

ANALYSIS OF MACRO VARIABLE AND HUMAN CAPITAL ON POVERTY AND ECONOMIC GROWTH IN INDONESIA

Ariusni

Economic Development Program
Economic Faculty, State University of Padang
ariusni.fe.unp@gmail.com

Abstract

The aim of this study was to analyze the effect of the unemployment rate, sex ratio and population density affect the level of poverty in Indonesia. The influence of the unemployment rate, level of education and health affect the value of production (GDP) in Indonesia. The population in this study were all provinces in Indonesia. In this study, the sample size is as much as 33 provinces of Indonesia. This research was conducted in Indonesia during the period 2006-2012. Technique of data collecting secondary data with the data panel approach (pooling data). This method combines two types of data: the data cross where (cross-section) with time series data (time series). The model used in this study is a model of simultaneous equations with two stage least square with the approach of fixed effect model (FEM) after the test Chow and Hausman Test. Results of the study found that in the first equation is the influence of positive and significant correlation between the unemployment rate (X1) with the level of poverty in the provinces in Indonesia. The variable sex ratio (X4) on the level of poverty in the Indonesian provinces is a significant negative effect. The influence of the ratio of population density variable (X5) on the level of poverty is positive and significant. Variable value of GDP (Y2cap) to poverty rate is negative and significant. In the second equation is found the results are the effect of a negative and significant correlation between the unemployment rate to the value of production (GDP) in the provinces in Indonesia. The influence of education variable (X2) the value of production (GDP) is positive and significant. Influence health variables (X3) to the value of production (GDP) is positive and significant. Variables influence the poverty level (Y1cap) to the value of production (GDP) is negative and not significant in the provinces in Indonesia. The government should always strive to improve human capitalnya in order to reduce poverty and increase the value of production in Indonesia. High participation of women in development are important because it can reduce the level of poverty in Indonesia. More and more Indonesian women contribute in the construction of the lower level of poverty. The government should create a policy that there is equity in the distribution of the population due to the increasingly dense population actually increased poverty. Therefore, the government should carry out resettlement in order to lower poverty.

Key words : *Human capital, Macro Variables, poverty, economic growth, GDP.*

I. Introduction

The problem of poverty has always been a major issue in achieving development in developing countries in general, especially in Indonesia, which is the fourth densest population in the world. The issue of poverty has always been the main constraints faced by Indonesia in every phase of the economic structure in the achievement of development. The problem of poverty has an impact on all forms of backwardness such as economic, cultural, social, educational, health, environment and natural resources. Therefore, the problem of poverty must be eradicated so as to bring major changes in the achievement of development. The problem of poverty and social inequality are high is a disease difficult to cure if treated seriously by the government through various programs.

Poverty as a social phenomenon is not only experienced by the developing countries but also for countries that already have the economic advancement of the country where inequality is very high. Poverty is essentially a classic problem that has existed since

long time. Poverty is a condition which is too needy from public concerning its limited capital, low level of knowledge and skills that he has, lack of knowledge and skills that lead to income and limited access to participate in the development.

The poverty rate in Indonesia is getting worse. Therefore, further away from the poverty line and inequality expenditure of the poor widened. The index of the growing trend is away from the poverty line. Poverty gap index rose from 1.75% (March 2013) to 1.89% (2014). Then the poverty severity index rose from 0.43% (March 2013) to 0.48% (2014). Moreover, when viewed spatially that the index of the depth and severity of poverty in rural areas is higher than urban areas. Recorded in the depths of 1.41% of urban and rural areas is much higher, at 2.37%. Although the government has launched various efforts to overcome poverty from year to year as a development program, but the number of poor people do not decline significantly. Based on BPS data there is a downward trend in the number of poor people, but it is not yet reveal Qualitative real impact the situation is even more concerning when that happens in the community.

Depth of poverty in the provinces in Indonesia in 2009 to 2012 has fluctuated with the average 2.45 percent. West Papua has a depth value is the highest among 33 provinces in Indonesia, namely 10.47 percent in 2010 despite a decrease in depth but still high among other provinces. After that Papua Province is the second level of the depth of poverty in Indonesia, namely 5.71 percent of its trend also fell but not significantly so. Meanwhile DKI Jakarta as the capital of the country has lower poverty rates are 0.57 percent in 2009 despite the volatile and ultimately experienced an increase in the amount of 0.60 in 2011.

The purpose of economic development is not merely to create a high economic growth, but also to reduce the level of poverty, income inequalities and the provision of employment opportunities more widely. Economic growth as an indicator that a quick way to see the progress of the economy and is considered as an important indicator of development. Although it is not only an indicator in development but it is also as early indicators in general to the development of a country. So that economic growth is still a major concern also in the economic progress of a country in the world, especially Indonesia.

Economic growth is generally found fluctuate in provinces in Indonesia, in part the absence of which has decreased and increased. The highest growth was found in West Sulawesi province, despite fluctuating after year. In 2010, the economic growth was 11.89 percent down to 9.01 percent in 2012. Furthermore, the lowest economic growth seen in East Kalimantan and Papua Province when the province is rich in natural resources or including one of the richest provinces in Indonesia. The conditions were very paradox occurred in the province of East Kalimantan. In 2009 the economic growth amounted to only 2.28 percent in 2013 and then increased to 3.98 percent. So it can be concluded that rich province has not guaranteed to have high economic growth and reverse the poor provinces of natural resources does not guarantee that lower economic growth.

The success of health programs and socio-economic development programs in general can be seen from the increase in life expectancy of the population of a country. Increased health care through health centers, increasing people's purchasing power will increase access to health services, to meet the needs of nutrition and calories, is able to have a better education so as to obtain a job with an adequate income, which in turn will improve public health and extend life expectancy life (BPS: 2013).

Increasing life expectancy figures indicating that there is an improvement in the country's health. Besides the quality of life is also getting better. Indonesian life expectancy is increasing. The higher the number the more elderly population aged over 65 years. This figure is expected to continue to rise, so it is indicated Indonesia bit quite successful in improving life expectancy. Although it is stated that the low life expectancy

indicates a lot of poor people in that country, rather high life expectancy indicates the welfare of a society.

Seen on an international scale, based on the data of the United Nations in 2011, the life expectancy of Indonesia are in the order of 108 out of 191 countries. This shows that Indonesia is still in the category of low life expectancy although still better when compared to India, North Korea and Ukraine

.In terms of average life expectancy of Indonesian people in all the provinces tended to increase from 2009 to 2012. Expectations of life were highest in the capital Jakarta, amounting to 73.05 years in 2009 rose to 73.49 years in 2012. Meanwhile, life expectancy the lowest was in West Nusa Tenggara province with a life expectancy of 61.8 years in 2009 rose to 62.73 in 2012. Furthermore, the life expectancy of people of Indonesia was an average of 68.63 in 2009 and 69.87 in the year 2012.

The problems of education in Indonesia were also little changed but not changed significantly. This means that the cost of education in Indonesia is still expensive. One important indicator to measure the progress of a nation is through education. With education can change this nation through an increased ability to produce goods or services output in the economy so that it will encourage rising incomes Indonesia and the problem of poverty can be alleviated.

