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# The influence of government spending on employment opportunities through investment and economic growth in South Sulawesi Province

<sup>1</sup>Jurais, <sup>2</sup>Nursini, <sup>3</sup>Fatmawati, <sup>4</sup>Paulus Uppun, <sup>5</sup>Anas Iswanto Anwar, <sup>6</sup>Retno Fitrianti

<sup>1</sup>Magister of Resource Economics. Hasanuddin University. Indonesia. <sup>2</sup>Economics and Business Faculty, Hasanuddin University. Indonesia

# KeyWords

spending on infrastructure, spending on education, spending on health, investment, economic growth, employment opportunities

# ABSTRACT

This study aims to analyze and determine the effect of government spending on infrastructure, education and health on job opportunities, both directly and indirectly through investment and economic growth in South Sulawesi Province.

The data used in this study is secondary data that is pooled data, which is a combination of time series data from 2016 to 2019 and a cross section of 24 municipalities in the province of South Sulawesi. The data analysis technique used to discuss the problems in this study is the Structural Model analysis.

The results of this study indicate that spending on infrastructure, education and health has a negative effect on job opportunities and indirectly has a positive effect on employment opportunities through investment and economic growth. Investment does not directly affect employment opportunities and indirectly negatively affects economic growth. Economic growth does not directly affect employment opportunities.

# I. INTRODUCTION

Manpower is one of the most important things in an effort to advance the nation's economy in the provision of sufficient employment opportunities to be able to keep up with the increase in the labor force entering the labor market. Expansion of job opportunities can provide opportunities for people to carry out economic activities which are a source of income so that they can meet the needs of their lives and their families. Job opportunities can also be interpreted as a demand for labor in the labor market (demand for labor force), therefore opportunities for cooperation with the number of job vacancies available in the world of work. Of course, the more development activities there are, the more job opportunities will be available. This is very important because the greater the employment opportunity for the workforce, the better the progress of community economic activities will be.

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The issue of employment is still one of the fundamental problems. This is due to the increasing number of population and the

workforce who have not yet got a job but this is not matched by adequate employment opportunities. The higher the workforce requires quite a lot of employment, but in reality employment is not always available. On the other hand, the number of labor force increases in a fast and high number while the job opportunities available are very limited. The most basic problem in manpower lies in the level of employment opportunities. The imbalance between the increase in the working age population and the availability of job opportunities will create a gap called unemployment. This unemployment in the end will have an impact on economic instability which in turn can lead to instability in other areas of life.

The limited employment available is not balanced with the number of labor force so that it has an impact on high unemployment. In effect, high unemployment will have an impact on economic development. Labor can be used as a measure of success in a regional development, meaning that the workforce supports regional development as a whole. So that the employment conditions can also describe the economic and social conditions and even the level of welfare of the population in an area within a certain period of time.

Manpower is closely related to economic development because in reality it is a vehicle that will drive economic development. In classical theory, it is assumed that humans are the main production factors that determine the prosperity of a society. This is because the land will be meaningless if there are no human resources to cultivate it. And in this case the classical theory of Adam Smith, also states that the effective allocation of human resources is the initiator of economic development. If human resources can be effective, they will be able to contribute to development. So it can be said that human resources are the main factor in development (Mankiw 2007).

Based on published data from the Central Statistics Agency (BPS) in the last 5 years, investment, economic growth and job opportunities in South Sulawesi have not shown a consistent increase. Therefore, it is necessary to have a policy strategy that is right on target and concrete to encourage consistently as an effort to open up job opportunities. Based on data from the BPS of South Sulawesi Province, comparative data on investment, economic growth and job opportunities for South Sulawesi Province were obtained in 2014-2018.

The employment opportunity rate decreased from 94.94 percent in 2014 to 94.04 percent in 2015. However, in 2016 it increased to 95.19 percent in 2017, it decreased again to 94.39 percent and in 2018 it has increased again. to 94.65 percent. Although the trend is slow and tends to fluctuate throughout the observation.

Likewise, economic growth in South Sulawesi has not consistently increased in observations from 2014 to 2018. In 2015, economic growth decreased by 7.19 compared to 2014 amounting to 7.54, while in 2017 to 2016 it experienced an insignificant increase. This indicates that weak planning needs to promote policies that can increase economic growth.

In general, the 2014-2018 period investment realization in South Sulawesi fluctuated. Nominally it increased in 2015 compared to 2014, then decreased in 2016, and increased again in 2017 and 2018. Investment is one of the macroeconomic variables in driving economic growth. High investment will increase economic growth, and further increase employment opportunities. Investment has a positive and significant effect on economic growth (Rohima, 2019).

According to Keynes, to avoid stagnation in the economy, the government seeks to increase the amount of government spending to a higher level of income so that it can increase growth which will have an impact on the level of employment opportunities. The importance of government intervention in expenditures for development aimed at building physical facilities and other infrastructure, is nothing but an investment activity carried out by the government which can encourage the development of community investment activities. Thus, through development spending, it will directly encourage investment activities in the economy.

