Poverty, Disparities and Human Development on Sustainability Development

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Abstract---Decreasing poverty line and improving the quality of human development is one of the objectives of development in Indonesia. Poverty has an impact multisectoral, not only concerning about household income but also the ability of households improves the quality of his life, that could be improve regional income. Poverty can cause disparities income in aech regencies or cities. The purpose of this research is look for the relations of poverty toward regional income, disparities, and human qualities. These researches used quantitative descriptive method by rekursif generalized component structured analysis (GSCA) with research areas in East Java. In GSCA, variable latent defined as a component of weight or aggregate of the indicators. This result of this research seen the model FIT of 76% and a component root mean square of 0.08% indicates that the overall model could be used and well received. Poverty has an impact to disparities as a direct and to regional income as an indirect, but poverty has not affected to human development and regional income.

Keywords---poverty, disparities, human development, GSCA

I. Introduction

One of the problems development in the developing country especially Indonesia is poverty. Decreasing poverty line is one of the purpose of development in Indonesia. One of the purpose SDGs in Indonesia is to end the poverty in all its forms everywhere. The other objectives of SDGs in Indonesia are End hunger, achive food security and improve nutrition and promote sustainable agriculture; Ensure healty lives and promote wellbeing for all at all ages; Ensure inclusive and quality eduaction for all and promote lifelong learning; Achive gender equality and empower all women and girls; Ensure access to water and sanitation for all; Ensure access to affordable, reliable, sustainable, and modern energy for all; Promote inclusive and sustainable economic growth, employment and decent work for all; Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation; Reduce income inequality within and among countries; Make cities and human settlement inclusive, safe, resilient and sustainable; Ensure sustainable consumption and production patterns; Take urgent action to combate climate change; Conserve and sustainably use the ocean, seas and marine resources for sustainable development; Protect, restore, and premete sustainable use of terrestrial ecosystem, sustainainable manage forest; Promote peaceful and inclusive societies for sustainable development; Strengthenthe means of implementing and revitalizing global partnership for sustainable development. These goals provide an important step forward in securing a sustainable future for the global world. Most goals are synergy and complementary. Therefore, a combined solution from several objectives contributes to the achievement of other goals[1].

According to Central Bureau of Statistics (BPS) in Indonesia the biggest poverty occurs in rural areas, this is different from research in China which shows that the greatest poverty occurs in urban areas[2,3]. Indonesia using measurement of poverty from the Central Bureau of Statistics (BPS) that uses three indek in measuring poverty. Head Count Index or more often abbreviated with P0 describe the percentage of the population that lives in the family with consumption expenditure

per capita below the poverty line. The bigger numbers P0 shows a high number of the percentage of people who are living under the poverty line. Second, Poverty Gap Index, P1, describing average size gap expenditure each poor people against the poverty line. This figure shows a gap between expenditure or the average income received poor people with the poverty line. The higher this index hence the economic life of the poor population of increasingly plunge. Third, the distributionally sensitive index, P2, accused of the spread of expenditure among the people of poor and it could also be used to know intensity poverty .The less this rate shows the income distribution among the people of poor will more fairly distributed [4] .

Kuznets hypothesis indicated that the early development gap distribution proceeds will high that influential to poverty[5,6].But this discrepancy is supposed to be reduced when development has been running so that the economic growth will be increase. Economic growth will be able to reduce the poverty number if followed by the reduction of the gap so income economic the poor and economic growth positively correlate [7,5]. Sustainable growth is one way to reduce poverty. In other countries, pro-poor policy in economics growth will provide in marginal revenue for the poor. Poverty will also increase disparities income besides that can also occur due to geographical and government institution[8,3]. In Indonesia, measurement on disparities income based on consumption expenditure approach so as to produce a Gini Ratio. In addition, to disparity income there are also gaps between regions/province which is measured using Williamson Index Entrophy Theil Index. Disparities among this region is also happening in China which happened between coastal areas and urban areas that made economic growth which was unequal in both of these areas [9].