If you look at the average of school in Indonesia is still lagging behind compared to other ASEAN countries. Indonesia is still about 7.8 years 8.8 years while Singapore and Malaysia 9.5 years. Therefore, the Indonesian government should increase the number of years of compulsory education from nine to twelve years old so that later can equate with the developed countries. This means that Indonesia will achieve development progress. Therefore, education of human capital is one of the very important role in development. Humans are the driving force of development and therefore should be of high ability or capacity to produce high-value output. Based on the 1945 Article 28B paragraph (1) mandates that "Everyone has the right to develop themselves through the fulfillment of basic needs, the right to education and gain the benefits of science and technology, arts and culture for improving the quality of life for the welfare of mankind" and article 31 paragraph 1 mandates that "every citizen has the right to education". Based on the mandate various attempts have been made, including the implementation of the Compulsory Nine-Year Basic Education which commenced in 1994. Perhaps compulsory for Indonesian education should have been changed to 12 years in order to become a developed nation and independent and no longer a poor nation amid have abundant natural wealth because they cannot manage it. In general, Indonesia's natural wealth which is actually managed by foreign educated and master the technology due to the advancement in the field of education in their country.

A developed country is certainly supported by qualified human resources is through higher education. One indicator is seen from the average length of schooling of the population of a country. Education is also entered in the second goal in the achievement of human development millennium (MDGs). But achieving this goal merely address the illiterate population. Indeed, achievement standards are still low in Indonesia, and even then not reach the 100 percent until now. Ironically, as residents of other countries in educational attainment in the form gain expertise, not only can literate population but also should have expertise in working so they can specialize in produce and output. In other words, the people working with professionalism so that their income is high, which in the end people do not live in abject poverty, but in the welfare state.

Trend average length of school in the Indonesian provinces is rising even though the increase was not so significant. The average length of school in Indonesia in 2009 was 7.72 years, then rose slightly in 2012 amounted to 8.08. This means that the increase in the

average length of the school has not reached the target of 9-year compulsory education program. Compulsory education since 1994 has been carried out but the results are not achieved until now. This means that in a timeframe of 20 years the achievement of 9-year compulsory education program has not been reached. How many years need their achievements? All the answer depends on the seriousness of the government in achieving the program. How Indonesia towards developed countries if the 9-year compulsory education program it took nearly a quarter century. When will we do 12-year compulsory education program. Perhaps Indonesia takes half a century. This means that Indonesia is very difficult to achieve progress in the field of education. Although higher education in Indonesia bit of progress, but the resulting output is not in accordance with the needs of the labor market so that many of the higher education graduates face unemployment.

The problem of unemployment is a major problem in the development therefore this issue must be a way out of the government, whether through the creation of development projects in order to increase employment opportunities that can reduce the problem of unemployment and poverty in Indonesia. The unemployment rate in Indonesia until February 2013 fell to 7.17 million people, compared to August 2012 which reached 7.24 million people. It means that it slightly decreased that the effect is not so significant to improving the economy of Indonesia.

The decline in the poverty rate was partly driven by improving economic growth and reduction of unemployment is open from 9.86 percent in 2004, to 5.92 per cent in March in 2013 (BPS: 2013). On the other hand it appears that in general are still contributing their employment is in agriculture, trade, social services, and industrial sectors were the largest contributor to employment in Indonesia.

The tendency of the unemployment rate in the Indonesian provinces generally fluctuated and there are likely to increase. The cause is unemployment that occurs because of imbalance employment rate of the population growth in Indonesia especially productive age. As a result, the unemployment rate is increasing from year to year. The province with the highest unemployment rate is in the amount of 10.13 percent in Banten province in 2012. Although the unemployment rate of Banten Province was decreased slightly but it is still high compared to other provinces in Indonesia. While the province has a low unemployment rate is the Province of Bali which in 2009 was 3.13 percent down to 2.04 percent in 2012. Judging from the whole, namely Indonesia, the average unemployment rate to 7.24 percent in 2009, then decreased slightly in parentheses period of 4 years at 6, 14 per cent.

By sex the number of unemployed women more than men in Indonesia in various levels of productive age. The number of unemployed women in 2012 amounted to 5.77 million, while the number of unemployed men by 5.77 million (BPS: 2013). Judging from the sex ratio, especially in developing countries in general and in particular Indonesia is a bit more dominant number of males than females. Based on the reality suffering from poverty in general are women compared with men coupled with lower levels of education than men so that productivity is low so wracked by poverty.

According to BPS data (2009-2012) that the number of men are more common than females, but there are fluctuating in which the ratio of the number of men decreased the number of women. This means that the lower the gender ratio in some provinces in Indonesia. Basically the difference in the number of men with the number of women is so thin that it also affects the amount of poverty that figure is still high.

In term of the density of population in the provinces of Indonesia, are generally uneven, there is a very solid province once the population, there are still very tenuous population of the provinces of Papua and West Papua. Meanwhile province once densely populated is of Jakarta, where the number of people is already over ten million and

included the mega metropolitan city in the world. Viewed by region, in general, the western Indonesian population is denser than the eastern part of Indonesia. In general, the number of poor people more than the number of people who are still tenuous. Therefore, it is to be seen that the overcrowding could have an effect on poverty and inequality are also high in the provinces are densely populated.

The lower the growth rate of a country's population will be more profitable to increase the prosperity of the country. High population growth rate will cause many problems for the country if it is not followed by an increase in production and efficiency in the field more. A large number of the population will increase the burden of the productive resources of the resource has not been productive due up will create quite complicated social problems such as poverty, among others.

The problem of poverty is a problem that cannot be completed by Indonesia until now, and the figure is still high so that should be trending in poverty alleviation efforts. Such efforts not only in the form of economic variables that are used but also variables are not economic in its completion as improving education, health, equitable distribution of the population and the absence of gender differences.

Although the Government has undertaken a program to suppress the growth rate, but the negative impact such as the number of unemployment due to the imbalance between the number of workers with the number of jobs, cannot be avoided. Because of the uneven number of population, gender disparity and lack of human capital led to a potential source of income in a sector of the country also does not work well and the maximum. This is what causes the poverty rate in Indonesia is still high.

Based on the background of this research on the effect of macro variables and human capital to poverty and economic growth in Indonesian so formulated that the extent of the unemployment rate, sex ratio and population density affects the level of poverty in Indonesia as well as the extent of the unemployment rate, level of education and health affect the the value of production (GDP) in Indonesia.

The purpose of this study was to analyze: the effect of the unemployment rate, sex ratio and population density affects the level of poverty in Indonesia as well as the influence of unemployment, education and health affect the value of production (GDP) in Indonesia.

II. Literature Review

Definition of Poverty

Poverty is a situation which is too needy happened not foreseen by the poor such as lack of food, beverage, home, work, knowledge, access to information that is helpful to get productive resources and so forth. In other words, poverty is powerlessness of a person in many ways. Poverty is caused by a lack of resources of its human power as a result of low levels of formal and informal education.

