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THE ANALYSIS OF FACTORS AFFECTING HUMAN **DEVELOPMENT INDEX IN THE REGENCIES/CITY OF** EAST NUSA TENGGARA PROVINCE, INDONESIA

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Abstract

As the taxes and investment increased, it also can increase the GRDP (Gross Regional Domestic Product), besides that, local governments need a Balanced Funds to encourage decentralization. The research objectives are to analyze the influence of Taxes, Investment, and the Balanced Funds on HDI (Human Development Index) that mediated by GRDP growth. The research observation points are based on Cross Section data, namely 21 regencies and 1 city, using 6-year panel data, so the number of research observation points is 132. The analysis technique used in this study is path analysis. Research results show that: 1) Tax has a positive and significant effect on GRDP, Investment and Balanced Funds do not have a positive effect on GRDP. 2) Tax, Balanced Funds, GRDP have positive and significant effect on HDI, Investment does not have a positive effect on HDI. 3) GRDP is able to mediate the effect of Tax on HDI; the GRDP does not mediate the effect of Investment on HDI while the GRDP does not mediate the Balanced Fund on HDI.

Keywords: Tax, Investment, Balanced Funds, GRDP Growth, HDI



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INTRODUCTION

Development is a change based on social status, community attitudes, and institutions, (Todaro, 2011). HDI is a solution to overcome poverty. Some things that cause the importance of studying HDI, (Central Statistics Agency) include: 1) HDI is a measure of the success of human development; 2) HDI measures ranks in regional and state development; 3) HDI as a measure of government performance. Developing countries, especially Indonesia, use Sustainable Development Goals (SDGs) as indicators in the formulation of strategic development goals and programs. the success of achieving SDGs depends on managements, implementation of inclusive growth, quality of public services, and community empowerment (Kuncoro, 2013). Infrastructure development facilitates people's access, and increases per capita real consumption (Delavallade, 2006).

HDI is a benchmark in achieving the quality of human development. Three basic references in measuring HDI are life expectancy, knowledge, and a decent standard of living. Life expectancy indicator at birth is a measure of public health. Education is rated by the average of schooling period expectations. Per capita expenditure is a measure of people's standard of living. National development is also determined by investment. Investment can be useful and beneficial for development and increase the number of workers (Hugan, 2012). According to Saragih (2003), Government expenditure factor is calculated into GRDP which will be managed with reliable human capital. In line with this, human development has an influence on economic growth, Yunita Mahrany (2012). Economic development is determined by the quality of human resources (Sri, 2010).

The purpose of this study are: 1) Analyzing the effect of Tax, Investment, and Balanced Funds on GRDP Growth; 2) Analyzing the effect of Tax, Investment, Balanced Funds, and GRDP Growth on HDI; 3) Analyzing the role of GRDP growth in mediating the effect of Tax, Investment and Balanced Funds on HDI.

LITERATURE REVIEW

Human Development Components, namely: 1) Life Expectancy Rate is population life expectancy; 2) Education index, which is an index that measures the quality of Human Resources, 3) Decent Living Standards, also known as purchasing power index, which can be measured by Gross Domestic Product (GDP) indicators seen from the magnitude of per capita expenditure. Human capital is a major factor in economic growth (Brata, 2002). Similar to research from Yunita Mahrany (2012) that human development related to the quality of human capital affects economic growth. This reliable HR is an economic requirement, (Sri, 2010).



Economic Growth is a measure of the success of development in development efforts (Mankiw, 2006). Economic growth is an indicator of the success of development in an economy. There are three important economic factors (Romer), including: a) Accumulation of capital, capital goods used for industrial processes; b) The quality of the workforce, high productivity, must be supported by qualified human resources from the available workforce; c) Technological Progress. Technology is able to increase efficiency in production. The indicators of economic growth according to Adisasmita are as follows: a) Income imbalance; b) Changes in Economic Structure. Changes in economic structure can be seen from the agricultural sector changing to industry where the industry will contribute more Job Opportunities than the agricultural sector; c) Gross Regional Domestic Product is a measuring tool in regional economic development. There is a way of calculating GRDP, namely the approach of production, income, and expenditure.

