ABSTRACT

Performance as one of the main points in the economic development of a country, this is also known as growth. The expected economic growth must of course be of quality, where there is a growth that occurs and has a sensitivity to unemployment and existing poverty. This study aims to determine the influence of the Quality of Human Resources in Economic Growth in Malang Regency. This study uses secondary data analysis which aims to provide an explanation of the role of the quality of human resources on economic growth in Malang district in the 2011 to 2020 fiscal year. The secondary data consists of (1) economic growth seen from constant price GRDP, (2) population in productive age, (3) the proportion of the population aged 10 years who have a high school education and above, and (4) Life Rate and Expectations at birth. The data is processed using Multiple Linear Regression. The results in the study show that (1) the proportion of the population of productive age has a positive and insignificant effect on economic growth, (2) high school education and above has a positive and significant effect on economic growth, (3) health life expectancy has no significant effect on economic growth. The quality of human resources as measured by using three variables as independent variables has a significant effect on economic growth. The influence of these three variables is very significant both in their position as individual variables (independently) or jointly or simultaneously has a significant effect on economic growth.

Keywords: Economic Growth, Population at Productive Age, Senior High School Education and above, Life Expectancy.

JEL Classification Code: O47, P46, Q56
INTRODUCTION

Human resources are all the capabilities or potential of the population in a productive individual area who work as a driving force for a particular organization. In Indonesia, there is an imbalance between the number of employment opportunities and the workforce where of course there are far fewer jobs than job seekers. Human resources are the potential contained in humans to realize their role as adaptive and transformative social beings who are able to manage themselves and all the potential contained in nature towards achieving life welfare in a balanced and sustainable order. Very competent and qualified human resources needed in an effort to support productivity and activity so that the country's goals can be achieved perfectly. Human resources are also a key factor in economic reform, namely how to create quality human resources who have skills and high competitiveness in global competition.

Good human resources are the beginning of economic growth, and the economy is growing. First, what is needed to keep the economy growing, in other words, proper allocation of human resources is a necessary condition for economic growth. In human development assets, there is a relationship between economic development and human resource development, economic development or more clearly referred to in other words, economic growth is a condition for achieving human development, because economic development will ensure quality improvement and employment opportunities. Having a relationship with economic growth and human development also Having a relationship between human development will also affect economic growth, because without human development will also affect economic growth, because without sustainable human development will not be achieved. There is a gap in the results of research by Fajar Azzam (2016) whose results state that the proportion of the productive age population has no significant effect on economic growth; Education affects economic growth, but health, life expectancy does not affect economic growth, but simultaneously these three variables affect economic growth.

The opinion of Pasolong (2013: 5) states that there is a quality of human resources which is a workforce that has high knowledge, skills and moral competence. One of the obstacles faced in development in a developing country like Indonesia is the unavailability of funds which is the cause of limited quality human resources in Indonesia. Infrastructure development is needed to facilitate economic growth, which will improve the quality of human resources. Effectively development is all efforts carried out in a structured manner in making changes with the intention of becoming better and improving the quality of people's lives, realizing prosperity and improving the quality of society.

According to Rahardjo Adisasmita (2013:4) Economic growth is an effort to increase production capacity to achieve additional output, which is measured using Gross Domestic Product (GDP) and Gross Regional Domestic Product (GRDP) in a region. This opinion is in line with "Prof. Simon Kuznets" in the book "(Michael Todaro 2015:44)" economic growth is an increase in the long-term quality of related countries. In order to prepare all kinds of economic goods to the community. This increase in quality is likely due to technological, institutional and ideological improvements or adjustments to various existing conditions. National development should be directed to achieve this result, namely increasing the dignity of the State. Growth is the main performance in the economy of a country. Economic growth is expected to grow in quality, the growth that will occur has a sensitivity to unemployment and poverty. The existence of economic
growth is an indication of success in the economic development of a country. Therefore, every developed country as well as a developing country cannot escape efforts in spurring economic growth. Economic growth aims for development that must be achieved for every country. The measure of success can be seen from the achievement of higher economic growth, success in carrying out economic transformation from the primary sector to the secondary and tertiary sectors. Increased economic growth in the exploration and exploitation of natural resources optimally, especially as non-renewable natural resources. This happens to all developing countries including Indonesia, which can spur economic growth so as not to lag behind developed countries.