The role of government spending is by opening up more job opportunities, while government spending and investment is a response to opening job opportunities. The economic factor needed to solve the problem is the large portion of government expenditure, the distribution of investment and job opportunities to all parts of the city districts in South Sulawesi province. Government spending is a stimulus for fiscal policy that aims to increase the rate of investment, maintain employment opportunities, maintain economic stability and create an even distribution of income. Government expenditure has a positive and significant effect on investment and employment opportunities, both direct and indirect. Likewise, the effect of investment on job opportunities both in KTI and in KBI (Rahmat, 2016).

On the one hand, it reflects effective demand and on the other hand it creates productive efficiency for future production. This investment process results in an increase in output. Investment is needed to meet the demands of the region's increasing population. Investments in capital goods not only increase production but job opportunities. Investment as a type of investment has a very big role in development. Capital can enter an area in the form of private capital and state capital so that it will expand employment opportunities.

The main factor that determines an economy being able to provide employment opportunities is the accumulation of capital or investment which will result in various projects that provide employment opportunities. In addition, investment can have a large multiplier effect because it will encourage increased investment both in terms of production and consumption. The increase in both sides will lead to the formation of economic growth and increased employment (Hendarmin, 2012). This view is in accordance with Lewis theory, Ranis-Fei theory and Harrod Domar theory, even the investment theory itself has a direct effect on the expansion of employment, economic growth.

With investment, growth will increase and create new jobs so that they can absorb labor. Conceptually, infrastructure is needed to increase competitiveness in order to encourage more investment activities to achieve economic development as well as improve and provide services or access for people to take advantage of economic opportunities. Investment has a positive and significant effect on employment (Sulistiawati, 2012)

On the other hand, investment will encourage the creation of new capital goods so that it will increase production factors which

indirectly create jobs or employment opportunities that will absorb labor and then reduce unemployment (Prasojo, 2009). The availability of job opportunities means increasing the welfare of the community. Job opportunities provide opportunities for the community to carry out economic activities, through economic activity members of the community have a source of income to finance basic necessities such as food and clothing.

In this study, government spending does not only provide stimulus and facilitate a good investment climate and increase economic growth, but how government spending can increase employment opportunities. This argument shows that there is a significant influence between government spending on employment opportunities through investment and economic growth. If this influence is strong enough, then this study will find an important impact of government spending on employment opportunities through investment and economic growth.

#### **II.** Theoretical review

Work provides a person with income, which is used to create effective demand for consumption and capital goods. This effective demand in turn leads to increased production of goods and services. This increase in production again leads to more job opportunities and thus the Work-Income-Demand-Production-Work cycle is created.

Job opportunities basically depend on how much labor demand is needed. The size of the elasticity of labor demand is influenced by the factors that allow the substitution of labor with other production factors. The elasticity of demand for goods produced and the elasticity of supply from other complementary factors of production. The less likely it is to substitute capital for labor, the smaller is the elasticity of labor demand. The greater the elasticity of the demand for goods produced, the greater the elasticity of labor demand and the greater the elasticity of supply of complementary factors in production, the greater the elasticity of labor demand.

Demand for labor is the relationship between the number of workers and the level of wages as the price of the demand for labor that is desired by employers to be employed. The employer's demand for labor differs from the consumer's demand for goods and services. Entrepreneurs employ someone to help produce goods and services that will be offered to society as consumers. In other words, the increase in labor needed by the entrepreneur depends on the increase in demand for goods and services by consumers so that the employer's demand for labor is also called a derived demand, which is a demand that occurs because of other requests such as demand for goods and services.

Job creation and increased productivity in sectors of activity that are expanding will increase income for the population concerned. Policies aimed at expanding employment opportunities and increasing labor productivity must be seen in relation to policies concerning income distribution in society.

#### Government Expenditure, Investment, Economic Growth and Employment Opportunities

Government expenditure (government expenditure) is part of fiscal policy (Hakim Abdul, 2002), which is a government action to regulate the running of the economy by determining the amount of government revenue and expenditure each year which is reflected in the APBN document for the nation and APBD for regions / regions. The objective of this fiscal policy is to stabilize prices, output levels and employment opportunities and spur economic growth. Government spending can contribute to stimulating economic growth and employment. According to Barro (2001) and Sun'an (2008), the contribution of productive expenditure will have a positive effect on job opportunities, on the other hand, unproductive expenses will have a negative effect on job opportunities.

Research conducted by Ziyadaturrofiqoh (2018) states that government spending has a significant effect on labor absorption. Increase the efficiency and effectiveness of government spending from the use of direct spending and indirect spending. Local governments must be wiser in prioritizing regional development, especially in order to provide facilities and infrastructure such as road construction and more equitable human resource development. In order to further expand employment. Local governments must give more priority in allocating their expenditures for economic sectors that are still potential and government spending should be more optimized for development costs and creating productivity that can absorb labor.

