

III. Research Method

Types and Data Sources

This study uses secondary data with a ratio scale, which comes from:

1. Data on Life Expectancy (AHH), for Papua and North Maluku Provinces (2014-2018) obtained from the Central Bureau of Statistics (BPS) both central and regional as well as data from the population of Papua Province,

2. Expectations for the length of schooling (HLS), the average length of schooling (RLS) in Papua and North Maluku Provinces (2014-2018) are obtained from the Central Bureau of Statistics (BPS) both central and regional as well as data from the population of Papua Province,
3. Capital Expenditure Data (B.Modal) of district / city governments in the provinces of Papua and North Maluku for the year (2014-2018) were obtained through the District / City APBD reports that were examined by BPKP at the Regional Development Planning Agency of Papua Province,
4. Data for People's Business Credit (KUR) for Papua and North Maluku Provinces (2014-2018) obtained is the Indonesian Financial Economic Statistics Report (SEKDA) Bank Indonesia Papua Province Branch,
5. Technology Data from Electricity Customers and Cellular Operator Users from each district / city of Papua Province. So in this case the authors are looking for the percentage of electricity customers and users of cellular operators in the district / city multiplied by the amount of electricity used and the quota used,
6. Data on Gross Regional Domestic Product (PDRB) of Regency / City Governments in Papua and North Maluku Provinces (2014-2018) are obtained from annual routine reports published by the District / City Statistics Bureau in Papua Province,
7. Inflation data can be obtained from the Central Bureau of Statistics (BPS) or BPS Papua Province.

Data Collection Methods

In collecting this data the researcher took several steps to obtain valid and reliable data. Some of the steps taken include:

Online Data Search

The development of Internet network technology advances the emergence of data collection media in the data base that provides a variety of information for both business and non-business needs. One of the objectives of the institution / company is to provide a data base for public consumption, one of which is to facilitate research. Searching data in this way (online) provides convenience, including time-saving, cost-effective, and fast in obtaining further related information.

Search by Visit

In completing the incomplete data obtained from the online method above, the researchers made visits to several agencies at the head office stored in public libraries, government office libraries, statistical bureau centers related to this research. If the data is not obtained at the head office or in Jakarta, the researcher then looks for data from the source that released the information in districts / cities in Papua by requesting a contact with the head of the statistical bureau in Papua from the central statistics bureau office in Jakarta.

Operational Variables and Measurement Methods

In order to facilitate uniformity of understanding, the following in Table 3.1 is the operational definition of each variable and in Table 3.2 is the measurement method for each variable.

Table 3.1 Variables of Operational Research

No		Variable	Variable Definition	Source	Scale
1	Healthy	Expectancy Life	Life expectancy at age might interpret as to accomplish a person born in a particular year.	Suindyah (2009)	Ratio
2	Education	Expectations for Old Schools	Is a description or education plan in the region / province that is proclaimed by the local government.	This novelty writing	ratio
		The average length of schooling	is the average amount of time spent by residents aged 15 years and over across all levels of formal education that they have attended.	Nugroho (2010)	Ratio
3	Capital	Capital	Expenditure Local government expenditures are used for the purchase / procurement of tangible fixed assets and for the use of services whose benefits exceed a year in implementing work programs.	Hasan (2009)	Nominal
		KUR	KUR is a government program in providing access between MSMEs to community-based	Wijaya (2012)	Nominal

			banking instead of market interest rates (subsidi)		
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Table 3.1 Research Operational Variables (Continued)

No	Variable Variable	Definition	Source	Scale
6	Technology	Electricity is the energy needed to run technological equipment. And Cellular Operators are a window for society to open up the internet network	Prasetyo (2008)	Ratio
7	Inflation	Is an increase in prices in general and continuously within a certain period of time	Fahma Sari (2005)	Ratio
8	GRDP	Is a measure of the achievement of gross income from a regional government	Abdullah and Syukriy (2003)	Nominal
9	Poverty Level	Percentage of the population that is not able to meet human material needs such as food, clothing, shelter and so on	Fahma Sari (2005)	Ratio