Economic growth is part of one of the most important indicators that are often used to assess the success of economic development in a region. Regions that have high economic growth are usually more likely to have high quality human resources as well. In aggregate, when economic growth increases, all economic activities in a region can also increase and therefore ultimately increase the income per capita of the community (Barro and Sala-i Martin 2004). Therefore, it can be said that economic growth is something that really needs to be considered immediately. The problem of human resources (HR) is what causes the current stage of development to be less supported by adequate labor productivity. Human resource investment is a cost that must be incurred in the form of money, time, and opportunities to form more human assets. well in the future. While human capital (human capital) is a word commonly used by economists for education, health, and other human strengths that can increase productivity if these things are developed. High productivity will refer to a higher aggregate output growth rate.

Indonesia is the only country in Southeast Asia that is part of the G20, a group of countries with the largest economy in the world. However, on a per capita basis, the Indonesian economy is still relatively low. In the G20, Indonesia's GDP per capita is in 19th position, one level above India. Indonesia's GDP per capita in 2020 is US$ 3,870. Even in Southeast Asia, Indonesia's GDP per capita is in fifth position behind Singapore, Brunei Darussalam, Malaysia and Thailand. GDP per capita is one indicator of a country's economy. Especially those that reflect the average income of each resident. With this GDP per capita, Indonesia still needs to catch up with other countries.

Currently, Indonesia is asked to become the G20 presidency. This is an opportunity to improve the economy. The government estimates that this position can boost household consumption by US$ 190.2 million. In addition, there was an increase of US$ 533 million to Indonesia's GDP. Indonesia is one of the countries in Southeast Asia with poor economic growth performance. Indonesia's economic growth is relatively low when compared to other lower-middle income countries, namely Vietnam and the Philippines. The conditions of the population of each region shows that the growth of GDP per capita of Vietnam and the Philippines in 2019 respectively was 4.68% and the Philippines 6.00%, while in the same period Indonesia's GDP per capita growth was only Rp. 3.87%.

There are 2 provinces in Indonesia with a "Very High" HDI achievement (IPM 80), namely Yogyakarta DIY Province and DKI Jakarta. In addition, there are 21 provinces with “High” HDI category (achievement 70 HDI < 80) and 11 provinces with “medium” HDI category (achievement 60 HDI < 70), and no province with “low” human achievement status. The state of GDP growth and the Human Development Index in Indonesia shows conditions that are not in line with neoclassical theory and the theory of the cycle of poverty. A
Influence of Human Resource Quality to Economic Growth in Indonesia

The reciprocal relationship between the quality of human resources and economic growth can be explained by neoclassical growth theory and the poverty cycle theory. First, the influence of HDI on economic growth, which is explained through neoclassical theory where increasing investment in human capital can increase the level of available resources so that it can lead to increased economic growth. Second, the effect of economic growth on HDI can be explained through the theory of the cycle of poverty where when a country’s economic growth increases, the level of public savings will also increase which in turn increases investment in human capital.

This study contains several explanations regarding the relationship between economic growth and the quality of human resources. The results of the research presented by Suri et al (2011) aims to see the dynamics that have a two-way relationship between economic growth and human development so that there is a reciprocal relationship from economic growth to better human development. This study does not use the simultaneous method because it is assumed that there is heterogeneity between countries so that it uses panel data estimates for the reason of knowing the relationship between human development and economic growth. The variables used in this study are GDP per capita, infant mortality, life expectancy, investment, Gini ratio, NER, Gini coefficient, poverty, education per capita public expenditure, and health per capita public expenditure. So that the results can be raised that there is a two-way relationship between human development and economic growth. The policies issued are adjusted to human development to be considered. In addition, the impact of sustainability on economic growth, but there is a reciprocal relationship to economic growth that is felt to be sustainable.