The problem of poverty is the main problem faced by developing countries in general and being a very big concern, especially in Indonesia. Therefore it is very essential to be addressed by every country that has this problem, especially developing countries. Therefore, the issue of poverty reduction is inserted into one of the most important destinations in the construction and development policies. So the World Bank (2000) defines poverty as people in need in achieving prosperity, where well-being is measured from the ownership of an individual or household to income, health, education, wealth and certain rights in the society such as freedom of speech. Simply put, the poverty that refers to "whether individuals or households have enough resources or ability to conform to their needs. (Asian Development Bank, 2001). Poverty is also understood as a lack of opportunity, powerlessness and vulnerability. Then poverty is a multidimensional

phenomenon that request maps a multidimensional intervention in order to increase the welfare of the individual (Hulme and Shepherd, 2003).

Haughton and Khandker (2009: 153) argues that poverty in an area characterized by geographically isolated local conditions, resources are low, low rainfall and climatic conditions are unstable. In general, it has many definitions of poverty because it is caused by many causes and factors. According to BPS (2011) poverty is a conceptually also divided into two absolute and relative poverty. (A). Absolute poverty is determined based on the inability to meet the minimum basic needs such as food, clothing, health, housing and education necessary to live and work. Minimum basic needs is defined as a financial measure in the form of money. The minimum value of basic needs is known as the poverty line. Residents whose income is below the poverty line is said to be with the poor. Absolute poverty (Todaro: 2006) is a population that is not able to obtain sufficient resources to meet basic needs. They live under the real income level or below a certain minimum "international poverty line". The line does not recognize the boundary among countries, does not depend on the level of per capita income in a country and also take into account the differences in price levels between countries by measuring the poor as less people living on less than US \$ 1 or US \$ 2 a day in PPP dollars. (B). Poverty is a relatively poor condition due to influence development policies have not been able to reach all levels of society, causing unequal distribution of income. Minimum standards drawn up by the living conditions of a country at a particular time and attention focused on the poorest population.

In other words, people whose income is below the poverty line is called the group of poor people. The Central Bureau of Statistics (2005), the poor can be defined as: "People whose income (expenditure approach) is smaller than the income needed to live decent lives in the region where he lives. The need for this life interpreted as amounts of money that can meet the needs of the food consumption of 2100 calories per day equivalent, housing, clothing, health, education, transport and others. Total rupiah is then referred to as the poverty line. "

Basically poverty can be described in more detail and more specific so divided into four parts: (a). Absolute poverty is the inability of someone to meet their basic needs. (B). Relative poverty is poverty caused because they have no income, but has other property, (c). Structural poverty is someone to be poor due to changes in economic structure. (D). Cultural poverty is poverty caused by their culture.

Factors Contributing to Poverty

In general, poverty can be caused by poor natural resources or backward, availability and limited application of technology, production facilities and infrastructure are limited, less availability of capital, the low quality of human resources and institutions that do not support. Causes of poverty from the economic side, among others (Kuncoro, 2006: 120): (a). On the micro level, poverty arises because inequality resource ownership patterns, causing distortion in income distribution. Poor people have only limited resources with low quality. (b). The incidence of poverty due to differences in the quality of human resources. The low quality of human resources implies lower productivity and low wages. (c). Poverty due to differences in access to capital. According to Basri (2002: 98) poverty is defined as a result of lack of capital democracy, which reflects the power relations that eliminates the ability of citizens to decide issues of concern to their own, so the majority of the population is less acquire the means of production (land and technology) and resources (education, credit and market access). In addition, the lack of an adequate mechanism for the accumulation and distribution of income are available for poor people. In other words,

poverty in Indonesia due to the very limited opportunity or the opportunity that these groups in accessing resources for development.

Measurement of Poverty

According to Sen (1999) poverty is analyzed using two approaches; a). Approach to basic needs and income, b) the capability approach will be. Basic needs and income approach (often designated as the main indicator) has been characterized as quantitative indicators, while the human capability approach (often designated as the final indicator) characterized both indicators do both quantitative and qualitative indicators. Demonstrated capability approach more qualitative indicators which adds to the basic needs approach and income.

Indicators of income is usually monetary approach and basic needs indicators to measure poverty, while the capability approach is a form of welfare that as increased capacity or human capability. The latter approach has the welfare and policy objectives relating to the freedom of the individual to life and value that have true potential. This approach can be divided deeper into the capabilities approach and a participatory approach. There are four approaches in more detail as follows: 1). Monetary approach; this approach is the most common method identified and in the measurement of poverty. Poverty was identified as a lack of income or consumption of some of the poverty line. Assessment of components of different income or consumption carried out at a market price which requires monetary value of the error for some items. Utility-maximizing behavior of households with expenditure reflects the marginal value of the individual measured from commodities. Welfare is measured from the amount of consumption enjoyed by individuals or households and poverty is defined as a lack of resources below some minimum level of the so-called poverty line. 2). Basic Needs approach; Basic needs defined here is not just food, water, shelter and clothing, but also access to assets such as education, health, and participation in the political process, security and individual power. This approach uses the HPI (The Human Poverty Index) created by UNDP, which shows the depth of lacks. This index uses three indicators of poverty that is a short life, lack of basic education and lack access to public and private resources. (3). Capability Approach; Capability approach developed by Sen (1985, 1999) which is an extension of the HPI approach. This approach, monetary income as a measure of well-being and indicators denied the freedom to live the emphasis on the value of life. In this approach, poverty as a lack of capability in space or the failure obtain the basic capabilities. According to Sen, the basic capability is the ability to satisfy certain essential functions to a level of at least decent.

According to Sen that poverty cannot be was measured from the level of income or of utility as the conventional understanding, the most important is not what the person or satisfaction arising from these items, but what do people with these items. so the benefits of what was taken from the commodities. The function means that what can a person to a commodity with certain characteristics that are owned or controlled person. (4). Approach Participatory Poverty; Poverty usual size depends on statistical information that contains household survey divided the poor and non-poor. Participatory survey was designed to study how individuals learn from different social groups to assess poverty itself, how the strategy of diverse work, what kind of poverty reduction strategies and the preparation of the public wants to support it. Survey methodology is a portrait of the instruments used by the World Bank and the recipient assessment participatory rural appraisal (World Bank, 2000).

Economic Growth

A hope of a country is as the implementation of economic growth. The high economic growth led to the development occurs evenly and enjoyed by all layers of society. The high growth is not only dominated by certain sectors and certain layers of society but all sectors are interrelated with all the community involvement.

Todaro (2011) explains that there are three major factors or components in the economic growth of any nation, namely; (A). Accumulation of Capital, which includes all forms or types of new investments were invested in land, physical equipment and human resources. (B). Population growth, the next few years by itself bring labor force growth. (C). Advances in technology is a very important factor in promoting economic growth. Therefore, the technology is generating new methods in resolving traditional jobs.

The sources of economic progress can be traced to a variety of factors. But, overall it can be said that investments that improve the quality of physical resources and human, raising the productive resources that, as well as improving all the productivity of all resources, specifically by the results of discovery, innovation and technological progress are the factors that have and will continue to drive economic growth in any society.

Economic development is a change in spontaneous and disjointed in the stationary state is constantly changing and replacing the previously existing balance situation, whereas economic growth is a long-term change slowly and steadily occurring through higher savings and population (Jhingan; 2007).

