

## CHAPTER I

### INTRODUCTION

#### A. Background

According to World Bank (2016), Indonesia is included as a lower-middle income country since Indonesia has GNI per capita for about 3,400 USD. Economies are divided into four income categories which are low, lower-middle, upper-middle, and high. Income is measured by using Gross National Income (GNI) per capita in USD. The World Bank defined four levels of a country's income group based on GNI per capita. In 2016, World Bank points out that country which earned income less than 1,005 USD is classified as low-income country. While country who have income between 1,006 – 3,955 USD is classified as lower-middle income, and 3,956 – 12,235 USD would define as upper-middle income. However, for country with income more than 12,235 USD would be classified as high income.

Indonesia is one of developing country which is in take-off stage where economic growth is quite high along with the changes and development of the economic structure. Nevertheless, the growth is expected to raise the development in synergy with the welfare of society and the environment. However, increasing of economic growth from public expenditures including investment, government spending and private sector or entrepreneurial

activities are affecting only on pseudo economic growth. It means that this growth did not consider on improving the quality, quantity and equity in the economic, social and culture aspects. Hence, Indonesia still has problem of income inequality since the number is considered as high number compare to other countries. The data shows that Gini coefficient of Indonesia reach 0,39 with economic growth rate of 5,01 percent in 2016 (BPS, 2016).

In order to help Indonesia from middle income trap, Indonesia needs to implement development that emphasizes on principle of growth and equity. According to Felipe *et al* (2012) cited in Saputri (2014), a country in a low middle income trap is a country that is in the lower-middle income level for 28 years or more, or is in an upper-middle income position for 14 years or more. In order to realize the development of growth, equity and avoid middle-income trap, the strategy of increasing human capital investment supported by good infrastructure is needed so that the income and social gap could reduce as well. A configuration of human capital investment in the form of investment both in education and health have done by society and government.

Investment in human resources is a cost that must be sacrificed in form of money, time, and the opportunity to establish a better human capital in the future. While human capital is a term often used by economists to education, health, and another human capacity that can increase productivity if these things are improved. According to Todaro and Smith (Saputri, 2014), higher productivity will spur higher aggregate output growth rates. Based on Sen as

cited in Syalkahfi (2016), putting human development as the ultimate goal of the development process is expected to create opportunities that directly contribute to the expansion and enhancement of human capacity and quality of life through the improvement of health care, basic education and social security. Government as implementer of development requires qualified human development as the basic capital itself.

Human is in the role of subject and object of development, which means human as well as actors of development is also the target of development. In this case, required various facilities and infrastructure to encourage human role in development. Therefore, investment is needed to create productive human resources. The better quality of a country's human resources, the better human resources will drive the state economy. The government tried to improve its human resource investment in enhancing economic growth through government spending that can be used as a reflection of policies taken by the government in a region. According to Usaliadanti (2011) cited in Syalkahfi (2016), government spending is used to finance important public sectors, including investment in education and health sectors which are expected to have an effect on improving the quality of human resources.

One form of development success can be seen from the level of human development of a country or region. Therefore, the government's seriousness in dealing with human development issues is needed. An evidence of the government's seriousness is through government spending which is a concrete proof of the government's role in regulating the economy. Expenditure in

education and health are the sector which is quite important in government spending and influence on human development. Human capital is one of the important factors that support technological change and development, while technology invests in physical capital and population is a function of output growth. According to Barro and Martin (1985) as cited in Saputri (2014), in the theory of new economic growth or referred to as endogenous growth theory, external factors are involved as determinants of economic growth and human capital as one of these factors. In addition, human capital is a form of ability or skill possessed by a person and shows the quality of the individual itself. Improve the knowledge, skills, and abilities in a country is one of the ways to establish the quality of human capital. The quality of human resources can be a person's selling point in the labor market. Based on Sitepu (2010) cited in Saputri (2014), the better quality of human resources, the greater demand on the labor force because of the quality of good human resources has high productivity.

This study aims to analyze and determine how much the influence of human resource investment on the economy in Java which consists of six provinces, namely DKI Jakarta, West Java, Central Java, Daerah Istimewa Yogyakarta, East Java, and Banten. Java is an island with more than 60 percent of the Indonesian population. A density of 1.317 inhabitants / km<sup>2</sup>, this island is classified as one of the world's most populous island. The strategic position that makes Java as a key region in the distribution economy western and eastern parts of Java. Java is not only influenced by the economy

aspect but also social and cultural as a result of the population mobility the western region to the eastern of Java and vice versa.