According to Adisasmita (2013) Economic growth is an effort to increase production capacity to achieve additional output, which is measured using Gross Domestic Product (GDP) and Gross Regional Domestic Product (GRDP) in a region. Boediono (2012) Economic growth is a process of increasing output per capita in the long term. The emphasis is on three aspects, namely: process, per capita output and long term. Economic growth is a process, not an economic picture at a time. Here we see the dynamic aspect of an economy, namely how an economy develops or changes from time to time. The emphasis is on change or development itself.

Economic development has a broader meaning and includes changes in the overall economic structure of society. Economic development is generally defined as a process that causes an increase in the real income per capita of a country’s population in the long term accompanied by improvements in the institutional system.

Natural resources and human resources are the main factors in economic development. The more human resources that are owned in the development process means that it tends to increase the overall level of production which will further increase the rate of economic growth of the city of Makassar. the role of human resources has not been described explicitly.

Theory That Discusses Economic Growth Is Modern Economic Theory Harrod-Domar’s growth theory is one of the theories of modern economic growth, this theory emphasizes the importance of investment formation for economic
growth. The higher the investment, the better the economy, investment not only has an influence on aggregate demand but also on aggregate supply through its effect on production capacity. In a longer perspective, investment will increase the capital stock (Ahmad Ma’aruf and Latri Wihastuti 2014:44).

According to the results of research conducted by Han and Lee (2020) there is a relationship between human capital and economic growth in Korea, the variables used in this study are micro variables that reflect human capital, including the composition of labor age, gender, education, and wage levels. and GDP growth as a proxy for economic growth. This study states that the quality of human capital can be projected to be constant and have a major influence on economic growth in Korea and the main source of increasing human capital growth in Korea is the education sector. Azzam et al (2014) research results indicate that (1) the proportion of the productive age population does not have a significant effect on economic growth, (2) high school education and above has a positive and significant effect on economic growth, (3) health life expectancy does not have a significant effect on economic growth.

According to Li and Huang (2009) in their research, there is a relationship between real GDP growth per capita and physical capital, human capital, and health investment in the production function using the analysis method and using panel data based on provincial data from 1978–2005 whose conditions were adjusted, with conditions in China. The variables used in this study are the ratio of students to teachers for primary schools, the proportion of people with secondary education or above as a proxy for the stock of education, the number of hospital beds per 10,000 people, the number of doctors per 10,000 people as a proxy for the health stock. Real GDP per capita, savings and investment ratio, and labor growth. Empirical evidence shows that health and education have a positive and significant effect on economic growth. The results of his research will show that the interaction of health and education will not reduce the impact on growth and that there is a trade-off between the two forms of human capital investment.

According to Lincolin Arsyad (2015) Economic development is a process which means changes that occur continuously, efforts to increase per capita income, the increase in per capita income must continue in the long term and the last is the improvement of institutional systems in all fields (eg economic, political, legal, social, and culture). This system can be viewed from two aspects, namely: aspects of improvement in the field of organization (institutions) and improvements in the field of regulation, both formal and informal. In this case, it means that economic
development is an active action effort that must be carried out by a country in order to increase per capita income. Thus, it is very necessary for the participation of the community, government, and all elements contained in a country to actively participate in the development process. The results of research from Benhabib and Spiegel (1994) which aims to determine the role of human capital and physical capital as a factor to determine economic growth in developing countries using the variables of income per capita, labor, investment, education of the workforce, and schools (primary, middle, high school), leading to the result that human capital affects the growth of total factor productivity.