Balanced funds are funds to finance the needs of local governments. It is expected that government transfers can be effective and beneficial for development, and can improve HDI, because HDI is a measurement tool in human development and how effective a balanced fund is given. Adhisasmita (2005), argues that more investment leads to developed regions compared to poor regions. Investment is the basis for economic growth GRDP growth (Syafii, 2009).Investment can produce labor that can increase community income (Hugan, 2012). According to Jogiyanto (2003), there are two types of investment, namely: 1) Direct Investment is the process of acquiring a majority stake in a business to gain sufficient control of a company, 2) Indirect Investment in the form of securities. For example stocks and bonds, and so on. According to Tandelilin (2010) several reasons for investing include the following: 1). Earn a steady income; 2) Prevent inflation; 3) tax efficient. The investment process of investment includes the basis of investment and the investment decision process, (Tandelilin 2010).The relationship between return and risk of an investment. The investment process consists of the basis of investment decisions, namely the level of return and risk, (1). Return on investment is to get a profit, the level of return on investment is called return, (2). Risk as a consequence if investors incur losses, (3). The relationship between Risk and Return is unidirectional. That is, every risk must be considered. Tax on state cash sources is based on rules and is forcing to pay government expenses, (Sumitro, 1998), the tax characteristics are: 1) Taxes are paid according to the applicable constitution; 2) Results are not shown directly; 3) It can be forced (juridical).

Growth is a key condition for inclusive growth, Klasen (ADB, 2010). Inclusive growth can reduce disparity between groups. There are several efforts in inclusive growth, namely: (1) macroeconomic stabilization, supported by fiscal policies and incentives for agriculture, (2) increasing production capacity, supported by infrastructure development and preservation of



natural resources for the long-term sustainability of economic growth; (3) synergy and integration of poor community empowerment programs ranging from villages to national and; (4) increasing the capacity and access of the poor, protecting the control of productive assets, and accelerating the increase in income, (Rusastra, 2011). Habito also explained that inclusive would reduce the level of poverty. Min Tang (2008) argues that poverty is caused by income distribution problems. Inclusive economic growth is the key to overcoming poverty (Kakwani, 2004) Inclusive growth is interconnected with economic growth; a close relationship looks simple but complex (Lundstrom, 2009). According to Heal (1998), inclusive growth contains a time dimension because sustainability is related to the future. Inclusive development can create jobs and improve public services.

According to Lincolin Arsyad (2016), the growth of national products and population is a major aspect of the economy. The growth of national products has 3 elements, namely: 1) Natural resources are the center of economic activity with limited supplies; 2) Human resources are judged by the population, 3) Capital, it is very important role in the economy. Capital, and labor and technology are included in classical theory (Samuelson and Nordhous: 2004). Economic growth in production increases and welfare increases. Jonathan Skinner (1996) stressed the need to encourage government taxes and government expenditure policies.

The government must provide health insurance and health facilities through government expenditure, namely direct expenditure. Todaro (2000), According to Sukirno (2010), an increase in investment can encourage national income, and aggregate demand. Technological progress, institutions, and ideological suitability are needed in economic growth. (Kuznets 1971). GRDP and investment are the main factors in the economic world. Investment consists of physical investment and human capital. Physical investment is any form of profitable new capital creation (Mankiw, 2000). Human capital investment is the value and experience of productivity and income (Scultz, 1961; Sjafii, 2009: 59). Humans are assets of real wealth in development that can affect profit maximization, Ranis (2004). Human resources are an effort to empower people to work optimally (FustinoCardos Gomes, 2003). The contribution to development is by investing for the improvement of human resources (Kosack and Tobin, 2006; Bosman, 2010). Improving employee performance through investment in education and health and developing technology (Bosman, 2010). The relationship between GRDP growth and human development always has in common (De Gregorio et al., 2004).