Source: Data Processed Author, 2020

No	Variable	Measurement Method	Information	Source
1	Life Expectancy	Number of death rates by age (Age Specific Death Rate / ASDR)	Data obtained from death registration records of	the Central Bureau of Statistics
2	Expectations for the duration of schooling for		HLS_a^t = Expectations for school years at age a in year t E_i^t = Number of population age i attending school in year t i = Age (a, a + 1, ..., n) FK = Correction factor for pesantren,	Central Bureau of Statistics
3	Average length of schooling		RLS = Average length of school for residents age 25 and over x_i = Length of schooling for population i who is 25 years old N = Total population aged 25 years and over	Central Statistics Agency
4	Capital Expenditure	Figures Central / Regional Government Financial Statements and APBN / APBD Figures The	data can be obtained from official website page of the central statistical	agency Central Bureau of Statistics
5	KUR	Average people's business credit distributed to the public recorded in the report published by BPS The	data can be obtained from the official website of the central agency's page s tatistik	Central Bureau of Statistics
6	Technology	Percentage rate of electricity distributed to the public This	data can be obtained from the official website of	the Central Bureau of Statistics Statistics Indonesia

7	Inflation		Inflation at the consumer level at time t = CPI at time t = CPI at time t-1	BPS & Bank Indonesia
8	GRDP		CPI ₀ = base year price index CPI _t = price index year t GRDP _t = nominal GRDP year t	Central Bureau of Statistics
9	Poverty level		$\alpha = 0$, $z =$ poverty line. $y_i =$ Average monthly per capita expenditure of people who are below the poverty line ($i = 1, 2, 3, \dots, q$), $y_i < z$ $q =$ The number of people living below the poverty line. $n =$ total population.	Central Bureau of Statistics

Source: Author Processed Data

IV. Research Results And Discussion

Research Results

Table 4.1 Research Results in Papua Province

Hypothesis	Results	Meaning
H1: Health	AHH: P: 0.2725 > 0.05 (Not Influential)	This shows that in the province of Papua the variable life expectancy does not affect the increase / decrease in the level of poverty because even though they are alive, if they do not carry out activities that generate money, the community cannot meet their daily needs and escape poverty.
H2: Education	HLS: P: 0.0087 < 0.05 (Influential)	The higher the expectation standard for the length of school that is issued by the local government for the people of the province of Papua, the poverty will decrease because if the government provides assistance for school fees and they go to school according to school expectations when they graduate school it will be easier to find a job that gets enough salary to meet their daily needs and get them out of the poor community.
	RLS: P: 0.0100 < 0.05 (Influential)	So it can be interpreted that the greater the average number of years of schooling in the province of Papua, the greater the people who will be free from poverty because if they do not complete their expectations of long schooling but at least they passing one level of school or even more widens their chance to meet work qualifications or gain knowledge for entrepreneurship.
H3: Capital	Capital Expenditure: P: 0.0012 < 0.05 (Influential)	It can be interpreted that the greater the capital expenditure or APBD of Papua province is allocated for education, health, training for entrepreneurship programs, the higher the community will be free from poverty.
	People's Business Credit: P: 0.7268 > 0.05 Unaffected ()	People's Business Credit does not affect the level of poor people in the province of Papua because if the people of the Papua province enter into a credit agreement for business, it is often misused by the local community, it is not intended to be turned into a business, instead it is used to buy daily necessities which causes the provincial community to fall further. Papua to the brink of poverty because it has to pay KUR installments and buy daily necessities.