Poverty is the concept of integrated with other sectors order to be able to form poverty circle. The impact of poverty was not only short-term such as low income per capita but capable of influential the long term especially on increased the quality of human development. Human capital are so important for investments in the future. Good health will add to life expectancy therefore time learning the long it will improve community incomes in search of work [6]. Poverty will have an influence to individual to prioritize on increased the quality of being human as education and health. The quality of human development often measured by Human Development Index for consisting composite index are life expectancy index, literacy rate, time of long schools and expenditure per capita. The Human Development Index (HDI) can also be seen as an indicator of the implementation of SDGs. This is calculated based on three indicators, namely longevity, measured as life expectancy at birth, education level and living standars measured by GDP per capita based on purchasing power parity (PPP) [10].

East Java is one of cities in indonesia having the digits poverty moderately high on 2014 is as much as 12,73 % and on the average a number national poverty is 10,39 % [2] .As one of the provinces which contributed GDP second largest after Jakarta should East Java capable of reduce the poverty number under on the average a number national poverty. Furthermore in this paper will show the relations between poverty, disparities, human development and regional income in East Java.

II. Contribution to Literature

This paper makes contributions to the empirical literature on poverty, human development and disparities. Several literature which concern of poverty has been delivered by experts. Poverty is a condition in an individual or household which is usually associated with a lack of material or resources. Poverty can also be a form of social marginalization from individuals, households or communities and also marginalized ethnic minorities. Even a female head of household who does not have adequate access to nutrition and unemployment is also categorized as a poor. Poverty can be measured by the proportion of the population below the poverty line, monthly expenditure or minimum income standards in the community [3,11-14]. Human development is another factor cause poverty. With a low level of human development it will increase unemployment so that it can increase poverty. This human development can be seen from access to education and health services. In line with Lim, et.al [15] research in the Philippines shows that education has a significant impact in increasing

income so that can reduce poverty [16]. In addition, the relations between human development is also positive for inequality. In this paper we write inequality as disparities.

According to the research of Bruckner and Lederman [17] in countries with middle-low income, there is a relations between disparities and human capital [15]. Disparities are usually differences in income, distribution of income or wealth that are more directed towards welfare. Variables that are positively correlated with disparities are health, longevity, education and happiness. Whereas the measurement of the disparities that are often used is the gini ratio index, which is the total income that must be distributed to obtain equality [3,18,19].

III. Methodology

Methodology used the research is quantitative with a analysis generalized structured component analysis (GSCA). Generalized structured component analysis (GSCA) is one of the multivariate analysis that is a model structural and model formed in path that can be recursive or in line, relations between variables latent with the indicators can be reflexive and [20]. GSCA is based method components have used in a very small sample.

The assumptions underlying GSCA is the relationship between variables latent in the inner model is linear and an additive; to examine the assumption linear can be done by a scatter diagram or approach curve fit. While for linear looking at the relationship between latent variables can be used curve estimation. The advantages GSCA on the model of the measurement, structural model, and the whole of model. The measurement of a model aimed at ascertaining validity and reliability instrument of research. To see the validity of use and reliability AVE and alpha cronbach. The advantages structural model using the coefficients determined (R2) on the variables of latent. Feasibility whole a model is measured using FIT and AFIT. FIT described the diversity within the total endogenous variable that can be described by a whole model. In GSCA, AFIT can be used for comparison a model, the larger value of AFIT shows a model that better [21]. The data used in this research was secondary data that results of publication the Central Bureau of Statistika (BPS). That variable as follows:

The model used to this research is
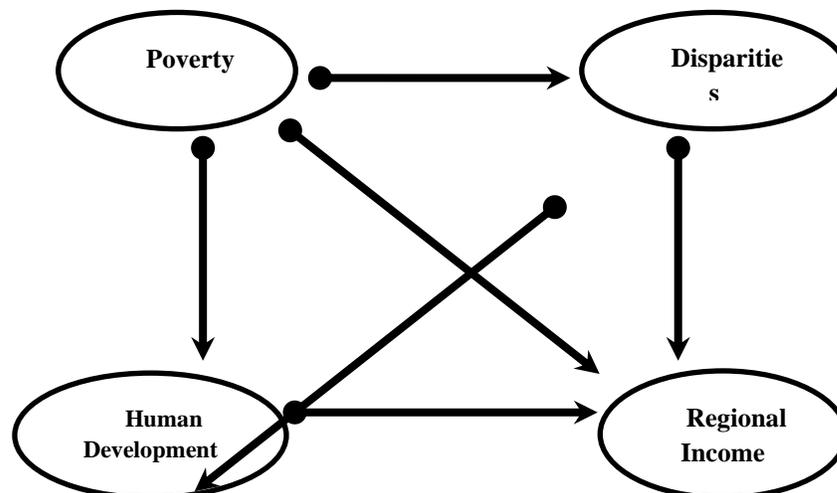
Figure 1. Research Model

This research model adapted from research Ekasari [22] with adjustments in accorandce with current research.The research uses a sample 38 district in the East Java in 2016. Limitations of this research on data because published data only arrived in 2016 by Central Bureau of Statistik in East Java.

