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The Influence Of Structural Transformation, Education, and Open Unemployment on Poverty in Districts/City of Bali Province

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 ABSTRACT : This research aims to analyze the partial and simultaneous effect of structural transformation variables, education, open unemployment on poverty, and the most dominant variables in influencing poverty. This research was conducted in all district/city of Bali Province and used panel data (time series data for 10 years and cross section data as many as 9 districts/city) with data collection methods through non-participant observation (secondary data). The analysis technique used in this research is multiple linear regression analysis. The results of this research indicate that simultaneously the structural transformation, education, and open unemployment have an effect on poverty in districts/cities of Bali Province. Partially, structural transformation and education have a negative and significant effect on poverty in the districts/city of Bali Province, while the open unemployment has a positive and significant effect on poverty in the districts/city of Bali Province. The variable with the most dominant influence is the education variable because it has the largest value of standardized coefficients beta among other independent variables.
Keywords:Structural Transformation, Education, Open Unemployment, and Poverty

I.   INTRODUCTION

Basically, the development process is not just an economic phenomenon. Development is not only shown by the achievements of economic growth achieved by a country, development has a broad perspective. Development is a process of change towards a better condition through well-planned efforts. The development process basically has four main dimensions, namely: (1) growth, (2) poverty reduction, (3) economic change or transformation, and (4) sustainable development from an agrarian society to an industrial society (Alfarabi, et al., 2014), however development that has been put into action stumble upon several obstacles hence the four main dimensions of the development process failed to be achived optimally. One of the four main dimensions of development is poverty reduction. According to Todaro (2010) in developing countries there are still a lot of striking poverty. Poverty problem is the most intriguingsubject to study and is the most important and easiest thing to assess in order to the success or failure of government in a country (Dewi, 2011). Poverty is a multidimensional concept of human well-being which includes various traditional measures of prosperity such as income, health and security. On the other hand, the poverty trap which shackles the poor as the root act of all incapability has strike the attention of the world community (Pramesti, 2018). The central and local governments have tried to reduce poverty through various policies. Over the past two decades, Indonesia has implemented a number of social protection programs targeted directly at poor households, including the rice subsidy program, Rastra / BPNT, and its predecessors, Raskin and OPK; direct cash transfer programs, BLT and BLSM; and CCT, PKH and BSM programs, and *etc* (Olken, 2019).The policiesaims to reduce the poverty rate, however in reality this goal has not been fully achieved

Bali is one of the provinces in Indonesia that cannot be separated from poverty issues. The poverty in Bali continues to fluctuate every year. The percentage of poverty in Bali during the period 2010-2019 continued to fluctuate rather insignificantly. The highest poverty rate occurred in 2010 at 5.67 percent, while the lowest poverty rate occurred in 2019 at 3.79 percent. For several years the poverty rate continued to increase, namely in 2013 by 4.49 percent and 2014 by 4.76 percent and in the following years it decreased to 3.79 percent in 2019. The average poverty rate in Bali Province has been classified into the low, however, if viewed in each districts/city in Bali that has poverty rate higher than the average rate in Bali. In 2019, when viewed per districts/city there are still districts/city that have a percentage of poor people above the average poverty rate in Bali. Many negative impacts resulting from poverty, causing many social and economic problems. Poverty is believed to be very influential on national economic development in a country. Poverty is likened to a serious disease that appears in social and economic life where it occurs when the condition of the community is always

experiencing shortages, especially in the economic sector because if the economy of the community is unstable it will have an impact on all the needs of the community itself, and will automatically lead to poverty (Suputra et al., 2015).

Seeing these conditions, the poverty that occurs is certainly caused by certain factors. According to Kuncoro (2004: 22), the country's population is poor because they depend on the subsistence agricultural sector, a traditional production method, which is often accompanied by apathy towards the environment. Seeing the causes of poverty, there are several districts/city in Bali Province that still depend income from the agricultural sector, but over time the contribution of the agricultural sector to GRDP has decreased and has shifted to the secondary or tertiary sectors. This change in economic structure can be seen from changes in the composition of the upper economic sector. Contribution to GRDP within a certain period (Cita and Wirawan, 2015). Seeing this phenomenon, it can be said that poverty can generally be identified from the existence of structural transformation, namely a process of transition from a traditional economic system to a modern economic system. According to Wiwekananda (2016) changes in the structure of the economy from a traditional economy to a modern economy cause a shift in labor and the contribution of GRDP or often known as structural transformation. If the structural transformation is less balanced it will lead poverty. In addition, according to Sharp, poverty occurs because of differences in the quality of human resources related to education. The education factor greatly influences the level of poverty because education is a very significant human capital asset for increasing skills, knowledge and shaping individual integrity so as to reduce the tardiness of an area. In theory, the higher the education, the individualproductivity will also be higher. However, in the province of Bali it is the opposite. The school enrollment rate shows that the higher the level of education, the lower the school participation rate. This will influence individuals to get a job. When individuals have low education, the opportunity to get a job is also low so that they are classified as unemployed.The country faces two major challenges in an unpredictable international and domestic area: those are providing better and safer jobs and increasing productivity to help raise living standards and reduce poverty. Over the past few months, new global and domestic threats to economic growth have emerged that could hinder progress in employment and productivity (Dong and Manning, 2017).