Unemployment Rate

Based approach to the labor force, unemployment is divided into three types, namely (Case and Fair: 2007), (1). Frictional unemployment; this unemployment arises because job seekers are still searching for the appropriate job so he was unemployed not because there are no jobs. Unemployment is not an issue, and can be solved by economic growth. (2). structural unemployment. Structural unemployment arises due to changes in the structure and composition of the economy. Unemployment is difficult to overcome because it is associated with the development strategy of a country. Nevertheless, this kind of unemployment could be overcome by giving training to create a skilled workforce. (3). unemployment cycle. Unemployment caused by the recession and the depressed economy of a country, for example workers in industries that rely on the life of the order. This type of unemployment also poses a lot of problems due to a decrease in the purchasing power is reduced and the production companies reduce their workers, hence creating unemployment which is great if that happens depression.

Unemployment occurs because the amount of power disproportionate number of employment or employment absorbed. Another thing is also the reason for the competence of the workforce that does not match those needed in the labor market so that labor is not absorbed and eventually there was unemployment. The unemployment problem is also closely related to the termination of employment resulting, among others, are companies closing or reducing the scope of business due to the economic crisis or security that is less conducive to investment and regulatory barriers in the process of import export.

Efforts structural changes to improve productivity and create employment opportunities as efforts to improve the welfare of the population often cannot reach all elements of the population itself. Opportunities of each population are different from one another. Similarly, in the development process, issues such as poverty and unemployment are the negative effects of the implementation of the development as well as the creation of social inequality. The problem of unemployment is generally much more characterized by urban areas as the effects of industrialization.

The adverse effects of unemployment are reducing people's income, which in turn reduces the prosperity that has been achieved by the community. Diminishing the welfare of the community it will increase them trapped in poverty because they do not have income. If a country is very high unemployment or bad, there will be political and social chaos will always occur and adversely affect the welfare of the community and the more difficult to create long-term development prospects.

Indicators of development success are the removal or reduction of unemployment and poverty as well as the reduction of income inequality in a country. Development has experienced a new redefined so that not only rely on economic growth alone as the successful economic development of a country but also to apply the problem of unemployment and poverty.

World Bank (2000) states clearly the main challenge of development is to improve the quality of life. Especially the poorest countries, the quality of life better life indeed requires a higher income, but which requires not only that. Higher income is only one of the many conditions that must be met. Many other things that must be fought for better education, improved standards of health and nutrition, the eradication of poverty, the improvement of the environment, equal opportunity and diversity preservation of cultural life.

Level of Education

The demand for education can be ascertained progressively increases. The decline in job opportunities for uneducated encourage every citizen to protect the position or prospects of life by taking the level of basic education to graduate. Education plays an important role in shaping upon ability of a developing country to absorb modern technology and to develop the capacity to create growth and sustainable development. Education is a component of growth and development as a vital input aggregate function (Todaro: 2011).

A state that high income level should have high education levels for a developed country considers that education is as normal goods. This means that the higher the income, the higher the demand for higher education. So, a high income will be invested in higher education as well.

Level of Health

Healthy seen also as a component of growth and development is vital. Therefore, health plays an important role in economic development. Health is also related to income due to the higher income, the better the level of public health. In a proportion of its revenues allocated to health investments.

Good health leads to lower levels of educational capital depreciation. On the other hand, capital of education is better can increase the return on investment in health, because many health programs rely on the basic skills learned at school. The more developed country, the level of health more advanced and sophisticated that life expectancy as one indicator of the health of the higher. Good health will increase productivity so that the impact on improving people's income. Instead it can happen in underdeveloped countries where backward mindset and health. This affects productivity and low income.

Distribution of health and education can be very lame as well as income and wealth. However, improvement in health and education can help families to break out of the vicious circle of poverty trap. The most important causes of ill health in a country is poverty itself. A systematic review of education and health in a developing country is understood as the sources of inequality and inefficiency severe that always follow society. So investment in human capital must be provided equitably and efficiently so that their

potential impact is high income can be realized. Finally, the problem of poverty can be overcome in a country.

Population Density

The population density is the ratio between the number of people from one area to another in a particular area, such as kilometers and miles. The population density of each region is not the same because of the accumulation of the population of an area is affected by several factors geography, topography, climate, location, water, and social and economic factors; (1). The population density arithmetic is a number that indicates the number of people in each square km of land. (2). agrarian population density is a number that indicates the ratio between the number of inhabitants per square kilometer farmers on the farm.

This results in an imbalance of population density inequality of development both physical and non-physical which then resulted in a desire to move higher. The outflow of population usually moves from a rather backward area development to a more advanced, so that the area already congested become increasingly dense.

High population density or the population explosion describes wide gaps and high poverty. Population explosion is a condition when the population of a region larger than the total area concerned, so that there is an imbalance between the number of residents in a territory that is available. There are some problems that arise as a result of the population explosion among others (Hendrawanto: 2010) .: (1). The explosion followed the population without employment inventories cause unemployment; (2). unemployment breeds poverty; (3). poverty impact on the education and health of the population; (3). if education and health reduced means reduced levels of human resources; (4). If creativity lower mean low productivity; (5). if the GNP low productivity is also low; (6). if the GNP is low, the national development and competitiveness of the low; (7). This result allows a lot going on crime, slum housing, and others.

The population density raises many economic and social problems that ultimately led to the issue of poverty. The population is a lot to be unruly like Indonesia which is the densest population of all four in the world. One of the problems of population in Indonesia is the uneven population distribution. This relates to the carrying capacity of the environment (area) that is not balanced between Java-Bali and outside Java-Bali.

Sex Ratio

Sex Ratio is an indicator that is used to determine the composition of the population by sex. This figure is expressed by the ratio between the numbers of male population with the number of females in an area at a particular time. The sex ratio can also be calculated for each age group. (BPS: 2013).

$$\text{Sex Ratio} = \frac{\text{Male population}}{\text{Female population}} \times 100 \quad (1)$$

The sex ratio determines the gender productivity. In general, men tend to generate higher productivity than women. This is related to differences in the level of education of men and women.

The development of the population by sex can be seen from the development of the sex ratio, the ratio of males to female population. The majority of poor people in the world are women. Anywhere hemisphere developing countries actually found that completely disadvantaged groups are women and children. They are mostly poor and not enough nutrients and less likely to get health care, clean water, good sanitation and other benefits. Many households are headed by women, women's earnings capacity is lower and their constraints limited to income couples. In addition, women have less access to education, formal employment, social security and job creation programs. The combination of all

these facts lead to the financial resources of women are smaller and unstable compared to the financial resources of men (Todaro: 2011).

Economic Growth and Poverty

Several empirical studies suggest that the relationship between economic growth and poverty negatively correlated where the higher economic growth caused the lower the level of poverty. An increase in economic growth caused reducing poverty in a country or region. This relationship demonstrates the importance of speeding up economic growth in order to decrease poverty.

Economic growth is an essential condition for fighting poverty, despite economic growth cannot stand alone for poverty reduction, economic growth remains a major factor for poverty alleviation. Economic growth is the increase in capacity in the long term of the relevant country to provide a variety of economic goods to the population as determined by the progress or adjustment of technological, institutional, and ideological to the various demands of the existing situation (Simon Kuznetz in Todaro, 2004 in Achmad Khabhibi, 2010: 41). Economic growth is an indicator to see the success of the development and is a prerequisite for poverty reduction. The condition is the result of economic growth is spreading in every class of society, including the poor population groups.