According to Keynes in Sukirno (2005) that government expenditure is a budget allocation in regulating the economy each year. High economic fluctuations will result in unemployment. In another perspective, the balanced fund can weaken the relationship between the Local Revenue and direct expenditure, this condition occurs when the regional government



does not receive the balanced fund as planned, so that the source of income becomes low and the balanced fund cannot mark the budgeted direct expenditure. GRDP (Gross Regional Domestic Product) is an indicator of economic growth (Mankiw, 2000. Economic growth is highly dependent on the rate of investment growth (Arsyad, 1999). Investment can increase income, (Jhingan 1999). Government investment is needed to improve the economy. The role of the government is indispensable to prevent market failure by the private sector (Mangkoesoebroto, 1994).

CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

GRDP growth is influenced by three factors namely Tax, Investment, Balance Funds which can increase HDI. Investment in an area will result in economic growth and factors of production to the area concerned. In developed regions that are experiencing growth, investment will increase, and so on. Therefore, investment will be concentrated in developed regions. The investment allocation will be centralized in developed regions. This unbalanced investment allocation will result in population migration and result in high poverty rates. The concept of human capital emphasizes the relationship between improving performance and the need for investment to increase human resources. Economic growth is the main indicator tool. The government only emphasizes the achievement of economic growth but does not pay attention to human development, so that increased economic growth is not enjoyed by the poor (Kembar Sri Budhi, 2010 in FebyShinta Dewi, 2013).

Balancing Funds are funds provided based on proportional distribution according to regional needs. If the regional government receives a significant balanced funds from the central government, the source of government revenue does not only come from the Regional Original Revenue alone. Local Original Revenues and also a large Balanced Fund will be a high source of regional income that can fund direct expenditure. However, in other perspectives the balanced fund can weaken the relationship between the original regional income and direct expenditure, this condition occurs when the regional government does not receive the balanced fund as planned, so that the source of income becomes low and the balanced fund cannot finance the budgeted direct expenditure.

Government investment is needed so that it can overcome market failures by the private sector. GRDP growth is closely related to increased investment. The development of the amount of investment with the development of GRDP has an increasing trend. The amount of labor absorption increases in line with the development of GRDP, this is evidenced by the reduction in poverty. According to Sukirno (2010), high investment will increase income, and



aggregate demand, so that it can drive the private and household growth sector so that it can maximize its resources.

Article 33 of the 1945 Constitution states that the state is mandated to ensure the education, religion, security and social welfare of the Indonesian people. This means that the results of the management of strategic production factors and natural resources (Article 23 of the 1945 Constitution) are fully utilized for the welfare and prosperity of the people which is realized through government expenditure. Government spending has a relationship to economic growth (JamzaniSodik, 2007). According to Saragih (2003) the increase in Regional Original Revenue must be in line with the growth of the regional economy, the regions must be given freedom in accordance with the needs of the region. According to Cristy (2015), the Balanced Fund has a positive effect on GRDP and spending directly has an effect on HDI. According to LilisSetyowati (2012), GRDP growth has no positive effect on HDI while the Balanced Fund has a positive effect on HDI. Taxes affect the HDI, (HerlinaRahman, 2005: 38). Regional Original Income is a source of income from taxes, regional retribution. According to UNDP, human development is related to economic growth. Growth is also related to human capital and not only about physical capital. The new growth theory holds that the importance of increasing human capital and productivity. One way is to improve the quality of education so that knowledge and skills also increase so that it encourages work productivity. Technological progress is the main thing and concerns physical capital and human capital. Based on the theories and concepts above, the conceptual framework is described as below:

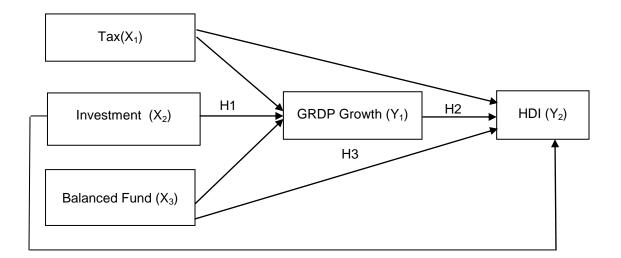


Figure 1. Proposed Research Model



Based on the theoretical foundation and conceptual framework, the following hypothesis is formulated:

H₁: Taxes, Investment, and Balanced Fund have a positive and significant effect on GRDP Growth in Regencies / City in East Nusa Tenggara Province.