Research conducted by Siestri (2013) states that regional spending has a positive and significant effect on job opportunities. Regional spending, or what is known as regional government spending in the Regional Budget (APBD), is one of the factors driving regional economic growth. The greater regional expenditure is expected to further increase regional economic activity (economic expansion occurs) which in turn will create jobs. The problem of lack of job opportunities if there is no follow-up will affect the economy which in turn will affect the level of welfare of the community.

Government spending can increase the output produced by an economic sector. In addition, it can also increase people's income because government spending will become public revenue, thus encouraging aggregate demand. Due to an increase in aggregate demand, which encourages producers to increase their production output. For this reason, producers need additional production inputs, one of which is labor, so that new job opportunities will be created. Thus, an increase in government spending will add new job opportunities for the community. Projects financed by the government, such as building roads, schools, or other facilities are generally labor-intensive in nature so as to increase employment.

## Spending on Infrastructure, Investment, Economic Growth and Job Opportunities

A supportive view of public spending with a significant impact on employment opportunities. Research conducted by Aphu (2019) states that government spending on infrastructure reduces unemployment and opens up new jobs. Increased public sector spending has been widespread which has generated interest in both developed and developing countries to optimize the size of government spending. The need to provide and expand public goods is an urgent demand to expand and serve an increasing population through the provision of employment opportunities. Jobs are generated when employment opportunities are provided by the government through its spending arm for the provision of social and economic infrastructure facilities in the economy. That the provision of infrastructure facilities has a dual purpose of generating employment opportunities directly while at the same time using its facilities to encourage productive sectors to generate and provide employment for the population or workforce (Araga, 2016). Likewise, research conducted by Faramarzi, (2014) states that government spending has a positive effect on labor absorption.

Research conducted by Wahyu Zamzami (2020) capital expenditure and investment have a significant effect on job opportunities while partially variables have a significant effect on job opportunities. The importance of public sector government spending such as basic infrastructure provides multi-effects. Infrastructure is needed to increase competitiveness in order to encourage more investment activities so as to create jobs. In addition, infrastructure is also intended to accelerate equitable development so that the unemployment rate can be lowered. At the macro level, the availability of infrastructure services will affect the marginal productivity of private capital, while in the microeconomic context, the availability of infrastructure will affect the reduction of production costs.

Not all research results support that government spending has a significant impact on employment opportunities. This supportive view starts from the results of research conducted by Hellen (2017) which investigates the effect of investment and labor and government spending on economic growth and employment opportunities. Government spending directly has no significant effect on employment opportunities. Research also conducted by Nancy (2019) that infrastructure spending has a positive but insignificant effect on economic growth and job opportunities.

The level of availability of the public sector in a country is an important and decisive factor for the rate of speed and expansion of economic development. Infrastructure as physical facilities and services developed or required by public agencies for government functions in water supply, electricity, waste disposal, transportation and similar services to facilitate the objective of meeting basic social and economic needs . Therefore, infrastructure is parts of facilities and infrastructure (network) that are inseparable from one another which are defined in a system.

# Education, Investment, Economic Growth and Employment Opportunities

Conceptual education can improve living standards. In other words, government spending on education is an investment to increase the number of skilled workers in the economy and improve the welfare of the community. Education has always been a strategy in fostering human resources as a form of development agenda and shaping the future of a nation. A good education will produce a proportional workforce that can fulfill a country's workforce. Education is always associated with the labor market, that the higher a person's education, the greater the chance to get a decent job. This is if the quality of human resources is higher, the easier it is to be involved in the labor market. This shows that the current development of education is beneficial for increasing the level of employment, increasing the proportion of workers and the development of higher education creates a positive effect on the work of Zhongchang (2007).

Government spending in the education sector is also a way out to solve economic problems such as unemployment, economic recession (Nurudeen & Usman, 2010). Government spending on education can increase the number of skilled workers in the economy. He is able to create job opportunities and meet the requirements of skilled and semi-skilled workers in the economic field. It is important to increase the number of skilled labor, creating and fulfilling employment so far education can affect employment in the economic sector (Muhammad, 2017).

Research conducted by Obadic (2011) government expenditure is an investment in human capital to develop the economic sector by increasing the involvement of skilled and semi-skilled workers. Government spending on education at the tertiary level will contribute to educational inputs and outputs such as increasing enrollment rates, increasing labor force participation rates. Education as the basic infrastructure for increasing human capital will make people more educated, so they will be more creative and productive. Educational opportunities will open up better opportunities for people to get better jobs hoping that with these opportunities people will move to a higher welfare life. The implication of development in education is that human life will be of higher quality. In relation to the economy in general (national), the higher the quality of life of a nation, the higher the level of growth and welfare of the nation.