METHODOLOGY

The type of research used in this study is quantitative research that aims to test the influence between variables with the aim of formulating hypotheses that have been applied. Research on the influence of the Quality of Human Resources on Economic Growth in Malang Regency. The data analysis method used in this research is quantitative analysis. So that the data collected can be used, then the data is processed and analyzed first so that later it can be used as a basis for decision making.

The data collection method used in this study is as follows. Observation, namely research conducted by making direct observations in the field related to research. Library Research (Library Research). In this case the aim is to obtain theoretical foundations regarding the matters to be studied. Both books, reports or the like that are documented by the Regional Government or certain parties through the Central Bureau of Statistics, the data required is an annual data series. The type and source of data used in this research is quantitative which tests certain theories with the relationship between variables. Variables are measured by research explanations to provide an explanation of the effect of the quality of human resources on economic growth. Data sources consist of primary data obtained directly from the source using direct observation while secondary data includes data from journals, books or previous research.

Before entering into data processing, researchers must test the results of the questionnaire by using validity and reliability tests. Validity is the accuracy or accuracy of an instrument in measurement. While reliability is used to determine the consistency of measuring instruments, whether the measuring devices used are reliable and remain consistent. After the data has been declared valid and reliable, the next step is to test using classical assumptions. This classic assumption test consists of a normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. The purpose of testing this classical assumption is to provide certainty that the regression equation obtained has accuracy in estimation, is not biased and is consistent. Not all classic assumption tests must be carried out in linear regression analysis, for example the multicollinearity test is not carried out in simple linear regression analysis and the autocorrelation test does not need to be applied to cross sectional data.

Furthermore, after all are fulfilled, the data is processed using multiple linear regression analysis to measure the relationship of two or more variables and to show the direction of the relationship whether positive or negative from the dependent and independent variables. The stages of quantitative analysis include multiple linear regression analysis which measures the relationship between two or more variables in this study so that it is formulated by Sugiyono (2014: 277) with a multiple linear regression equation.
\[ Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + e \]

Note:
- \( Y \) = Economic Growth
- \( b_0 \) = Constant Coefficient
- \( b_1, b_2, b_3 \) = Regression Coefficient
- \( X_1 \) = Age
- \( X_2 \) = Education
- \( X_3 \) = Health
- \( e \) = Error

The t-test is used to test the significance of the relationship between variables \( X \) and \( Y \), whether the variables \( X_1, X_2 \) and \( X_3 \) (Quality of Human Resources and Economic Growth) separately or partially. The hypothesis used in this test is to correlate the score of the questions with the total score of the construct or variable. The proposed hypothesis is:

\( \text{H}_0 : \) The score of the questions is positive with the total construct score.

\( \text{H}_a : \) The score of the question items is not positively correlated with the total construct score.

According to Ghozali (2016: 96) the F test aims to determine whether the independent variables (independent) jointly affect the dependent variable (dependent) procedures that can be used are as follows: In this study, a significance level of 0.05 was used with degrees of freedom \(( nk)\) where \( n \); number of observations and \( k \); number of variables.

**RESULT AND DISCUSSION**

Data Normality Test is to find out whether a variable is normal or not. To find out the probability of normally distributed data, the authors tested the data with the Kolmogorov-Smirnov test.

**Table 1. Test Result Specifications**

<table>
<thead>
<tr>
<th></th>
<th>x1</th>
<th>x2</th>
<th>x3</th>
<th>y</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Normal Parameters^a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.012</td>
<td>3.906</td>
<td>3.924</td>
<td>3.959</td>
<td>.000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.6227</td>
<td>.6291</td>
<td>.5505</td>
<td>.5700</td>
<td>.11415180</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>.238</td>
<td>.209</td>
<td>.232</td>
<td>.235</td>
<td>.089</td>
</tr>
<tr>
<td>Negative</td>
<td>-.228</td>
<td>-.209</td>
<td>-.232</td>
<td>-.235</td>
<td>-.067</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>1.328</td>
<td>1.221</td>
<td>1.351</td>
<td>1.368</td>
<td>.518</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.099</td>
<td>.102</td>
<td>.052</td>
<td>.047</td>
<td>.951</td>
</tr>
</tbody>
</table>

^a. Test distribution is Normal.
^b. Calculated from data.