H₂: Taxes, Investment, Balanced Funds, and GRDP Growth have a positive and significant effect on HDI in Regencies / City in East Nusa Tenggara Province.

H₃: GRDP growth mediates the effect of Tax, Investment, and Balanced Funds on HDI

RESEARCH METHODS

This research covers 21 regencies and 1 city in East Nusa Tenggara Province. The Province of East Nusa Tenggara was chosen as the location of the study because the HDI of East Nusa Tenggara Province ranks third lowest so there needs to be an improvement to its Human Development Index. Exogenous variables in this study consist of: Tax (X₁), Investment (X₂), and Balanced Funds (X3). Endogenous Variables in this research are HDI (Y_2), Intermediate variables are mediation or intervening which has double function, namely Economic Growth (Y₁).

The type of data used is quantitative data, namely data on the Regional Revenue and Expenditure Budget, and GRDP in East Nusa Tenggara Province. Qualitative data in this study is information about the Regional Revenue and Expenditure Budget and GRDP. Source of data used in this study was through in-depth interviews. This study uses secondary data obtained from the Central Statistics Agency and the Financial Bureau of East Nusa Tenggara Province using 6-year panel data, so that the number of research observation points is 132.

Data Collection Method is by observing documents from related institutions such as the Central Statistics Agency report on Tax, Investment, Balance Funds, GRDP Growth, and HDI in East Nusa Tenggara Province. In-depth interviews in this study were conducted with the Department of Health and the Regional Development Planning Agency and R & D regarding Tax, Investment, Balance Funds, GRDP Growth and HDI in Regencies / City of East Nusa Tenggara Province.

Descriptive analysis in this study by applying descriptive statistics to calculate averages, tables, figures created or calculated with the SPSS application program or Microsoft Excel. Inferential Analysis, namely Path analysis using SPSS. Path analysis is the application of multiple linear regression analysis to predict causality relationships between variables (causal models) that have been predetermined based on theory.



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RESULTS AND DISCUSSION

Secondary data was used from the Regional Development Planning Agency and the Central Statistics Agency for regencies / city in East Nusa Tenggara Province, namely Taxes, Investment, Balanced Funds, GRDP and HDI in East Nusa Tenggara Province. The results of this study include: 1) Direct Effects of Tax (X_1) , Investment (X_2) , Balanced Funds (X_3) on GRDP Growth (Y_1) .

Model		Unstandardized Coefficients		Standardized Coefficients		
		В	Stand. of Error	Beta	t	Sig.
1	(Constant)	5.017	.137		36.604	.000
	Тах	2.417	.000	.576	7.262	.000
	Investment	7.696	.000	.079	1.034	.303
	Balanced Funds	-5.178	.000	165	-2.072	.040

Table 1.	Linear	Regression	Model	1
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a. Dependent Variable: GRDP

Based on the multiple linear regression test table above, it is known that Tax has a positive and significant effect on GRDP, while investment and Balance Funds have no significant effect on GRDP. The results of this study are in line with the research concluded by Aprilia Damaningrum (2016), that local tax has a positive and significant effect on GRDP Growth, Sellilmaniar (2017), Investment has no positive effect on GRDP. Albert Gamot Malau (2012) suggests that investment does not have a positive effect on GRDP in Riau Islands. Muhamad Nasir (2017) explains the Balance Fund does not affect the GRDP; 2) The Direct Effect of Tax, Investment, Balance Funds, and GRDP Growth on HDI. The results of processed data on the influence of Tax, Investment, Balance Funds, GRDP on HDI are presented, then the regression equation is made as follows:

		Unstandardi				
Model	-	В	Stand. of Error	Beta	Т	Sig.
1	(Constant)	43.171	5.148		8.386	.000
	Tax	1.584	.000	.331	3.611	.000
	Investment	-8.851	.000	008	107	.915
	Balanced Funds	1.062	.000	.295	3.768	.000
	GRDP	1.945	.980	.170	1.984	.049

a. Dependent Variable: HDI



The table describes that Tax, Balanced Funds and GRDP Growth (Y_1) has a positive and significant effect on HDI (Y₂). Investment (X₂) has no positive and significant effect on HDI (Y₁) and Tax (X_1) . This research has similarities with the research concluded by ArfahHabibSaragih (2017), that Tax has a positive and significant effect on HDI. According to IlhamIriawan (2009), that investment is not significant to HDI in Indonesia. Abdul Mafahir (2017) argues that the Balanced Fund has a positive and significant effect on HDI; 3) GRDP as a Mediation Variable between Taxes, Investment, and Balanced Funds on HDI. Indirect Tax Effects (X_1) , through the GRDP (Y_1) , on the HDI (Y_2) can be counted using the following formula:

Information : a=2.417 b=1.945 Sa=0.00 Sb=0.98 $z = \frac{a.b}{\sqrt{b^2 s a^2 + a^2 s b^2}}$ $=\frac{2.417.1.945}{\sqrt{1.945^20.00^2+2.417^2x0.980^2}}$ $=\frac{4.701}{\sqrt{5.841.0.960}}$ $=\frac{4.701}{2.367}$ =1.98

GRDP mediates the Effect of Tax on HDI, with a Z value of 1.98. Z count> 1.96, then H0 is rejected, meaning that the GRDP is able to mediate the effect of tax on HDI.Indirect Investment Effect (X₁), through GRDP (Y₁), on HDI (Y₂). GRDP growth does not mediate investment on HDI. This is because z count<1.96, then H0 is accepted, meaning that GRDP does not mediate the effect of investment on HDI. Indirect Effects of Balanced Funds (X₁), through GRDP (Y₁) on HDI (Y_2). GRDP growth does not mediate the effect of investment on HDI, with the zobel test of -1.98. This is because z count<1.96, then H0 is accepted meaning that the GRDP does not mediate the influence of the Balanced Fund on HDI.

The results showed that the effect of tax on GRDP had a regression coefficient of 0.576 which directly affected the tax with GRDP. The absolute value of 0.576 has no effect, with a P value of 0.000, the null hypothesis is rejected at the significance level of less than 0.05. This means that tax has a positive and significant effect on GRDP. The effect of investment on GRDP shows a positive and not significant effect on GRDP. The null hypothesis is accepted



because the p value of 0.97 is greater than 0.05. The Balanced Fund has a positive and not significant effect on GRDP. An absolute value of -0.165 has an effect, with a p value of 0.040, the null hypothesis is rejected at a significance level of 0.05. The Balanced Fund does not have a positive effect on the GRDP.

Tax has a positive and significant effect on HDI, the regression coefficient is 0.331. The null hypothesis is rejected because the p value is 0.00. Tax has a positive and significant effect on HDI. The effect of investment on HDI is not significant on HDI. The null hypothesis is accepted because the p value of 0.97 is greater than 0.05. The Balanced Fund has a positive and significant effect on HDI. An absolute value of -0.165 has no effect with a p value of 0.040, the null hypothesis is rejected at the significance level of 0.05. This means that the Balanced Fund has a negative effect on GRDP.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the study it can be concluded that: 1) Taxes have a positive and significant influence on GRDP, Investment and Balanced Funds do not show a positive effect on GRDP; 2) Tax, Balanced Funds and GRDP have positive and significant effect on HDI, while investment does not have a positive effect on HDI; 3) The effect of GRDP mediates the effect of Tax on HDI, GRDP does not mediate the effect of Investment and Balanced Funds on HDI.

Based on the results of the analysis and conclusions, it is recommended that the East Nusa Tenggara Provincial Government need to improve the Human Development Index through education and health, so as to create community welfare. There is an uneven distribution of income and development in an area, so the government must oversee the distribution of funds and infrastructure. Instead, the Government should increase investment equally so that welfare increases and poverty levels will decrease. The government must work even harder in increasing the GRDP by building quality human resources in order to be able to utilize existing resources.

This study still has some limitations in terms of research methodology which are limited number of samples and also the indicators of information and research time that may restrict generalization of the study. It is hope that further researchers can complement the shortcomings of this study.

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