Unemployment is one of the causes of poverty and could potentially create vulnerability to various crimes and social problems, the poverty and political unrest is important to pay close attention to, regarding the problems unemployment (Cang and Wu, 2012). The government's decision to implement regional autonomy has begun to show results, even though the reduction in the unemployment rate has not solved all poverty problems. The problem of the unemployment rate in districts/city is still fluctuating. This is caused by the potential that each region has is different. The potential that exists in each region is one of the things that is closely related to people's livelihoods starting from those working in the primary, secondary and tertiary sectors. The unemployment rate in Bali is inseparable from the low employment opportunity factor.

II.   CONSEPTUAL MODEL AND HYPOTESIS

The concept of this research is to analyze the influence of structural transformation, education, and open unemployment on poverty in districts/city of Bali. The dependent variable of this research is poverty as seen from the percentage of poor people in districts/city of Bali and the independent variables for this research are structural transformation, education, and open unemployment.Poverty is a problem that is difficult for a country to avoid, especially a developing country such as Indonesia. Many factors caused poverty in a country. One of them is due to the unbalanced structural transformation, this is because land demand by the industrial sector encourages large-scale conversion of paddy fields to non-agricultural uses. A similar situation which places farmers to be unable to access resources and results in polarization of resource control is an emphasis on poverty. Seeing this situation, the poor are in the most sensitive condition and will be increasingly left behind in development (Nugroho, 2004).According to the Pattern of Development theory proposed by Chenery, it explains the structural changes in the stages of the process of economic change from developing countries that have undergone a transformation from traditional agriculture to the industrial sector as the main engine of economic growth. When this structural transformation occurs, the role of economic gains in the agricultural sector is diminished and replaced by the industrial sector, this imbalance shows a blockage in the flow of labor from the agricultural sector to the service and industrial sectors or it can be said that when there is a structural transformation, a reallocation of labor occurs. from agricultural (rural) to non-agricultural (urban) (Christiaensen and Martin, 2018). However, if structural transformation can run in balance, it will play a role in reducing poverty.

Furthermore, Sharp as cited in Kuncoro (2004: 23), he identifies the causes of poverty from an economic perspective. According to Sharp, there are three causes of poverty, among others; (1) First, on a macro level, poverty arises because of the unequal patterns of resource ownership which lead to an unequal income distribution. The poor have only limited and low quality resources; (2) Second, poverty arises from differences in the quality of human resources. Low human resource quality means low productivity, which in turn low

wages. The low quality of human resources is due to low education, unfortunate fate, discrimination, or heredity; (3) Third, poverty arises from differences in access to capital. These three causes of poverty boil down to the vicious circle of poverty theory.

Looking at the second cause proposed by Sharp, namely poverty arises due to differences in the quality of human resources, which of course is closely related to the factor of education. Education is also the most important thing in influencing the level of poverty in a country. Based on research by Anderson (2012), Margareni et al., (2016), Arias and Sanchez (2016), it is stated that education is very influential on the level of poverty in a country. When someone's education is low, the opportunity to get a job is also low so that it can be classified as unemployed. The unemployment rate will directly impact the poverty level. This is in line with Okorie and Anowor's (2017) research which states that unemployment is one of the causes of poverty. Research by Aiyedogbon and Ohwofasa (2012), Hu and Giuliano (2014), also found that unemployment positively and significantly affects poverty. This is also supported by research by Meo, et al (2020) which states that there is a positive and significant relationship between unemployment and poverty, where unemployment has an almost two-fold effect on poverty.

Based on theory and previous research, hypothesis proposed in this research are as follows:

H1: Transformation structural, education, and open unemployment simultaneously have an effect on poverty in districts/city of Bali Province.