The provinces of Java have an economic growth pattern and the Human Development Index (HDI) that tend to be stable or proportional between the two indicators compared to the provinces from another Island as described in Table 1.1. In addition to the growth of Gross Regional Domestic Product (GRDP) as a reference for regional welfare, HDI is an indicator that includes some qualities of human life, which are education and health. Therefore, these two variables can represent the economy and human capital in Java. Table 1.1 below illustrates the comparison of economic growth rate and HDI of the provinces in Java.

**Table 1.1 Growth Rate of GRDP and Human Development Index of Java in 2012-2016**

Province	GRDP Growth (%)					HDI				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
<b>DKI Jakarta</b>	6,53	6,07	5,91	5,89	5,85	77,53	78,08	78,39	78,99	79,6
<b>West Java</b>	6,5	6,33	5,09	5,04	5,67	67,32	68,25	68,8	69,5	70,05
<b>Central Java</b>	5,34	5,11	5,27	5,47	5,28	67,21	68,02	68,78	69,49	69,98
<b>DIY</b>	5,37	5,47	5,17	4,95	5,05	76,15	76,44	76,81	77,59	78,38
<b>East Java</b>	6,64	6,08	5,86	5,44	5,55	66,74	67,55	68,14	68,95	69,74
<b>Banten</b>	6,83	6,67	5,51	5,4	5,26	68,92	69,47	69,89	70,27	70,96

Source: BPS Indonesia 2017, processed

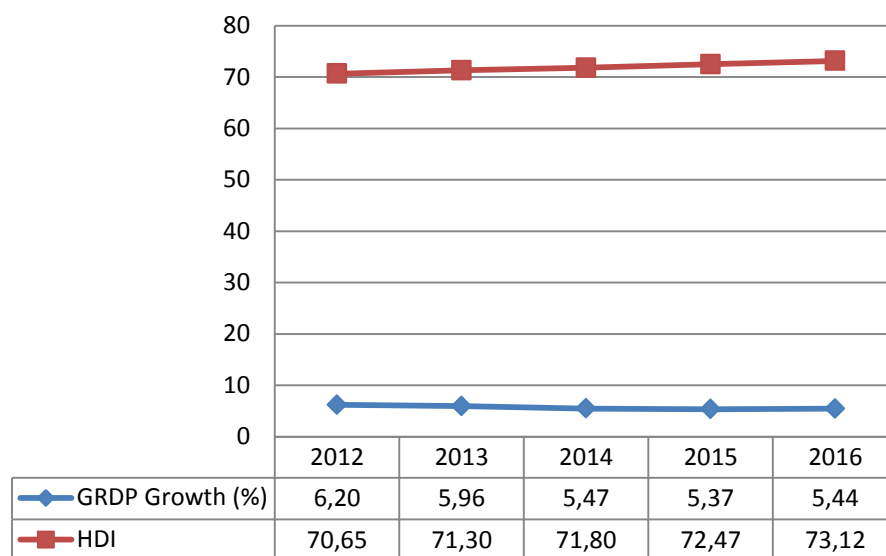
The Human Development Index in Java tends to increase from 2012 to 2016, accompanied by fluctuations in economic growth rates in each province.

The average HDI in Jakarta is 78,52 which able to experience economic growth with an average of 6,05 percent during 2012 to 2016. DKI Jakarta became the province of the first rank who had an average of economic growth and the highest HDI in comparison with other provinces. The growth pattern is different from the growth pattern in East Java Province as the province with the lowest average of HDI during 2012 to 2016 in Java. However, with the lowest average of HDI, West Java was able to have an economic growth rate of 5,91 percent and became the third rank with the highest economic growth in Java. Daerah Istimewa Yogyakarta has the second highest HDI average after DKI Jakarta with an average of 77,07, but only able to experienced economic growth rate of 5,20 percent. With a larger HDI value than East Java, DIY has the lowest average economic growth in Java during 2012 to 2016. Therefore, further study and verification on the role of human capital on economic growth in Java are needed.

Economic growth is something that is often associated with human development. An increase in economic growth can enable to increased output and income in the future so that can help to improve HDI. One of the most important development tasks is interpreting economic growth into an increase in human development. Human development or the quality of human resources is very important, as well as the efforts to improve the quality of human resources development has become a necessity. According to Putra (2015) as cited in Syalkahfi (2016), the quality of good human resources in a

region is determining a role to the success of development management in the region.

Efforts that can be done by local governments for human development and economic growth are able to focused on one direction, which is to pay more attention relating to education and health. This is very important to avoid social inequality and disparities due to the policies that are more inclined to economic growth. Figure 1.1 shows the comparison of economic growth rate to HDI in Java from 2012 to 2016.