Based on these results, the significance value of the three variables studied is above 0.05 so that the data is normally distributed. This means that it is feasible to be used as material in the next data processing stage.

Multicollinearity means that the independent variables in the regression model have a perfect or near-perfect linear relationship (high correlation coefficient or even 1). A good regression model should not have a perfect or near-perfect correlation between the independent variables.

**Table 2. Multicollinearity Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>Age</td>
<td>0.072</td>
</tr>
<tr>
<td>Education</td>
<td>0.051</td>
</tr>
<tr>
<td>Health</td>
<td>0.277</td>
</tr>
</tbody>
</table>
The results of the multicollinearity test show that all variables have a VIF value of <10 and a tolerance value of >0.1. This shows that there are indications of the existence of multicollinearity in the equations that are done and it is not proven or there is no multicollinearity in the equations that are done or the relationship that occurs between the independent variables can be tolerated so that it will not interfere with the regression results.

The heteroscedasticity test can be identified by looking at the graphic plot or the relationship between the dependent variable and its residual value. Heteroscedasticity problems will not arise if the correlation significance value is more than 0.05.

### Table 3

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Coefficient</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lag k</td>
<td>0.765</td>
<td>0.000</td>
</tr>
<tr>
<td>PP</td>
<td>-0.25</td>
<td>0.114</td>
</tr>
<tr>
<td>SD</td>
<td>-0.068</td>
<td>0.036</td>
</tr>
<tr>
<td>SMP</td>
<td>-0.072</td>
<td>0.050</td>
</tr>
<tr>
<td>SMA/SMK</td>
<td>-0.162</td>
<td>0.043</td>
</tr>
<tr>
<td>Diploma</td>
<td>0.342</td>
<td>0.342</td>
</tr>
<tr>
<td>Sarjana</td>
<td>-0.234</td>
<td>0.053</td>
</tr>
<tr>
<td>Magister/Doktoral</td>
<td>-0.765</td>
<td>0.412</td>
</tr>
<tr>
<td>Cons</td>
<td>14.987</td>
<td>5.877</td>
</tr>
</tbody>
</table>

Sources: processed data, 2022

Based on the multiple linear regression test in the table, it is known that the constant (α) is 6342 while the age value is 125. The education value is 055 and the health value is 048 (b/regression coefficient). So that the regression equation can be written:

\[ Y = 6.342 + 0.125X_1 + 0.055X_2 - 0.048X_3 + e \]

The regression coefficients can be translated as follows from the regression equation, it is known that the value of \( \beta \) is 6.342 which means the constant value is negative, meaning that the value of the independent variable is considered constant or equal to zero, then economic growth is decreasing. The quality of human resources, economic growth will increase by 125%. The X2 coefficient value is 0.55, which means that the X2 coefficient value is positive, which means that for every 1% increase in the quality of human resources in the education sector, economic growth will increase by 0.55%. The X3 coefficient value is 048, which means that the X3 coefficient value is negative, which means that for every 1% increase in the quality of human resources in the health sector, economic growth will decrease by 048%.