H2: Partially, structural transformation and education have a negative effect on poverty in the districts/city of Bali Province, while the open unemployment has a positive effect on poverty in the districts/cities of Bali Province.

H3: Education variable has the most influence on poverty in districts/city of Bali Province.

III.   RESEARCH METHODS

This research is used an associative quantitative approach with a causal relationship from 2010-2019 with research locations in the districts/city of Bali Province. The dependent variable in this research is poverty and independent variable are structural transformation, education, and open unemployment. The data used in this reasearch is in the form of panel data in the form of secondary data, namely data collected and published by other parties (Wirawan, 2016:7). The data collection method in this reasearch used the non-participant observation method, namely observation which is carried out by collecting data that is already available by certain agencies or institutions, in which the researcher is not directly involved (Sugiyono, 2014: 247). The data analysis technique used in this study is the multiple linear regression analysis technique with SPSS 26.0 software which is used to determine the effect of structural transformation (X_1), education (X_2), and open unemployment (X_3) on poverty (Y) in the districts/city of Bali Province. The regression equation used in this reaserch is as follows:

$$Y= \alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+ e \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.(1)$$

IV.   RESULT AND DISCUSSION

1)   Simultaneous Testing (F-Test)

For answer the first hypothesis will be assisted by a statistical test, namely the F test. The results of data processing using SPSS 26.0 can be seen in table 1

Table 1 The Result of Simultaneous Testing (F-test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	219.502	3	73.167	143.993	.000[b]
	Residual	43.699	86	.508		
	Total	263.201	89			
a. Dependent Variable: Poverty						
b. Predictors: (Constant), structural transformation, education, and open unemployment						

Based on table 1, the result of F-test shows that structural transformation, education, and open unemployment have a simoultaneous and significant effect on poverty inthe districts/city of Bali Province because the F-count value of 143.993 is greater than F-table 3.10 and the significance results obtained are 0.000 < 0.05. This result is supported by the adjusted R square value through coefficient of determination test (R^2). The coefficient determination test (R^2) is used to determine what percentage of the variation in the dependent variable can be explained by variations in the independent variable. The results of data processing using SPSS 26.0 can be seen in table 2.

Table 2 The Result of Coefficient Determination Test (R^2)
Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913[a]	.834	.828	.71283
a. Predictors: (Constant),structural transformation, education, and open unemployment b. Dependent Variable: Poverty				

The results of data processing using SPSS 26.0, it was obtained an adjusted R square value of 0.828 or 82.8 percent. It means 82.8 percent of the variation (fluctuation) of the poverty in the districts/city of Bali Province is influenced by variations (ups and downs) of structural transformation, education, and open unemployment, while 17.2 percent is influenced by other variables that are not included in the research model.

2) Partial Testing (t-test)
For answer the second hypothesis will be assisted by a statistical test, namely the t test. The results of data processing using SPSS 26.0 can be seen in table 3.

Table 3 The Result of Partial Testing (t-test)
Coefficients[a]

Model		t	Sig.
1	(Constant)	22.809	.000
	Structural transformation	-4.449	.000
	Education	-8.423	.000
	Open unemployment	3.363	.001
a. Dependent Variable: Poverty			

Based on table 3, the result of partial testing shows that:

The partial testing on the structural transformation variable has a negative and significant effect on poverty in the districts/city of Bali Province. This is indicated by the negative t count value of -4.449 and the significance value of the structural transformation variable of 0.000, which is smaller than the significance requirements used ($\alpha = 0,05$). The negative regression coefficient means if in district/city of Bali Province transformation structural occurred or changes in the contribution of each sectors to gross domestic product, namely from the primary sector to the secondary or tertiary sector, while the independent variable of education and open unemployment are fixed, poverty in district/city of Bali Province will be decrease. The result of research by Webb and Steven (2012) which state that structural transformation a very important role in reducing poverty, provided that the agricultural sector (primary sector) is still supported in the process of structural transformation. Lin's research results (2019) also show that structural transformation has a negative effect on poverty because structural transformation will usually be accompanied by new technology and job opportunities, which will help people increase their income so they can avoid poverty.The increasing economic growth in the tertiary sector and the decreasing contribution of the primary sector indicates a structural transformation in the districts/city of Bali Province. Structural transformation is needed because it has an impact on the addition of types of work so as to increase employment opportunities for people. Structural transformation needs to be accompanied by qualified human resources to support every process that occurs. If this cannot be realized, the structural transformation will only have an impact on economic losses which will reduce the employment opportunities of the people which are replaced by machines. The results of this study can be applied under normal conditions. Unlike the case at the time of the Covid-19 pandemic, it was the primary sector that was able to survive in the midst of these conditions because the sector that was used as a mainstay by the Province of Bali, namely the tourism sector (tertiary) was completely paralyzed due to the implementation of strict health protocols and very limited access to tourists. This policy led to the number of workers being dismissed and even some workers who had been laid off. It has an impact on the large number of unemployed people so that they do not earn income and are unable to meet their daily needs. If this condition lasts for a long time, it will increase the percentage of poor people in Bali Province. This condition can be said to be a condition for the failure to implement structural transformation caused by the Covid-19 pandemic.