Source: BPS Indonesia 2017, processed

**Figure 1.1 Comparison of Economic Growth Rate to HDI in Java 2012-2016**

From Figure 1.1 above can be seen that the graph of economic growth has fluctuated, while HDI continues to show an upward trend. This indicates that not always with an increase in economic growth will always be followed by

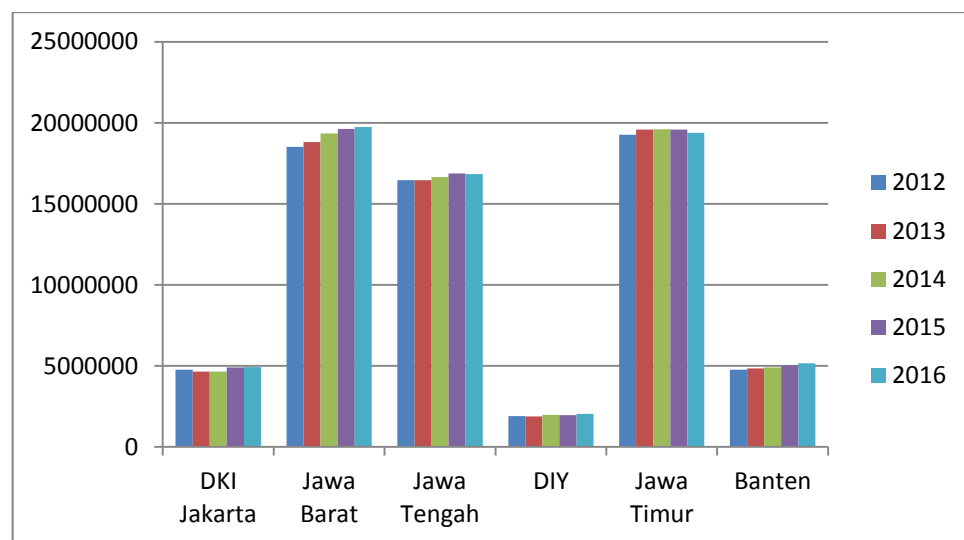
an increase in HDI. There are still other factors that may affect the increase in HDI. The increase and decline in economic growth in Java over the last five years are influenced by many factors. According to Todaro and Smith (2006) cited in Syalkahfi (2016), there are three main factors or components that influence the economic growth of a region, the three are the accumulation of capital, population growth, and technological progress. Meanwhile, according to Samuelson and Nourdhous (1997) as cited in Suryanto (2011), mentions that one source of economic growth is population growth (labor force). First, population growth (labor force) accompanied by employment will increase the output of the economy. Population growth here also includes the labor productivity itself. The second is capital accumulation, the owners of capital will have the opportunity to re-invest so that will increase the output of the economy.

One of the factors that influence the economic growth is human resources that exist in a region. A population that increases over time can be an incentive or a hindrance in economic growth. Increasing population then will increase the amount of labor and replenishment allows an area to increase production. On the other hand, the harmful effects of population growth are not matched by employment that leads to economic growth is not in line with the increase in welfare.

In addition to the investment, labor is a factor that affects the output of a region. A large labor force will be formed from a large population. But population growth can cause significant adverse effects on economic growth.



According to Todaro (2000) as cited in Rustiono (2008), rapid population growth encourages the problem of backwardness and makes the development prospect farther away. The description of the number of working people in Java can be seen in Table 1.2. A sufficient number of people with a high level of education and skills will be able to boost economic growth. With a large population of productive age, it will be able to increase production output in an area. The description of the number of working people in Java can be seen in Figure 1.2.