III. Methodology

The population in this study is all provinces in Indonesia. In this study the sample size is as much as 33 provinces of Indonesia. This research was conducted in Indonesia during the period 2006-2012.

Technique data collecting secondary data with the data panel approach (pooling data). This method combines two types of data, i.e data cross point (cross-section) with time series data (time series). The data used as the data of Statistics Indonesia (BPS Jakarta publication), and data SUPAS and SUSENAS. Secondary data were obtained from the Central Statistics Agency of West Sumatra province.

In this study the authors divide the research variables into exogenous and endogenous variables. Exogenous variables are variables that affect the endogenous variables. Exogenous variables in this study consisted of the unemployment rate, level of education, level of health, the sex ratio (gender) and the ratio of population density. Meanwhile the endogenous variable is the level of poverty and economic growth in Indonesia.

The operational definition of each variable is as follows; Poverty rate (Y1) using poverty gap index which is the average size of each expenditure gap of the poor to the poverty line is expressed in units per cent. Gross Domestic Product (Y2) Gross Regional Domestic Product (GDP) according to the Central Statistics Agency (BPS) is defined as the total value added generated by all business units in an area, or the sum of all the value of final goods and services produced by all economic units in a region. Gross Regional Domestic Product at current prices represent the value-added goods and services that are calculated using a price on every year, while the Gross Regional Domestic Product at constant prices shows the value-added goods and services is calculated using prices in a given year as a basis on which this calculation PDRB used in 1993. According to Gross Domestic Product at current prices is used to indicate the magnitude of the economic structure and the role of economic sectors. Unemployment rate (X1) ratio of the number of people who do not have a job or are looking for jobs to the labor force in units of percentage. Education Level (X2) in this study was measured using the average of the old school that shows the average length of the education that has been achieved by the population in terms of years. Health Level (X3) is measured from the average length of life or life expectancy of the population in terms of years. Sex Ratio (X4) comparison of the

number of males with the number of females per 100 inhabitants in the province of women in units per cent. Population density ratio (X5) is the average ratio between the number of residents in an area with the extent of the area is calculated every kilometer.

The population density = total population / area (sq km).

The model used is the Simultaneous Equation (Two Stage Least Squares). According to Gujarati (1999; 315) on this simultaneous model equation where there are more than one dependent variable (Y) and more than one independent variable (X), it means there is more than one system of equations (Y). One of the unique characteristics of the simultaneous equations is the presence or simultaneous two-way relationship between the dependent variable in which the dependent variable in the equation system may appear as independent variables of the system of equations to another.

Therefore, the variables that explain the dependent variable (dependent explanatory variable) in an equation will be stochastic and usually correlated with other variables of the equation where the dependent variable emerged as independent variables.

In a simultaneous equation, there are two types of variables included in the model; The first is the endogenous variables, i.e variables which value is determined in the model; and variables that are predetermined, the variable whose value is determined outside the model. Endogenous considered stochastic variables, while the variables are set in advance is required as non-stochastic.

In the study, there are two dependent variable and two systems of equations, namely:

$$Y_1 = \alpha_0 - \alpha_1 X_1 - \alpha_2 X_4 + \alpha_3 X_5 - \alpha_4 Y_2 + U_1 \dots\dots\dots 2$$

$$Y_2 = \beta_0 - \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Y_1 + U_2 \dots\dots\dots 3$$

Where: Y= poverty rate, Y2 =Value of Production is the dependent variable, X1 = Rate of Unemployment, X2 = Level of education, X3 = soundness, X4 = The sex ratio, X5 = The level of overcrowding, U1 = error term for poverty, U2 = error term for economic growth and are parameters or constants. Priori, is expected to a negative (downward sloping demand curve) and the expected positive (upward sloping supply curve).

Finding endogenous variables and exogenous variables then do the reduction process of the two equations below by way of seeking a balance between equality Y1 and Y2 equation, in order to obtain the following equation:

$$Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_4 + \alpha_3 X_5 + \alpha_4 Y_2 + U_1 \dots\dots\dots (4)$$

$$Y_2 = \beta_0 - \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Y_1 + U_2 \dots\dots\dots (5)$$

The equation above, substituting the equation Y₁ to Y₂ equation as follows :

substitution Y₂ to Y₁

$$Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_4 + \alpha_3 X_5 + \alpha_4 (\beta_0 - \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Y_1 + U_2) + U_1$$

$$Y_1 = \alpha_0 - \alpha_4 \beta_0 - (\alpha_1 + \alpha_4 \beta_1) X_1 - \alpha_4 \beta_2 X_2 - \alpha_4 \beta_3 X_3 - (\alpha_2 + \alpha_4 \beta_4) X_4 + \alpha_3 X_5 - \alpha_4 \beta_5 Y_1 - \alpha_4 U_2 + U_1$$

$$Y_1 + \alpha_4 \beta_5 Y_1 = \alpha_0 - \alpha_4 \beta_0 - (\alpha_1 + \alpha_4 \beta_1) X_1 - \alpha_4 \beta_2 X_2 - \alpha_4 \beta_3 X_3 - (\alpha_2 + \alpha_4 \beta_4) X_4 + \alpha_3 X_5 (\alpha_4 U_2 + U_1)$$

$$(1 + \alpha_4 \beta_5) Y_1 = (\alpha_0 - \alpha_4 \beta_0) - (\alpha_1 + \alpha_4 \beta_1) X_1 - \alpha_4 \beta_2 X_2 - \alpha_4 \beta_3 X_3 - (\alpha_2 + \alpha_4 \beta_4) X_4 + \alpha_3 X_5 (\alpha_4 U_2 + U_1)$$

$$Y_1 = \frac{(\alpha_0 - \alpha_4 \beta_0) - (\alpha_1 + \alpha_4 \beta_1) X_1 - \alpha_4 \beta_2 X_2 - \alpha_4 \beta_3 X_3 - (\alpha_2 + \alpha_4 \beta_4) X_4 + \alpha_3 X_5 (\alpha_4 U_2 + U_1)}{(1 + \alpha_4 \beta_5)}$$

$$Y_1 = \pi_0 - \pi_1 + \pi_2 X_2 + \pi_3 X_3 - \pi_4 X_4 + \pi_5 X_5 + K_1$$

Substitution Y₁ to Y₂:

$$Y_2 = \beta_0 - \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 (\alpha_0 - \alpha_1 X_1 - \alpha_2 X_4 + \alpha_3 X_5 - \alpha_4 Y_2 + U_1) + U_2$$

$$Y_2 = \beta_0 - \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 \alpha_0 - \beta_5 \alpha_1 X_1 - \beta_5 \alpha_2 X_2 + \beta_5 \alpha_3 X_5 - \beta_5 \alpha_4 Y_2 + \beta_5 U_1 + U_2$$

$$Y_2 = (\beta_0 + \beta_5 \alpha_0) - (\beta_1 + \beta_5 \alpha_1) X_1 + (\beta_2 - \beta_5 \alpha_2) X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 \alpha_3 X_5 + (\beta_5 U_1 + U_2)$$