Table 4.2 Summary of Research Results in Papua Province (Continued)

Hypothesis of the	Results	Meaning of
H4: Technology	Technology: P: 0.0418 <0.05 (Influential)	The higher the number of technology, the lower the poverty rate in the province of Papua because if entrepreneurship or work does not use electricity to earn income then everything will not work because all work now uses electronic devices that require electricity, for example, laptops, internet networks, cellphones, printers Even businessmen or hotel workers, distributors of daily necessities, restaurants need electricity, so if electricity consumption is met, their daily needs will also be fulfilled and in the end they can free the poor in Papua province.
H5: Inflation	Inflation: P: 0.6243 > 0.5 Unaffected ()	The province of Papua because of the fluctuation of the inflation rate cannot make the people of Papua province get out of the poverty zone even though the value of inflation is light or low even if the purchasing power of the people who do not have income, it will not have any impact.
H6: Gross Regional Domestic Product	Gross Regional Domestic Product: P: 0.0075 <0.05 (Influential)	The higher the GRDP figure, the lower the poverty level in the province of Papua because if the goods or services produced by economic actors in the Papua region are high, it will cause an increase in demand if an increase in demand for goods or services occurs, it will absorb a lot of labor or spawn new entrepreneurs. to meet this demand so that people who were not working before, can work and earn money to meet the daily needs of the family and in the end will change this poverty.

Source: compiled by the author, 2020

Analysis of Health Regression Results in the variable Life Expectancy Rate (AHH), Against the Poverty Level of Papua Province

From the results of the calculation of Life Expectancy (AHH), the probability value (P) is 0.2725, this value is above the significant level of 0.05, which indicates that AHH does not exist. influence on the level of the poor population, this is in accordance with the research of Anggadini (2013), the Life Expectancy Rate has a negative and significant effect on poverty on poverty in districts / cities in Central Sulawesi Province in 2010-2013.

This shows that the life expectancy rate does not affect poverty but rather affects the quality of life of a person because the quality of a person's life can be determined by education, health, and life expectancy. The better the quality of life of a person can increase life expectancy, the need for non-material materials will be far more felt than material needs. This will not support a person's welfare because the impact it produces is more of a psychological nature, in this case, especially Papua, which is the lowest area in life expectancy compared to other regions in Indonesia. This makes the role of the government very important, it needs serious efforts from the health sector to continue to be considered to create a good quality of life for the community to accelerate welfare development in Papua because the majority of the population is still classified as people who are below the national poverty line standard. **So that in this study the hypothesis is rejected.**

Analysis of Educational Regression Results in the variable Expectations for Old School Years (HLS), Average Length of Schooling (RLS) Against Poverty Levels in Papua Province

From the results of calculating Expectations for Old Schooling (HLS), the probability value (P) is 0.0087 this value is below significant level 0, 05 which shows that HLS has an influence on the level of the poor. The variable of school duration expectancy is a substitute variable for literacy rates which according to BPS (2017) is no longer a variable to measure poverty level indicators, in line with one study which states that this variable has no effect on poverty (Martani, 2017).

The local government in this case strives to provide funds and a good education system in an effort to increase the expectation of school years in the area, so that the community can receive much better access to education and get a much more decent education. The higher the education obtained by the community, it can have an impact on increasing social status and income so that the community's economy will experience an increase and get welfare that will keep it away from the poverty line. **So that in this study the hypothesis is accepted.**

From the results of the calculation of the Average Length of School (RLS), the probability (P) value of 0.0100 is obtained, this value is below the significant level of 0.05 which indicates that the RLS has an influence on the level of the poor, this is similar to the results of research by Nugroho (2012). The average length of schooling has a negative and significant effect on poverty. **So that in this study the hypothesis is accepted.**

Analysis of the results of capital regression in the variable Government Capital Expenditure and people's business credit on the Poverty Level of Papua Province

From the results of the calculation of capital expenditures, the probability (P) 0.0012 value is below a significant level of 0.05, which indicates that capital expenditure affects the level of poor people. This is the same as the findings of Hasan (2009) and in contrast to Martani's (2017) findings, the increase in the amount of government capital has a positive impact on the poor in Papua, because the availability of adequate infrastructure which is a positive impact of increasing government capital spending will make it easier for the community. to carry out economic and social activities. The focus of the Jokowi-era administration is on infrastructure development in various regions in Indonesia, including Papua.