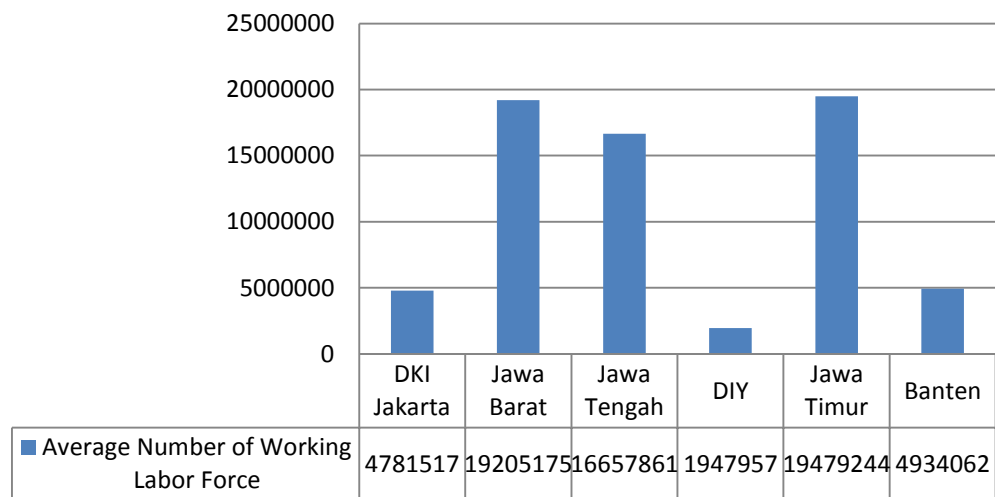


Source: BPS, processed

**Figure 1.2 Number of Working Labor Force in Java Period 2012-2016**

Based on Figure 1.2 shows that the majority of working labor force in Java worked in East Java from 2012 until 2016. However, the number of labor force who worked in East Java have fluctuated in 2012 (19.264.872) to 2014 (19.584.086) experienced an increase in the labor force, then dropped in 2016 (19.381.614). If seen from Figure 1.2 shows that DKI Jakarta, Central Java

and Banten have increased the number of working labor force in 2012 until 2016. While West Java, Daerah Istimewa Yogyakarta and East Java experienced fluctuations in the number of working labor force from 2012 to 2016. Figure 1.3 shows that East Java has the largest number of working labor force in Java since 2012 until 2016 then followed by West Java, Central Java, Banten, DKI Jakarta and the last is Daerah Istimewa Yogyakarta.



Source: BPS, processed

**Figure 1.3 Average Number of Working Labor Force in Java Period 2012-2016**

GRDP growth, as a measure of a regional economic growth, can not be separated from the role of government spending. In this case, the role of government is very important in pushing the progress of economic growth. The government has two policies to encourage economic growth, namely monetary policy and fiscal policy. According to Sukirno (2006: 234) as cited in Anggraeni (2017), Fiscal policy is a government policy in the area of expenditure and income with the aim for creating a high level of employment

without inflation. Keynes argues that there are two approaches that the government can take in fiscal policy, namely: income approach and expenditure approach. According to Mankiw cited in Anggraeni (2017), the economy will grow well if the government decreases taxes or raises its expenses.

Government expenditures are divided into central government expenditures and expenditures for the regions. Central government spending is divided into eight posts. The new format of the Indonesian budget or State budget uses the details of state expenditure by functions of public services, defense, order and security, environment, housing and public facilities, health and others. State expenditure by this function is a reclassification of programs in the old format which is a breakdown of development expenditures by sector. The function of the government according to Dumairy (1996) as cited in Bastias (2010) is allocative, distributive, stable and manifest. The government should be able to create prosperity for the community. The government will make development expenditure spending as a step to carry out its functions.

Development spending is a government expenditure to meet development needs. The purpose of developing one of them to improve the welfare of the community. The welfare of the community can be realized by meeting basic needs such as health and education. Fulfillment of basic needs will improve the quality of human resources. Qualified human resources will be able to contribute in the latest technological advances in order to improve production

efficiency. According to Mankiw (2008) cited in Bastias (2010), human resource development can be done by improving the quality of human capital. Human capital can refer to education, but it can be used to describe other types of human investment which investment that pushes toward a healthy population which is in health. Education and health are fundamental development goals in a region. Health is the core of the welfare and education is essential to achieve a decent life. According to Todaro (2006) as cited in Bastias (2010), education has an important role in making the ability of a developing country to absorb modern technology and developing it in order to create sustainable growth and development.

According to Samuelson and Nordhaus (2005) cited in Bastias (2010), there are four factors that are a source of economic growth. These factors are (1) human resources, (2) natural resources, (3) capital formation, and (4) technology. From the four factors above, human resources have the most important role because it acts as an economic actor who can drive economic activity. The better the quality of human resources of a country, the better the human resources can move the state economy. The government's seriousness in improving the quality of human resources is quite high through the government expenditure used to improve the Human Development Index when viewed from the Indonesian budget policy side. A large education budget if managed properly is expected to increase the level of a person's ability to read and write, as well as the mean years of schooling. In addition, the health budget will increase life expectancy. It can be concluded that

expenditure that can improve the quality of human resources in short and long-term is the expenditure of education, health and economy. The government's seriousness in improving the quality of human resources is marked by the development of government spending in the education, health and economic sectors in each year, despite experiencing fluctuating circumstances.