$$(1 + \beta_5 \alpha_4 Y_2) Y_2 = (\beta_0 + \beta_5 \alpha_0) - (\beta_1 + \beta_5 \alpha_1) X_1 + (\beta_2 - \beta_5 \alpha_2) X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 \alpha_3 X_5 + (\beta_5 U_1 + U_2)$$

$$Y_2 = \frac{(\beta_0 + \beta_5\alpha_0)}{(1 + \beta_5\alpha_4)} - \frac{(\beta_1 + \beta_5\alpha_1)}{(1 + \beta_5\alpha_4)} + \frac{(\beta_2 - \beta_5\alpha_2)}{(1 + \beta_5\alpha_4)} X_2 + \frac{\beta_3}{(1 + \beta_5\alpha_4)} X_3 \\ + \frac{\beta_4}{(1 + \beta_5\alpha_4)} X_4 + \frac{\beta_5\alpha_3}{(1 + \beta_5\alpha_4)} + X_3 \frac{(\beta_5e_1 + e_2)}{(1 + \beta_5\alpha_4)}$$

$$Y_2 = \pi_0 - \pi_1 X_1 + \pi_2 X_2 + \pi_3 X_3 + \pi_4 X_4 + \pi_5 X_5 + K_2$$

A structural model for the level of poverty and economic growth to be;

$$Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_4 + \alpha_3 X_5 - \alpha_4 Y_2 + U_1 \dots \dots \dots (6)$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Y_1 + U_2 \dots \dots \dots (7)$$

Based on the above structural model, it is now the independent variables into X_1, X_2, X_3, X_4, X_5 and the dependent variable is Y_1 and Y_2 .

In the resolution of the models are done simultaneous identification tests by determining the endogenous and exogenous variables in the equation. What is meant by the identification of the problem is whether the estimated number of parameters can be obtained from the structural equation coefficients estimated reduced form. Identification problem arises because different set of structural coefficients may be suitable with the same set of data (Gujarati: 2004).

In this research, $K = 5 (X_1, X_2, X_3, X_4, X_5)$

$$k_1 = 3 (X_1, X_4, X_5)$$

$$k_2 = 3 (X_1, X_2, X_3)$$

$$M = 2 (Y_1 \text{ dan } Y_2)$$

Equation of poverty level : $K - k_1 = M - 1$

$$: 5 - 3 > 2 - 1$$

Over Identified

Equation of economic growth : $K - k_2 = M - 1$

$$: 5 - 3 > 2 - 1$$

Over Identified

So it happened exactly identified and over-identified, then the solution can be done with TSLS (Two Stage Least Square).

IV. Results and Analysis

In a panel regression, data be adopted is a combination of cross section data and time series. Before the two-stage analysis of the data panel, then several tests including; Chow-test test results in the equation of poverty level by using Eviews 8, obtained probability of 0.0000. Probability value is smaller than the significance level = 0.05, then H_0 for this model is rejected and H_a accepted that better estimate this equation is the Fixed Effects Model.

Chow test results on the economic growth equation in Appendix obtained probability of 0.0000. Probability value is smaller than the significance level = 0.05, then H_0 for this model is rejected and H_a accepted that better estimate this equation is the Fixed Effects Model. Hausman test used in the selection approach using a fixed effect model or random effect model can be seen from the results of the test output Hausman test were processed using eviews.

Based on the results of Hausman test in the poverty rate equation are obtained probability of 0.0130. Probability value is smaller than the level of significance level = 0.05, then H_0 in this model is rejected and H_a accepted, so these estimates are used are the fixed effects model (FEM).

Hausman test results in the economic growth equation obtained probability of 0.0046. probability value is smaller than the level of significance level $\alpha = 0.05$, then H_0 in this model is rejected and H_a accepted, so these estimates are used are the fixed effects model (FEM). Estimates of the exact use of the equation is the equation of poverty and economic growth rate is a fixed effect.

One way in which to view the heterocedasticity is by using test Park. The estimation results can be seen with the testing criteria through value comparison. α of 0.05 and the data is said to occur when the probability heterocedasticity $< \alpha$ of 0.05. The test results showed that the two equations heteroscedasticity is free from the problem of heteroscedasticity.

Equation Poverty Level With Two Stage Least Square

The results of this study can be determined the magnitude of the effect of the unemployment rate (X1), the sex ratio (X4), the ratio of population density (X5) and the GDP (YCAP) based on an estimated two stage least square panel with fixed effect model approach (FEM). Here are the results of a panel estimation of two stage least square with the approach of using a fixed effect model with Eviews program 8:

Model of estimation for the poverty rate is as follows:

$$Y_1 = 26,83411 + 0,2579X_1 - 0,09533 X_4 + 0,000431 X_5 - 0,9531 Y_{2cap} + U_1 \dots\dots\dots(8)$$

Table 1 (Appendix) can be known that the coefficient of elasticity of the unemployment rate variable (X1) of 0.2579. This shows that the positive influence between the unemployment rate to the level of poverty in the provinces in Indonesia. If the unemployment rate is increased by one percent, the poverty rate rose by 0.2579 percent. This means that the higher the unemployment rate the higher the level of poverty in the provinces in Indonesia. Further variables sex ratio (X4) the level of poverty in the Indonesian provinces was negative with the coefficient of 0.0953. If the variable sex ratio is increased by one percent, the poverty rate dropped by 0.0953 percent. This means that the higher the sex ratio, the lower the poverty rate. Next, the effect of population density ratios variable (X5) on poverty levels are positively associated with the coefficient is 0.00043. If the variable population density increased by one percent, the poverty rate increased by 0.0043 percent. This shows that the higher the ratio of population density poverty levels also experienced an increase. Furthermore, the effect of variable value of GDP (Y2cap) the level of poverty is negative with a coefficient of 0.9531. If the value of GDP rose by one percent, the poverty rate dropped by 0.9531 percent. This means that the higher the value of GDP the lower the level of poverty.

Equation Value of Production (GRDP)

Results of processing by using eviews 8 the production value model is used as follows:

Model of Production Value estimates are as follows:

$$Y_2 = -20,7738 - 0,0135X_1 + 1,9244 \text{ Log}X_2 + 8,04899 \text{ Log}X_3 - 0,00116 Y_{1cap} + U_2 \dots\dots(9)$$

Table 2 (Appendix) above shows that the variable coefficient (X1) of unemployment rate is 0.0135. This indicates that the negative effect of the unemployment rate with the value of production (GDP) in the provinces in Indonesia. If the unemployment rate rose one percent, then the value of GDP was decreased by 0.0135 percent. This means that the higher the unemployment rate, the lower the value of production (GDP) in the provinces in Indonesia. Effect of education variable (X2) the value of production (GDP) was positive with the elasticity coefficient was 1.9244. If the education variable increases by one percent, then the value of production was increased by

1.9244 percent. This means that the higher the education, the higher the value of production (GDP) produced in the provinces of Indonesia. Influence health variables (X3) to the value of production (GDP) was positive with the elasticity coefficient was 8.0489. If the health variable increases by one percent, then the value of production was increased by 8.0489 percent. This means that the higher the health, the higher the value of production (GDP). The effect of variable levels of poverty (Y1cap) to the value of production (GDP) was negative with elasticity coefficient was 0.0012. If the variable rate of poverty rose one per cent, then the value of production was decreased by 0.0012 percent. This means that the higher the unemployment rate, the lower the value of production (GDP).