Based on the value of the significance results for the influence of the variable X1 the quality of human resources vs age, it produces a t - count value (1.393 < 12.71), while the significance value (Sig) above is known to be the significance value (Sig) of the health variable (X1) of 0.396 where 0.396> 0.05. From these results, it can be concluded that H1 is rejected, which means that the development of health sector infrastructure does not have
a significant effect on economic growth in Malang Regency in 2018-2021. Based on the value of the significance results for the influence of the variable X2 on the quality of human resources in the education sector, it produces a t-count value \(0.439 < 12.71\), while the significance value (Sig) above is known to be the significance value (Sig) of the education variable (X2) of 0.737 where \(0.737 > 0.05\). From these results, it can be concluded that H2 is rejected, which means the quality of human resources in the education sector does not have a significant influence on economic growth in Malang Regency in 2018-2021. Based on the value of the significance results for the influence of the variable X3 the quality of human resources in the health sector, it produces a t-count value \(0.866 < 12.71\), while the significance value (Sig) above is known to be the significance value (Sig) of the agricultural variable (X3) of 0.546 where \(0.546 > 0.05\). From these results, it can be concluded that H3 is rejected, which means the health sector does not have a significant influence on economic growth in Malang Regency in 2018-2021.

Based on the results of regression, it was found that from the results of research on variable X1, namely the quality of age human resources, it was positive, which means that for every 1% increase in the quality of age human resources, economic growth has increased by 0.125%. So it can be said that the higher the quality of human resources of age, the existing economic growth will also increase. If human resources are good, it can increase existing human resources. However, age also does not fully affect economic growth, but there are other variables that also influence it, namely the education sector and the health sector. The results of this study are different from Fajar’s (2015), with the title research on the quality of human resources on economic growth using quantitative methods with the results of research that the age variable has a negative and statistically significant effect on economic growth.

Based on the regression results, it was found that from the results of research on the X2 variable, namely the quality of human resources in the education sector, it was positive, which means that for every 1% increase in the quality of human resources in the education sector, economic growth increased by 0.125%. Human resources in the education sector, the existing economic growth is also increasing. So that good educational infrastructure and facilities will create continuity and smoothness in activities, as well as improving the quality of education will give birth to quality human resources so as to increase economic growth in the region. But the quality of education also does not fully affect economic growth but there are other variables that also influence it, namely the health sector and productive age variables. The results of this study are different from research conducted by Freshka Hasiani (2015), with the title research on the quality of human resources on economic growth in Pelalawan Regency using quantitative methods with the results of research that education variables have a simultaneous and statistically insignificant effect on economic growth.

Based on the results of regression, it was obtained that from the results of research tests on Variable X3, namely the quality of human resources in the health sector, it was positive, which means that for every 1% increase in the quality of human resources in the Health Sector, economic growth increased by 0.048%. So it can be said that if the quality of human resources in the health sector increases, the value of economic growth will also be higher. The quality of human resources in the health sector means that the existing economic growth is also increasing. If the health sector is good, it can be said that the creation of a healthy life for a society can increase existing human resources, but the
The development of health infrastructure also does not fully affect economic growth but there are other variables which also affect it apart from the variables of Infrastructure Development in the education sector and age.

The results of this study are different from research conducted by ethical research et al (2015), with the title Research Effect of the quality of human resources and infrastructure on investment growth in the IDX investment gallery, which uses quantitative methods with research results that health variables have a positive and statically significant effect on Economic growth that is different from the research results is that the health sector has a positive and significant effect.

**CONCLUSION**

Based on the results of research that has been done by researchers with the title The Effect of Quality of Human Resources on Economic Growth in Malang Regency. Then it can be concluded as follows age (X1) has a positive but not significant effect, this is evidenced by the significance value (sig) of the age variable (X1) of 0.396 > 0.05. From these results it can be concluded that H1 is rejected, which means that age has no significant effect on economic growth in Malang Regency, year 2018 – 2021. Education (X2) has a positive but not significant effect, this is evidenced by the significance value (sig) of the education variable (X2) of 0.737 > 0.05. From these results it can be concluded that H2 is rejected, which means that education has no significant effect on economic growth in Malang Regency in 2018 – 2021. Health (X3), has a positive but not significant effect, this is evidenced by the significance value (sig) of the health variable (X3) of 0.546 > 0.05, from these results it can be increased that H3 is rejected which means that health has no significant effect on economic growth in Indonesia. Malang Regency in 2018 – 2021

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