Research conducted by Gambang (2016) if the level of government spending in the education sector increases by 1%, it will increase the absorption of energy, this means that government spending on the education sector plays a very important role in increasing the community's need for education. With the existence of government spending in the education sector, it will make it easier for people to access education easily, given that the education sector is a supporting factor in obtaining a job.

Not all research results support that government spending has a significant impact on employment opportunities. The view that supports this starts from the results of research conducted by this research which was also conducted by Nurlela (2018), increasing

education can basically increase opportunities for work and skills to earn more income, but this is inversely proportional to the results of research where education has a negative value. against labor absorption. This condition occurs when seen based on the industrial pattern which is still labor-intensive, which requires more practical labor or at the upper middle and / or vocational level. The level of education that does not have a significant effect on labor absorption is one of which is the condition of the more educated society which is not matched by the availability of jobs or job opportunities available according to Sihombing (2017).

# Health, Investment, Economic Growth and Job Opportunities

Research conducted by Zafer (2014) government spending and health services Investment in human resources through education as defined by can play a significant role in reducing the unemployment rate. Likewise, research conducted by Mardiana (2017) Health Sector Expenditure on unemployment in East Kalimantan shows that spending on the health sector budget has a significant effect, meaning that an increase in government spending on health can reduce unemployment.

Research conducted by Gambang (2016) Government spending in the health sector shows a positive relationship to labor absorption, this means that government spending on the health sector plays a major role in increasing the public's need for health. With government spending in the health sector, it will make it easier for the public to be able to access health easily. Health is very important for basic human needs. Health is a right for every citizen, therefore the importance of improving nutrition and health services. Any improvement in the health sector is a form of investment, investment in the health sector is needed to improve the quality of human resources. The effect of health improvement can increase workforce participation in obtaining decent work. Meanwhile, the effect of government spending on health functions has a significant effect on labor absorption in West Java Province (Nalyda, 2015).

Health sector spending can increase a healthy and quality workforce. Any improvement in the health sector is a form of investment, investment in the health sector is needed to improve the quality of human resources. The influence of the amount of government expenditure in the health sector can increase participation of productive labor and to get a job in the labor market so that it is easy to get a decent job.

# **Investment Relation to Job Opportunities**

Research conducted by Saadah (2018) states that investment has a significant positive effect on employment in the small formal industry. Investment continues to increase economic activity and employment, increase national income and improve community welfare. Investments by companies will affect the expansion of job opportunities. This is because the investment will improve the production process and make the production process require human labor, as well as companies need additional manpower. Meanwhile, research conducted by Masipa (2014) sees strong evidence of a positive long-term relationship between FDI, GDP and employment in South Africa. Apart from ensuring and also identifying the factors that might affect the flow of foreign investors to South Africa. These factors include, return on investment, human capital, labor costs, labor disputes and corruption. The government must put more emphasis on these factors so that South Africa is conducive to foreign investment. It thus suggests that FDI should be considered as a mechanism for enhancing long-term economic growth and employment in South Africa

Research conducted by Muhammad Taufik (2014) that investment has a significant effect on employment. That so far, investment has had a real impact on the expansion of employment in East Kalimantan because more investment has been realized in the laborintensive sector. In addition, investment can have a large multiplier effect (Risvi, 2009) because it will encourage increased investment both in terms of production and consumption. The increase in both sides will lead to the formation of economic growth and increased employment (Hendarmin, 2012). This view is in accordance with Lewis theory, Ranis-Fei theory and Harrod Domar theory, even the investment theory itself has a direct effect on all three things; expansion of employment, economic growth and poverty reduction.

Not all research results support that investment has a significant impact on employment opportunities. This supportive view begins with the results of research conducted by Hellen (2017) that investment and temporary government spending have no significant effect on employment. The insignificance of investment in employment opportunities is due to the fact that investment is not evenly distributed in several sectors so that it has an impact on the small number of available jobs so that job opportunities are still very low.

Research conducted by Saadah Alfizah (2020) Investment has no significant effect on labor absorption. lack of encouragement and make it easier for investors to invest and develop business units in industry so as to increase employment. This can be done by providing easy licensing for investors who will invest and facilitating the provision of capital loans to industrial entrepreneurs.

Research conducted by Ahmad Nur (2019) states that there is an insignificant influence between PMDN on the workforce of East Kalimantan Province. Because the leading sector of the East Kalimantan economy, namely coal, is experiencing turmoil, investors who easily open coal land lead to a lot of competition, of course this creates more job opportunities, but with many competitors and with limited natural resources. resulting in a very short work period, if the coal project runs out it will be difficult for entrepreneurs to find land to rebuild their businesses.

# **Economic Growth on Job Opportunities**

Research conducted by Pham (2014) stated that economic growth has a positive effect on job opportunities. Direct investment towards major national projects, support the real estate market, and help companies deal with adversity. new policies that encourage investment. Economic growth as the basis for increasing employment and increasing income. In order to maintain high growth rates it is important to focus on measures to mobilize all possible resources, such as financial resources from the economic sector as well as natural resources. This policy and should focus on expanding production in the manufacturing and construction sectors, especially scale industries small and labor intensive, encouraging the development of the private sector, and supporting rural entrepreneurship. In addition, improving the work performance of the centers is also a solution to reducing the unemployment rate.