Table 1 shows that the value of R2 for the equation of poverty level is 0.9423. This means the contribution of exogenous variables on endogenous variables is 94.23 per cent while the remaining 5.77 percent is explained by variables outside the model that is not included into the study. In Table 2 shows that the value of R2 for the equation of poverty level is 0.9362. This means the contribution of exogenous variables on endogenous variables is 93.62 per cent while the remaining 6.43 percent is explained by variables outside the model that is not included into the study.

V. Discussion

Based on the results of hypothesis testing is done that the unemployment rate has a positive and significant impact on poverty levels in the provinces in Indonesia. This indicates that the level of poverty in the Indonesian provinces affected by the unemployment rate itself. This means that if an increase in unemployment rates, poverty levels will rise, otherwise if there is a decrease the level of unemployment, poverty levels will decline in the provinces in Indonesia. The development objective is the welfare of society is achieved. Therefore, the government and various social and economic programs tried to provide employment for all labor force is absorbed in the economy is happening so that this has an impact on poverty reduction. Poverty reduction impact on the increase in value of production Indonesia so that Indonesia could become the most-income countries do not become middle-income country to the top. This is according to research conducted by Prasad (2009) that significantly influence the unemployment rate in 35 regencies / cities in Central Java in 2003-2007. This research is also appropriate to do Budiantara, et al (2010) who found that the relationship model of poverty and unemployment in Indonesia is obtained by using a Bayesian approach Spline in the form of quadratic spline models with two knots optimal in which the percentage of poverty is in the curve of the square and the rising stage when the open unemployment rate is less than 3.87, and will be rejected when open unemployment rate moved between 3.87 and 4.24. But after the open unemployment rate reached 4:24, the percentage of poverty re-patterned quadratically but decreased slowly. Then this contradicts the results of research conducted by Amalia (2012) that the poverty rate of unemployment in Eastern Indonesia (KTI) Period 2001-2010 negative effect. This study is also in line with Pramana and Arianti (2012) was conducted in 2004-2009 in Central Java that are running positive influence and significant correlation between the level of unemployment and poverty in Central Java.

Based on the results of hypothesis testing, it has been done that the sex ratio has a negative and significant effect on the level of poverty in the provinces in Indonesia. This indicates that the level of poverty in the Indonesian provinces is affected by the gender ratio. This means that if an increase in the sex ratio, poverty levels will decrease, whereas in case of the declining sex ratio, poverty levels will increase in provinces in Indonesia. This condition is a portrait that more and more number of females then diminishing poverty. That is the role of women in development is very meaningful that can raise incomes and reduced poverty. The woman is a producer of the younger generation, in the

presence of educated women particularly the contribution in generating the younger generation or the successor will get better because most women can educate and produce a young generation with quality. So the role of women is very important in the development so that poverty can be reduced. This is according to research conducted by Widiaworo (2014) to see the effect of female labor force participation significant effect either partially or simultaneously. There is a significant influence on the female labor force participation rate of poverty.

It is not appropriate to the research conducted by Masunah (2013) found that the variables of population and education has no effect on poverty. This study is not consistent with that made by Saputra (2011) that the variable Population positive and significant impact on poverty levels in Central Java. Furthermore, the same study conducted by Laili. N. 2011 which found that the effect of population density on the level of poverty in East Java in 2005-2009 so that might be expected to be used as a basis in determining policy in addressing the problem of poverty in East Java. Population density has a significant negative effect on poverty levels. This means that the increase of population density can reduce the level of poverty.

Variable of production value (GDP) based on the hypothesis that has been done is the value of production (GDP) has a negative and significant effect on the level of poverty in the provinces in Indonesia. The value of production is closely related to poverty levels in the early stages of development because poverty levels tend to rise and gradually decline if it is already in the final stages of development. Various attempts by the community to the problem of poverty can be overcome so that the issue of poverty population. This suggests that the level of poverty in the Indonesian provinces affected by production value. This means that if an increase in production value, then the poverty rate will decrease, conversely if a decline in value of production, poverty levels will increase in provinces in Indonesia. High production values portrait of the work or the work force is absorbed in the economic sectors so the community has a high income and they will prosper. This shows that poverty declined even poverty could be eliminated if everyone worked and productivity high so that production increased and poverty declined. This is according to research conducted by Prasad (2009), that affect the economic growth of poverty in 35 regencies / cities in Central Java in 2003-2007. The research line is also carried out by Mustika (2012) that the GDP variable significant effect on poverty levels in Indonesia Period 1990-2008. Furthermore, this research line conducted by Pramana and Arianti (2012) who found that the GDP a significant negative effect on poverty in Central Java in 2004-2009. This study is in line also performed by Saputra (2011) who found that the GDP a significant negative effect on poverty levels in Central Java. Next results is also incompatible conducted by Vitello. R.D. (2010) with the result that the GDP variable has negative but insignificant effect on poverty levels across the districts / cities in Central Java in 2005 - 2008. The same thing was found by Laili. N. 2011 which obtained the result that economic growth variable did not affect the level of poverty in the District / City of East Java in 2005-2009.

Based on the results of hypothesis testing is done that the unemployment rate has a negative and significant effect on the value of production (GDP) in the provinces in Indonesia. This indicates that the value of production in the Indonesian provinces affected by the unemployment rate. This means that if an increase in the unemployment rate, the value of production will decrease, conversely if the decline in the unemployment rate, the value of production will be increased in the provinces in Indonesia. Many causes of unemployment caused by government policy which is called structural unemployment where the government changed the economic structure of the agricultural sector to the industrial sector so that the workforce can not customize the new job will be unemployed

so that they lose their jobs and are unemployed and have an impact on the value of production decreased. Other things can also be caused by low quality of human resources in the community so that they can not produce the value of production. With so many government programs that absorb unemployed labor can be reduced and the value of production (GDP) has increased. This is according to research conducted by Suryanto (2010) found that a variable workforce, and a significant positive effect on economic growth in the region Subosukawonosraten.

Furthermore, based on the results of hypothesis testing was conducted that education has a positive and significant effect on the value of production (GDP) in the provinces in Indonesia. This indicates that the value of production in the Indonesian provinces affected by education. This means that if an increase in education, then the value of that production will increase, whereas if a decreased length of education, then the value of production will decline in the provinces in Indonesia. Higher education is a quality education so as to produce quality human resources and high productivity. Therefore, higher education increases high production values as well. Low public education has the capacity and poor ability to produce output that needs to improve the skills of a high order resulting production of high value. In Indonesia, it appears that for people with higher education certainly have high skills will affect the value of the resulting production. Hence the need to increase the length of schooling for the population in the provinces of Indonesia so that the value of production (GDP) will increase steadily. Education is a human capital investment that need long term or take a long time as seen from the length of education pursued by the population so that the resulting output value will increase in the long term as well. This is according to research conducted by Weale and Stevens (2003) who found that the link between education and economic growth in the early 20th century is very influential coupled with the use of the best technologies in learning. Further research is in line with that made by Wahyu (2013) that the educational level and significant positive effect on economic growth in the province of West Sumatra. More research is Harriott.K. et.al. (2010) found that a significant effect on the human capital in education and human capital technology to economic growth.