The partial testing on the education variable has a negative and significant effect on poverty in the districts/city of Bali Province. This is indicated by the negative t count value of -8.423 and the significance value of the structural transformation variable of 0.000, which is smaller than the significance requirements used ($\alpha = 0,05$). The negative regression coefficient means if the education variable has increase, while independent variable of structural transformation and open unemployment are fixed, poverty in districts/city in Bali Province will be decrease because the education factor greatly influences the level of poverty (Margareni et al.,

2016).Education is the right way to improve the quality of human resources (Sirilius, 2017) and education is closely related to character building, and is an investment in human resources to get a better life (Rustariyuni, et.al, 2018). Through better education, the poor will have a better chance of getting out of their bad status in the future (Anderson, 2012). The results of this study are also supported by research results from Jamir and Ezung (2017) which state that a higher level of education will lead to better jobs and higher income which in turn will raise people's living standards and avoid poverty

The partial testing on the open unemployment variable has a positive and significant effect on poverty in the districts/city of Bali Province. This is indicated by the positive t count value of 3,363 and the significance value of the structural transformation variable of 0.001, which is smaller than the significance requirements used ($\alpha = 0,05$). The positive regression coefficient means if the open unemployment variable has increase, while structural transformation and education variable are fixed, poverty in districts/city in Bali Province will be increase. Okorie and Anowor (2017) in their research showed unemployment is one of the caused of poverty. Others research of Aiyedogbon and Ohwofasa (2012), Hu and Giuliano (2014), which found that unemployment positively and significantly affects poverty. This is also supported by other research, namely research by Meo, et al (2020) which states that there is a positive and significant relationship between unemployment and poverty, where unemployment has an almost two-fold effect on poverty.

3) The Result of Standardized Coefficient Beta Test
For answer the third hypothesis will be assisted by a statistical test, namely the standardized coefficient beta test. The results of data processing using SPSS 26.0 can be seen in table 4.

Table 4 The Result of Standardized Coefficient Beta Test

Model	Standardized Coefficients Beta
(Constant)	
Stuctural transformation	-.327
Education	-.620
Open unemployment	.148

Standardized coefficients beta test is used to determine the independent variables which have a dominant effect on the dependent variable. Based on table 4, it can be seen that value of the highest standardized coefficients beta is education variable. The result shows that education has a major effect on reducing poverty in district/city of Bali Province because when a person's education is higher, his productivity will also be higher which causes that person to get a job and high income to meet his daily needs, especially basic needs so as to avoid the vicious cycle of poverty.

V. CONCLUSION

Based on the result of data processing with SPSS 26.0 and testing simultaneously, it show that structural transformation, education, and open unemployment have a simoultaneous and significant effect on poverty in the districts/city of Bali Province and the result supported by the adjusted R square value of 0.828 or 82.8 percent.Partially, structural transformation and education have a negative and significant effect on poverty in the districts/city of Bali Province, while the open unemployment has a positive and significant effect on poverty in the districts/city of Bali Province.The variable with the most dominant influence is the education variable because it has the largest value of standardized coefficients beta among other independent variables.

Structural transformation is needed by a region in the development process, therefore it is hoped that the government can encourage structural transformation in various regions, which of course cannot be separated from the support of adequate facilities and infrastructure and regulations that encourage the acceleration of structural transformation. In addition, in the process of structural transformation, various sectors, both primary, secondary and tertiary, must be considered in order to produce a multiplier effect for all elements of society.The increase in education very important, therefore the government through educational institutions is expected to be able to provide adequate and equitable access to education for all people, both formal and informal education to encourage improvement in the quality of human resources so that there is no gap between one area to another and have an impact on decrease open unemployment and poverty. To reduce the open unemployment, needs the important role of the government, private sector, and society in creating a good working climate so that there are many job opportunities.

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