Research conducted by Emilia (2011) states that only the process of economic growth, which generates new jobs, which strongly guarantees economic conditions and human development is important to act in order to increase employment intensity. Meanwhile, research conducted by A. Oznur (2013) ) increasing economic growth can increase employment in Tukri. Likewise, Research conducted by Kunal Sen (2009) on growth and employment for the Kosovo economy positively influences faster economic growth and job creation and points to key areas where targeted policy interventions can be expected to move the economy on a growth path. and higher job creation.

Not all research results support that economic growth has a significant impact on employment opportunities. The view that supports this starts from the results of research conducted by Oloni (2013) that economic growth has not led to an increase in employment. Due to the fact that the agricultural sector is still growing it is a traditional sector that does not attract skilled labor. Research also conducted by Zamzami (2020) shows that economic growth has no significant effect on the labor dependent variable. A larger number of workers means an increase in the level of production, while a larger population growth means a larger size of the domestic market. Furthermore, it is said that the positive or negative effects of population growth depend on the ability of the regional economic system to absorb and productively take advantage of the increased workforce.

#### **III. Research methods**

The analysis technique used in this study is the Structural Model analysis method using the SPSS analysis tool. to determine the effect of the influence of public sector focused infrastructure spending, education spending and health spending on investment, the effect of investment on economic growth and employment opportunities, the effect of economic growth on employment opportunities, the effect of public sector infrastructure spending, education spending and health spending on employment opportunities through investment and economic growth, the effect of investment on employment opportunities through economic growth. The equation of the Structural Model analysis model can be written into the following equation:

Y1 = f (X1, X2, X3) (4.1) Y2 = f (X1, X2, X3,Y1) (4.2) Y3 = f (X1, X2, X3, Y1,Y2) (4.3) Where: X1 = Infrastructure Expenditure X2 = Education expenses X3 = Health expenses Y1 = Investment Y2 = Economic Growth

Y3 = Job Opportunities

Based on the form of the function in the simultaneous equation system (4.1-4.2-4.3) it can be stated explicitly in the form of a function as follows:

Y1 = α0 X1 α1 X2 α2 X3 α3 + μ1	(4.4)			
Υ2 = β0 Υ1 β 1  Χ1 β1 Χ2 β2  Χ3 β3 + μ2	(4.5)			
Y2 = $\lambda$ 0 Y1 $\lambda$ 1 Y2 $\lambda$ 2 X1 $\lambda$ 3 X2 $\lambda$ 2 X3 $\lambda$ 2+ $\mu$ 3	(4.6)			
Equation (4.4-4.4-4.6) above can be expressed in the form of a system of linear equations as follows:				
$Y1 = Ln\alpha0 + \alpha1 LnX1 + \alpha2 LnX2 + \alpha3 LnX3 + \mu1$		(4.7)		
Y2 = Ln β0 + β1 LnY1 + β2 LnX1+ β3 LnX2 + β3LnX3 + μ2		(4.8)		
Y3 = Ln λ0 + Ln λ1 Y1 + λ2 Y2+ Ln λ3 X1+ λ4Ln X2	+ λ5Ln X3 + μ2	(4.9)		

Furthermore, to obtain the reduced form, equation (4.7-4.8) is substituted into equation (4.9) so that it is obtained as follows Y3 = Ln  $\lambda 0 + \lambda 1$  (Ln  $\alpha 0 + \alpha 1$  Ln X1 +  $\alpha 2$  LnX2 +  $\alpha 3$  LnX3 +  $\mu 1$ ) +  $\lambda 2$  (Ln $\beta 0 + \beta 1$  LnY1 +  $\beta 2$  LnX1+  $\beta 3$  LnX2 +  $\beta 3$ LnX3+  $\mu 2$ ) +  $\lambda 3$ (Ln  $\lambda 0 +$  Ln  $\lambda 1$  Y1 +  $\lambda 2$  Y2+ Ln  $\lambda 3$  X1+  $\lambda 4$ Ln X2 +  $\lambda 5$  LnX3 +  $\mu 3$ = Ln  $\lambda 0 + \lambda 1$  (Ln  $\alpha 0 + \alpha 1$  Ln X1 +  $\alpha 2$  LnX2 +  $\alpha 3$  LnX3 +  $\mu 1$ ) +  $\lambda 2$  (Ln $\beta 0 + \beta 1$  LnY1 +  $\beta 2$ Ln X1+  $\beta 3$  LnX2 +  $\beta 3$ LnX3+  $\mu 2$ ) +  $\lambda 3$ (Ln  $\lambda 0 +$  Ln  $\lambda 1$  Y1 +  $\lambda 2$  Y2+ Ln  $\lambda 3$  X1+ Ln $\lambda 4$  X2 + Ln  $\lambda 5$  X3 +  $\mu 3$ = (Ln  $\lambda 0 + \lambda 1$  Ln  $\alpha 0 + \lambda 2$  Ln  $\beta 0$ ) + ( $\lambda 1 \alpha 1 + \lambda 2 \beta 1 + \lambda 3 \lambda 1$ ) + Ln X1 ( $\lambda 1 \alpha 2 + \lambda 2 \beta 2 + \lambda 3 \lambda 2$ ) + Ln X2 ( $\lambda 1 \alpha 3 + \lambda 2 \beta 3 + \lambda 3 \lambda 1$ ) + Ln X3 ( $\lambda 1 \alpha 4 + \lambda 2 \beta 4 + \lambda 3 \lambda 4$ ) + ( $\lambda 1 \mu 1 + \mu 2 + \mu 3$ ) GSJ: Volume 9, Issue 1, January 2021 ISSN 2320-9186