Government spending that drives the economy is of course assuming that government spending is fully used for activities that can develop the regional economy or provide a boost to the development of the regional economy. If you look at the results obtained from this study and compared with the research hypothesis which says it is suspected that there is an influence between capital expenditure and poverty levels in Papua, **so in this study the hypothesis is accepted.**

From the calculation of the People's Business Credit (KUR), the probability value (P) is 0.7268, this value is above a significant level of 0.05 which indicates that KUR has no effect on the level of the poor. The results of this calculation are different from Purnomo's research (2014), which states that microcredit is not the only alternative solution to alleviating poverty, but as an effort to fight poverty. According to Wijaya (2012) who says that people who get the people's business credit program can increase their business capital, so that their turnover increases according to their needs. **So that in this study the hypothesis is rejected.**

Analysis of the Technology Variable Regression Results (TEK) on the Poverty Level of Papua Province

From the results of the calculation of Technology (TEK), the probability (P) value is 0.0418, this value is below the significant level of 0.05 which indicates that TEK has an influence on the level of the poor, this is According to research from Prasetyo (2008), it is said that existing electrical energy, good road length has a positive effect on economic development in the western region of Indonesia. And according to Sibarani (2002) suggests that technology variables have a positive effect on the per capita income of Indonesians. The more equitable development both in terms of infrastructure, telecommunications, energy and utilization of natural resources can affect poverty conditions in an area, especially Papua Province. **So that in this study the hypothesis is accepted.**

Analysis of the Regression Results of the Inflation Variable (INF) on the Poverty Level of Papua Province

From the results of the calculation of Inflation (INF), the probability (P) value of 0.6243 is above the significant level of 0.05 which indicates that INF has no effect on the level of poor people, This is different from Fahma (2005) according to his research that inflation has a positive effect on the unemployment rate and GRDP. This happens because inflation will reduce the value of the currency so that it can have an impact on people who are below the poverty line to find it difficult to meet their needs which will directly have an impact on increasing the level of poverty in certain areas. **So that in this study the hypothesis is rejected.**

Analysis of Variable Regression Results for Gross Regional Domestic Product (GRDP) on the Poverty Level of Papua Province. From the

results of the calculation of Gross Regional Domestic Product (PDRB), the probability (P) 0.0075 value is below the significant level of 0.05 which indicates that the GRDP has an influence on the level of the poor population, this is similar to the research of Hasan (2009) which states that "Gross Regional Domestic Product (PDRB) has a positive impact on the poor in Aceh". **So that in this study the hypothesis is accepted.**

Poverty Map in Papua Province 2014-2018

After analyzing the research variables in Papua province in 2014-2018, the writer can finally describe the poverty map in Figure 4.1 and the information below:

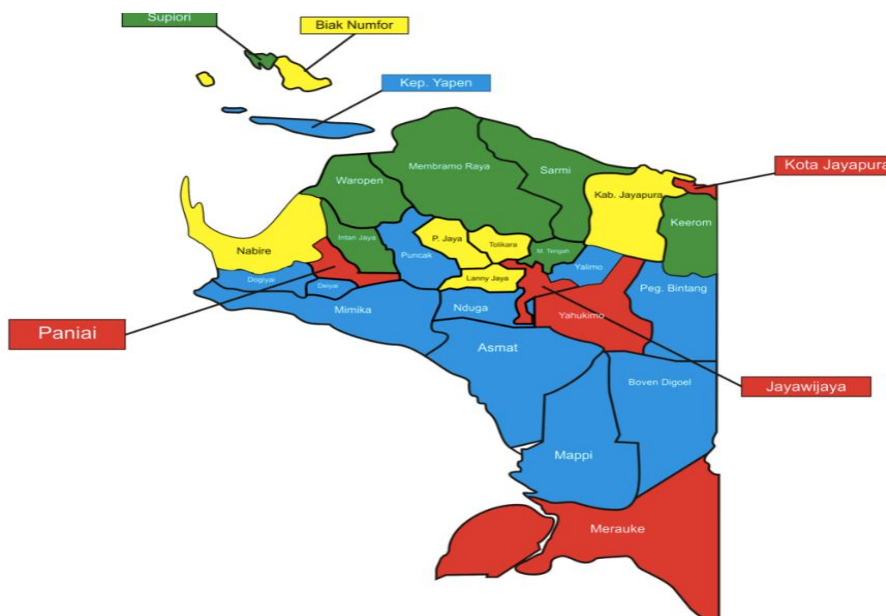


Figure 4.1 Map of Papua Province

Table 4.18 Percentage of Average Poverty Level in Papua Province 2014-2018

Regional Color	Year	POVERTY (%)
Blue (Dogiyai, Deiyai, Puncak Jaya, Nduga, Mimika, Asmat, Puncak, Mappi, Yalimo, Boven Digoel, Bintang Mountains, Yapen)	2014-2018	30.30
Red (Paniai, Jayawijaya, Yahukimo, Merauke, Kota Jayapura)	2014-2018	27.84
Green (Keerom, Supiori, Mamberamo Tengah, Mamberamo Raya, Sarmi, Waropen, Intan Jaya)	2014-2018	32.43

Table 4.18 Percentage of Average Poverty Level in Papua Province 2014-2018 (Continued)

Regional Color	Year	POVERTY (%)
Yellow (Biak, Nabire, Puncak Jaya, Tolikara, Lanny Jaya, Jayapura)	2014-2018	29.30
Papua Province	2014-2018	27.97

Source: Processed by Author, 2020

V. Conclusion And Suggestions

Conclusion

Based on the results and discussion, the researcher can draw the following conclusions:

1. There is no health effect on poverty levels in Papua Province.
2. The existence of the influence of education on poverty levels in Papua province.
3. There is the influence of capital on the level of poverty in Papua Province.
4. The existence of the influence of technology on the poverty level in Papua Province.
5. There is no influence of inflation on the poverty level in Papua Province.
6. The existence of the influence of the Gross Regional Domestic Product on the poverty level in Papua Province.

Suggestions and Implications for Research

1. For Papua Province

1a. Based on the findings of this study, what should be of greatest concern is that education is still very uneven in Papua Province. The first suggestion that can be done is to start a movement to develop elementary schools to non-profit universities funded by national companies or local governments that do not charge fees. at all for teaching and learning activities because it is a national urgency to pay attention to the eastern region of Indonesia, the second is to gather student volunteers, lecturers and university officials to make full scholarship programs from major universities in Indonesia aimed at the existing poor. in underdeveloped districts in the Papua region.

1b. Based on the findings of this study, what should be considered next is capital where the first suggestion is to increase the investment funded by the APBD and KUR by forming industrial centers that manage natural resources owned by Papua Province, because of the natural resources in Papua Province. There are so many things that can be processed by us, the Indonesian people so that the results obtained can be more optimal for the progress of the community, for example, the results of the freeport which is the largest gold mine in Indonesia that can be sold not only for gold, but also used as crafts and marine products from Papua are very rich and varied. The second suggestion is to create training and assistance to produce typical products of Papua Province that are already well-known or are newly introduced such as food, drinks, crafts, seafood and many more by providing training on how to make good, market through both offline and marketing. through the market place, introducing the method *Franchise* and making this method for superior products so that they can be enjoyed throughout Indonesia and of course the funding afterwards as well as assistance after getting the money properly.

1c. Based on the findings of this dissertation, what must be considered is technology by expanding the area of electricity and signal coverage for the people of Papua Province so that information and business opportunities are more evenly distributed because it has entered this era of globalization where the digital world has become a very useful world for the current era where The solution is that the local government, both districts as local sons / daughters in the district, begin to collaborate with internet service providers or providers by building district smart homes that are supported with the best signals and the best facilities such as the latest laptops, then printer, e-books, mini libraries, as well as comfortable rooms that can be found in the regency smart house, of course with operational hours that can cover 24 hours.

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