Based on the results of hypothesis testing was conducted that health has a positive influence and significant impact on the value of production (GDP) in the provinces in Indonesia. This indicates that the value of production in the Indonesian provinces affected by health. This means that in case of health improvement, the production value will increase, whereas if a decreased duration of life expectancy (health), then the value of production will decline in the provinces in Indonesia. Other human capital investment is health. Health better reflects the community's ability to work well so that the determining factor is also the high productivity. The impact of good health will yield high production values. By the government to provide health facilities and infrastructure that healthy communities are seen in life expectancy so high that upon ability to produce output also rose. A healthy workforce is physically and mentally more energetic and stronger, more productive, and earn a high income. Health can affect economic growth through a number of ways, such as improving one's health will lead to the increase in labor force participation, improved health can also bring improvements in education levels which then contribute to economic growth, or improved health led to an increase in population that will bring the level of labor force participation , It is not appropriate to the research conducted by Wahyu (2013) who found that the level of health of a significant and negative effect on the economic growth of West Sumatra province due to the high economic growth high pressure impact on the lives of the population which adversely affects their health.

The next hypothesis test results conducted that poverty levels have positive influence and significant impact on the value of production (GDP) in the provinces in Indonesia. This indicates that the value of production in the Indonesian provinces affected by poverty. This means that if an increase in the poverty rate, the production value will increase, otherwise if the level of poverty, the value of production will decline in the provinces in Indonesia. Poverty alleviation requires economic growth quality. The quality of economic growth can be realized with the policy of expansion of employment opportunities (to reduce unemployment) and maximize the productive investments in various sectors of the economy so that the poverty issue ordinary overcome. Indonesian production values are always increasing visits of the GDP based on constant prices as a result of a contribution to poverty diminishing despite the decline in poverty has not changed drastically. Therefore, the government's efforts to reduce poverty through various programs such as poverty reduction in Indonesia Raskin program, free school program, the PNPM Mandiri, development of rural infrastructure and their business partners for small businesses and others. This is according to research conducted by McKay (1997) suggests that high economic growth will reduce poverty.

VI. Conclusion

Simultaneously the unemployment rate, sex ratio, the ratio of population density and the value of production (GDP) have significant influence on the level of poverty in the provinces in Indonesia. It was known F count to the equation while the poverty rate is 107.6757 F table value is 2.25. So $107.6757 > 2.25$. Means a significant difference between the independent variables together against the dependent variable

Partially unemployment positive and significant impact on poverty levels (sig = 0.0000). The next partial sex ratio is negative and significant effect on poverty levels (sig = 0.0000). Furthermore, the partial ratio of population density and significant positive effect on poverty levels (sig = 0.0002). Variable production value is partially a significant negative effect on poverty levels (sig = 0.0057).

Simultaneously unemployment, education, health, and the poverty rate have a significant influence on the value of production (GDP) in the provinces in Indonesia. It was known equation F count to 11408.34 while the poverty rate is the value of F table is 2.25. So, $11408.34 > 2.25$. it means a significant difference between the independent variables together against the dependent variable.

In partial unemployment rate there is a significant effect on the value of production (GDP) in the provinces in Indonesia (sig = 0.000). Further education has a significant impact on the value of production (GDP) in the provinces of Indonesia (sig = 0.0000). Then health has significant influence on the value of production (GDP) in the provinces of Indonesia (sig = 0.0000). Furthermore, the poverty rate did not affect significantly to the value of production (GDP) in the provinces of Indonesia (sig $0.9454 < = 0.05$).

VII. Suggestions

Based on the discussion undertaken earlier and from the previous hypothesis obtained results of the analysis of the suggestions are as follows: It is hoped that the government continues to lower the unemployment rate with a variety of programs of economic and social because of the decline in unemployment rate will reduce poverty and will increase the value of production (GDP) so as to increase economic growth. The government should always strive to improve human capital in order to reduce poverty and increase the value of production in Indonesia. Participation of women is high in development because they can reduce the level of poverty in Indonesia. More and more Indonesian women contribute in the development of the lower levels of poverty. The

government should create a policy that there is equity in the distribution of the population due to the increasingly dense population actually increased poverty. Therefore, the government should carry out resettlement in order to lower poverty.

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Appendix

Table 1. Result of estimation from equation of poverty level

Dependent Variable: Y1
 Method: Panel Two-Stage EGLS (Cross-section weights)
 Date: 11/15/14 Time: 12:39
 Sample: 2005 2012
 Periods included: 8
 Cross-sections included: 33
 Total panel (balanced) observations: 264
 Linear estimation after one-step weighting matrix
 Instrument specification: C X1 X2 X3 X4 X5
 Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26.83411	7.415771	3.618520	0.0004
X1	0.257978	0.032726	7.883076	0.0000
X4	-0.095334	0.022102	-4.313330	0.0000
X5	0.000431	0.000116	3.724142	0.0002
Y2CAP	-0.953094	0.341329	-2.792306	0.0057
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.944371	Mean dependent var	3.749322	
Adjusted R-squared	0.935549	S.D. dependent var	1.778566	
S.E. of regression	0.561657	Sum squared resid	71.60917	
F-statistic	107.6757	Durbin-Watson stat	1.389272	
Prob(F-statistic)	0.000000	Second-Stage SSR	71.21274	
Instrument rank	38	Prob(J-statistic)	0.000001	
Unweighted Statistics				
R-squared	0.942170	Mean dependent var	2.965379	
Sum squared resid	74.52034	Durbin-Watson stat	1.415420	

Source: Data processed, 2014, n=264, df = (n-k-1) = 258

Table 2: Estimation result at equation value of production (GRDP)

Dependent Variable: LOG(Y2)
 Method: Panel Two-Stage EGLS (Cross-section weights)
 Date: 11/15/14 Time: 13:49
 Sample: 2005 2012
 Periods included: 8
 Cross-sections included: 33
 Total panel (balanced) observations: 264
 Linear estimation after one-step weighting matrix
 Instrument specification: C X1 X2 X3 X4 X5
 Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-20.77376	3.371344	-6.161864	0.0000
X1	-0.013503	0.002742	-4.924661	0.0000

LOG(X2)	1.924409	0.176736	10.88861	0.0000
LOG(X3)	8.048994	0.808101	9.960385	0.0000
Y1CAP	-0.001161	0.016930	-0.068585	0.9454

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

R-squared	0.999414	Mean dependent var	120.6459
Adjusted R-squared	0.999321	S.D. dependent var	101.1908
S.E. of regression	0.333839	Sum squared resid	25.29883
F-statistic	11408.34	Durbin-Watson stat	1.588011
Prob(F-statistic)	0.000000	Second-Stage SSR	23.84207
Instrument rank	38	Prob(J-statistic)	0.114733

Unweighted Statistics

R-squared	0.936177	Mean dependent var	17.11188
Sum squared resid	28.22790	Durbin-Watson stat	2.255467

Source: Data processed, 2014, n=264, df = (n-k-1) = 258