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Simplified to:

Y3=\delta 0 + \delta 1 \ln X1 + \delta 2 \ln X2 + \delta 3 \ln X3 + \mu 3
(5.0)

Where:

\delta 0 = \ln y 0 + y 1 \ln \alpha 0 + y 2 \ln \beta 0 + y 3 \lambda 0
\delta 1= (y 1 \alpha 1 + y 2 \beta 1 + y 3 \lambda 1) \ln X1
\delta 2 = (y 1 \alpha 2 + y 2 \beta 2 + y 3 \lambda 2) \ln X2
\delta 3 = (y 1 \alpha 3 + y 2 \beta 3 + y 3 \lambda 3) \ln X3
\mu 4 = \lambda 1 \mu 1 + \mu 2 + \mu 3
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# **IV. Results and Discussion**

The following is the result of analyzing the relationship of variables directly:

Variable Relationship	Coefficient	Probability	Information	
$X1 \rightarrow Y1$	2.294	0.004	Significant	
$X2 \rightarrow Y1$	1.847	0.034	Significant	
X3→ Y1	-3.209	0.004	Significant	
$Y1 \rightarrow Y2$	-0.076	0.207	Not Significant	
Y1→ Y3	-0.020	0.818	Not Significant	
Y2→ Y3	-0.179	0.232	Not Significant	
$X1 \rightarrow Y3$	-0.011	0.988	Not Significant	
X2→ Y3	0.051	0.949	Not Significant	
X3→ Y3	-1.860	0.065	Not Significant	

#### Table 1. Direct variable relationships:

#### Source: SPSS (data processed)

The estimation result of public sector focus government spending on investment is 2,294 with a significance level of 0.004. This shows that public sector focused government spending has a positive effect on investment, meaning that each change in a 1 percent increase in the level of public sector focused government spending will increase investment by 2,294 percent.

The estimation result of education expenditure on investment is 1,847 with a significance level of 0.034. This suggests that education spending has a positive effect on investment, meaning that any change in a 1 percent increase in the level of education spending will increase investment by 1,847 percent.

The estimation result of health expenditure on investment is -3,209 with a significance level of 0.004, this shows that health expenditure has a negative and significant effect on investment, every 1 percent increase in health expenditure will reduce investment by 3.209 percent, and vice versa, every 1 percent decrease in investment will increased health expenditure by 3.209 percent.

The estimation result of investment on economic growth is -0.076 with a probability of 0.207. This shows that investment has no effect on economic growth, meaning that any changes in the increase or decrease in the level of investment have no impact on economic growth.

The estimation result of investment on job opportunities is -0.020 with a probability of 0.818. This shows that investment has no effect on employment opportunities, meaning that any changes in the increase or decrease in the investment level do not have an impact on employment opportunities.

The estimation result of economic growth on employment opportunities is -0.179 with a probability of 0.232. This shows that economic growth has no effect on employment opportunities, meaning that any changes in the increase or decrease in the rate of economic growth have no impact on employment opportunities.

The estimation result of public sector focus on employment opportunities is -0.011 with a probability of 0.988. This shows that public sector-focused government spending has no effect on employment opportunities, meaning that any change in the increase or decrease in the level of public sector-focused government spending has no impact on employment opportunities.

The estimation result of education expenditure on job opportunities is 0.051 with a probability of 0.949. This shows that education spending has no effect on employment opportunities, meaning that any change in the increase or decrease in the level of education expenditure has no impact on employment opportunities.

The estimation result of health expenditure on job opportunities is -1.860 with a probability of 0.065. This shows that health expenditure has no effect on employment opportunities, meaning that any change in the increase or decrease in the level of health expenditure has no impact on employment opportunities.