There are three main roles that must be carried out properly in the economy by the government, namely: (1) The role of the Stabilization, government act more as stabilator to keep the economy running normally. Keeping the problems that occur in one sector of the economy does not spread or penetrate into other sectors. (2) The role of distribution, the government must make policies to allocate economic resources efficiently so that the wealth of a country can be well distributed in the community. (3) The role of allocation, basically the resources owned by a country is limited. The government must determine how much of its resources will be used to produce public goods, and how much will be used to produce individual goods. According to Putra (2015) as cited in Syalkahfi (2016), the government must able to determine the public goods that its citizens need, how much government should provide, and how much can be provided by the households.

With the regional government budget, a region can maximize the sources of regional income, then spend the funds in accordance with programs and activities that have been determined in local regulations. In this study, the

realization of regional government budget used is limited only to government expenditure variable in education and health sector. In accordance with the theory of HDI, which emphasizes the importance of the role of government in both sectors. The government must provide an education budget of at least 20% of a total of Indonesian budget as well as from a regional government budget to meet national education implementation requirements in accordance with article 49 of Law No.20 of 2003 article 1. Meanwhile, in the health sector according to Law no. 36 in 2009, the central government should allocate at least 5% of the regional government budget excluding salaries, while government health budgets of provincial and regency/city are allocated at least 10% of the regional government budget excluding salaries (Syalkahfi, 2016).

From some exposures above, shows that one of the government's efforts in increasing economic growth is by fiscal policy. Allocating government expenditures, especially in improving the quality of human resources as a driver of the economy is a way that is done in fiscal policy. Supported by the theory of Peacock and Wiseman and Wagner's law which states the higher overall national income and per capita, then relatively government expenditure will also higher. In addition, government spending that can drive economic growth is government spending that is used as an investment of human resources. Therefore, based on the above background, the title in this study is ***“THE ANALYSIS OF FACTORS AFFECTING HUMAN RESOURCE INVESTMENT TOWARDS ECONOMIC GROWTH IN JAVA PERIOD OF 2010-2016”***.

## **B. Problem Limitation**

There are many factors that may influence the economic growth from 2010 until 2016 in Java to be examined. Study limitation aims to restrict the analysis problem that may occur. This study has the following limitation:

1. The dependent variable of this research is Gross Regional Domestic Product as a representative of the economic growth.
2. The research period is limited from 2010 until 2016, used annually time series data.
3. The research are limited of four independent variables are government spending on health, government spending on education, the number of working labor force, and HDI (Human Development Index).

## **C. Research Question**

Based on the explanation that have been described above therefore, the problems in this research are:

1. How does the effect of investment in health on economic growth in Java?
2. How does the effect of investment in education on economic growth in Java?
3. How does the effect of HDI (Human Development Index) on economic growth in Java?

4. How does the effect of working labor force on economic growth in Java?

#### **D. Research Objectives**

The specific purpose of this research is to study of macroeconomic variables including economic growth, human capital investment and about human development. Based on research question, thus the objectives of this research are :

1. Analyze the effect of investment in health on economic growth in Java.
2. Analyze the effect of investment in education on economic growth in Java.
3. Analyze the influence of HDI (Human Development Index) on economic growth in Java.
4. Analyze the effect of working labor force on economic growth in Java.

#### **E. Research Benefits**

This research contributes useful information for parties which are interested in economic growth or any other fields that require economic growth in it. The focus benefits of this research are followings:

1. Provide reference to the reader about the effect of human resource investment on economic growth.



2. Contributing thoughts to the government in order to build the region with a scheme of growth and development are equitable in line with the increase in human capital.
3. Providing research contributions, especially to academics in examining the effect of human resource investment on economic growth.

## **F. Research Plan**

In order to make this research well organized and systematically, researcher divided this research into five chapters which are substantially as follows:

### **Chapter I : Introduction**

This chapter contains of background, limitation, purpose, objective and the research plan of this research.

### **Chapter II : Literature Review**

This chapter include the theory related with this research, theory of economic growth, theory of HDI (Human Development Index), theory of investment in health, investment in education and so on. In addition, there is also another research or previous research about human resource investment that may support this research.

**Chapter III : Research Methodology**

This chapter contains a description of how the research will be carried out operationally outlining research variables, operational definitions, types and sources of data, data collection methods and analytical methods.

**Chapter IV : Broad Image of Research Object**

This chapter contains a brief overview of the geographical situation of the provinces of Java and an overview of economic growth, government spending on the health and education sectors, Human Development Index and working labor force in Java.

**Chapter V : Research Results and Discussion**

This chapter contains the exposure of research results, data analysis and discussion with economic analysis.

**Chapter V : Conclusion and Recommendation**

This chapter contains conclusion of the research and recommendation for the next research and the government in Indonesian Economy.