Variable Relationships	Coefficient	Probability	Informaion
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-0.014	0,032	Significant
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-0.062	0.029	Significant
$\begin{array}{c} X3 \rightarrow Y1 \rightarrow Y1 \rightarrow Y3(\texttt{+}) \\ X3 \rightarrow Y1 \rightarrow Y1 \rightarrow Y2 \rightarrow Y2 \rightarrow Y3 \end{array}$	0.107	0.032	Significant
Y1→Y2→Y3	0,013	0,048	Significant

## Table 2 Results of Analysis of Indirect Variable Relationships

## Source: SPSS (data processed)

Based on table 2 above, it can be seen that:

- 1. Public sector focused infrastructure spending has a negative and significant effect on employment opportunities through investment and economic growth.
- 2. Education expenditure has a negative and significant effect on employment opportunities through investment and economic growth.
- 3. Health expenditure has a positive and significant effect on employment opportunities through investment and economic growth.
- 4. Investment has a positive and significant effect on employment opportunities through investment and economic growth

# The effect of public sector focused infrastructure spending on employment opportunities

The effect of infrastructure spending on the focus of public infrastructure on employment opportunities shows insignificant results. The estimation result of infrastructure spending on public infrastructure focus on job opportunities is -0.011 with a probability of 0.988. This shows that public infrastructure focus spending on infrastructure has no effect on employment opportunities, meaning that any changes to the increase or decrease in the level of infrastructure focus on public infrastructure have no impact on employment opportunities.

This supportive view starts from the results of research conducted by Hellen (2017) which investigates the effect of investment and labor and government spending on economic growth and employment opportunities. Government spending directly has no significant effect on employment opportunities. Research also conducted by Nancy (2019) that infrastructure spending has a positive but insignificant effect on economic growth and job opportunities.

## Effect of education expenditure on employment opportunities

The effect of education expenditure on employment opportunities is not significant. The results of the estimated expenditure on job opportunities amounted to 0.051 with a probability of 0.949. This shows that education expenditure has no effect on employment opportunities, meaning that any changes in the increase or decrease in education expenditure have no impact on employment opportunities.

The view that supports this starts from the results of research conducted by this research which was also conducted by Nurlela (2018), increasing education can basically increase opportunities for work and skills to earn more income, but this is inversely proportional to the results of research where education has a negative value. against labor absorption. This condition occurs when seen based on the industrial pattern which is still labor-intensive, which requires more practical labor or at the upper middle and / or vocational level. The level of education that does not have a significant effect on labor absorption is one of which is the condition of the more educated society which is not matched by the availability of jobs or job opportunities available according to Sihombing (2017).

# Effect of health expenditure on employment opportunities

The effect of health expenditure on employment opportunities is not significant. The estimation result of health expenditure on job opportunities is -1,860 with a probability of 0.065. This shows that health expenditure has no effect on employment opportunities, meaning that any changes in the increase or decrease in health expenditure have no impact on employment opportunities.

research Gambang (2016) in his research states that Government expenditures Government expenditures in the health sector jointly affect labor absorption. The positive coefficient of government spending in the health sector is 1.81, which means that if government spending in the health sector increases by 1%, employment will also increase by 1.81.

# Relationship of infrastructure spending to employment opportunities through investment and economic growth

Based on the regression results in Table 2, the results show that the indirect effect of public sector focused infrastructure spending on employment opportunities is -0.014, with a probability of 0.032, this indicates that public sector focused infrastructure spending has a negative and significant effect on employment opportunities through investment and economic growth. Every 1 percent increase in public sector focused infrastructure spending will decrease employment opportunities by 0.014 percent. Vice versa, every 1 percent decrease in public sector focused infrastructure spending will increase employment opportunities by 0.014 percent.

A supportive view of public spending with a significant impact on employment opportunities. Research conducted by Aphu (2019) states that government spending on infrastructure reduces unemployment and opens up new jobs. Increased public sector spending has been widespread which has generated interest in both developed and developing countries to optimize the size of government spending. The need to provide and expand public goods is an urgent demand to expand and serve an increasing population through the provision of employment opportunities. Jobs are generated when employment opportunities are provided by the government through its spending arm for the provision of social and economic infrastructure facilities in the economy. That the provision of infrastructure facilities has a dual purpose of generating employment opportunities directly while at the same time using its facilities to encourage productive sectors to generate and provide employment for the population or workforce (Araga, 2016). Likewise, research conducted by Faramarzi, (2014) states that government spending has a positive effect on labor absorption.

# The relationship of education expenditure on job opportunities through investment and economic growth

Based on the regression results in Table 2, the result shows that the indirect effect of education spending on employment opportunities is -0.062, with a probability of 0.029, this indicates that education spending has a negative and significant effect on employment opportunities through investment and economic growth. Every 1 percent increase in education spending will decrease employment opportunities by 0.062 percent. Conversely, every 1 percent decrease in education spending will increase employment opportunities by 0.062 percent

Conceptual education can improve living standards. In other words, government spending on education is an investment to increase the number of skilled workers in the economy and improve the welfare of the community. Education has always been a strategy in fostering human resources as a form of development agenda and shaping the future of a nation. A good education will produce a proportional workforce that can fulfill a country's workforce. Education is always associated with the labor market, that the higher a person's education, the greater the chance to get a decent job. This is if the quality of human resources is higher, the easier it is to be involved in the labor market. This shows that the current development of education is beneficial for increasing the level of employment, increasing the proportion of workers and the development of higher education creates a positive effect on the work of Zhongchang (2007).

Government spending in the education sector is also a way out to solve economic problems such as unemployment, economic recession (Nurudeen & Usman, 2010). Government spending on education can increase the number of skilled workers in the economy. He is able to create job opportunities and meet the requirements of skilled and semi-skilled workers in the economic field. It is important to increase the number of skilled labor, creating and fulfilling employment so far education can affect employment in the economic sector (Muhammad, 2017).

Government spending on education also has the potential to increase the workforce among children through government spending at the primary level and it will result in a more skilled workforce in the economic sector in the future through government spending at the tertiary level (Viaene & Zilcha, 2003). Government spending on education is very important for people, especially low-income people, because education at the tertiary level is too expensive and the real cost is higher than the ability paid by students. If government spending on education is implemented, this will also increase people's future income.

## The relationship of health spending to employment opportunities through investment and economic growth

Based on the results of the regression table 2 shows the value of the indirect coefficient of health expenditure on employment opportunities through investment and economic growth of 0.107 where the indirect coefficient is greater than the direct coefficient of which means that health expenditures affect the effect of employment opportunities through investment and economic growth. Every one percent increase in health spending will increase employment opportunities by 0.107 through investment and economic growth. on the other hand, every one percent decrease in health spending will decrease employment opportunities by 0.107 percent through investment and economic growth

Research conducted by Zafer (2014) government spending and health services Investment in human resources through education as defined by can play a significant role in reducing the unemployment rate. Likewise, research conducted by Mardiana (2017) on Health Expenditure on unemployment in East Kalimantan shows that health spending on unemployment has a significant effect, meaning that an increase in government spending on health can reduce unemployment.

Research conducted by Gambang (2016) Government spending in the health sector shows a positive relationship to labor absorption, this means that government spending on the health sector plays a major role in increasing the public's need for health. With government spending in the health sector, it will make it easier for the public to be able to access health easily. Health is very important for basic human needs. Health is a right for every citizen, therefore the importance of improving nutrition and health services. Any improvement in the health sector is a form of investment, investment in the health sector is needed to improve the quality of human resources. The effect of health improvement can increase workforce participation in obtaining decent work. Meanwhile, the effect of government spending on health functions has a significant effect on labor absorption in West Java Province (Nalyda, 2015).

# The relationship between investment and employment opportunities through economic growth

Based on the regression results table 2 shows the value of the coefficient of indirect investment on employment opportunities through economic growth of 0.013 where the indirect coefficient is greater than the direct coefficient, which means that investment affects employment opportunities through economic growth. Every one percent increase in investment will increase employment opportunities by 0.013 through economic growth. On the other hand, every one percent decrease in investment will decrease employment opportunities by 0.013 percent through economic growth

Research conducted by Saadah (2018) states that investment has a significant positive effect on employment in the small formal industry. Investment continues to increase economic activity and employment, increase national income and improve community welfare. Investments by companies will affect the expansion of job opportunities. This is because the investment will improve the production process and make the production process require human labor, as well as companies need additional manpower. Meanwhile, research conducted by Masipa (2014) sees strong evidence of a positive long-term relationship between FDI, GDP and employment in South Africa. Apart from ensuring and also identifying the factors that might affect the flow of foreign investors to South Africa. These factors include, return on investment, human capital, labor costs, labor disputes and corruption. The government must put more emphasis on these factors so that South Africa is conducive to foreign investment. It thus suggests that FDI should be considered as a mechanism for enhancing long-term economic growth and employment in South Africa

Research conducted by Muhammad Taufik (2014) that investment has a significant effect on employment. That so far, investment has had a real impact on the expansion of employment in East Kalimantan because more investment has been realized in the laborintensive sector. In addition, investment can have a large multiplier effect (Risvi, 2009) because it will encourage increased investment both in terms of production and consumption. The increase in both sides will lead to the formation of economic growth and increased employment (Hendarmin, 2012). This view is in accordance with Lewis theory, Ranis-Fei theory and Harrod Domar theory, even the investment theory itself has a direct effect on all three things; expansion of employment, economic growth and poverty reducti

# Conclusion

Based on the data processed and analyzed, it can be concluded:

Public sector focused infrastructure spending has an indirect positive effect on employment opportunities through investment in economic growth. However, it does not directly affect employment opportunities.

Education expenditure has an indirect positive effect on employment opportunities through investment in economic growth but does not have a direct effect on employment opportunities.

Health expenditure has an indirect positive effect on employment opportunities through investment in economic growth. However, it does not directly affect employment opportunities.

Investment has an indirect positive effect on employment opportunities but does not directly affect employment opportunities.

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