IV. The Analysis Result and Discussion

The analysis used in this study is generalized structured component analysis (GSCA) was conducted by calculation online through www.sem-gesca.org to the input variable in accorandce with a variable research. Values consisting of three variable latent endogenous namely B1 (disparities), B2 (Regional Income) and B3 (human development), while variable latent exogenous A1 (poverty). Result testing goodness of fit is in table 2 below.

Table 1. Result Model Fit

| Model Fit	
FIT	0.780
AFIT	0.765
GFI	0.997
SRMR	0.084
NPAR	32

The results showed a total of variant FIT all the variables that can be explained by the model. FIT value ranges from 0 to 1. From the analysis can be aware that the value of the FIT of the model so that the formed 0.780 can account for all the variables of 78% while the rest of 22% is explained by other variables not examined in this study. AFIT explained variables in addition to one variable. so that all variants of 76% explain by the variable. Linear regression analysis in the AFIT almost the same Adjusted R-square. Unweighted least-square (GFI) and Component root mean square residual (SRMR) shows the overall model could be used or rejected. The value of GFI is approaching 1 whereas values good SRMR is approaching 0. The results of the analysis show that the value of GFI is 0.997 while value was 0.084 SRMR which shows bring the overall model worthy of being accepted. While for the analysis result of the can be seen in table 3 the following.

Table 2. Result of Path Analysis

Path Coefficients			
	Estimate	**SE**	**CR**
poverty->disparities	-0.950	0.022	43.96[*]
poverty->regional income	-0.001	0.162	0.01
poverty->human development	-0.147	0.101	1.45
disparities->regional income	-0.523	0.257	2.04[*]
disparities->human development	0.843	0.099	8.5[*]
human development->regional income	-0.475	0.243	1.95

CR* = significant at .05 level

-0.950
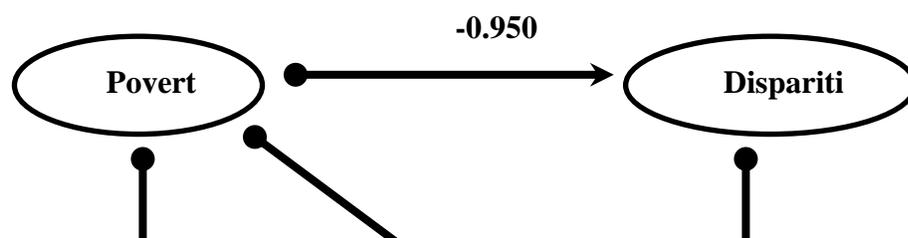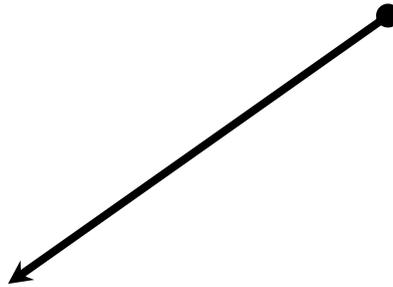
Povert → Dispariti

Figure 2. The Result of GSCA Model

The results of the path analysis evidence that poverty has a negative effect on disparities, and has indirect impact through disparities to regional income. This is in accordance with Peterson [18] research which states that disparities will be directly related to poverty and economic growth. In addition, the results of research in East Java also strengthen Peterson's [18] research by showing that disparities have an impact on human development. Human development in this paper is a human development index consisting of composite indexes for the duration of schooling (education), life expectancy (health), and expenditure. But in this study poverty does not directly impact to regional income and human development. This research is also not in line with the findings of Lim et al. [15] in Philiphines which states that education will increase income so that it will reduce poverty. In East Java, it can be seen that human development has no impact on regional income. This can be caused the composite composite index only has a small influence on the human development index. The education index in the calculation of the human development index in Indonesia is calculated based on length school expectations and the average length of school. From these results it can be seen that in East Java human development is not a determinant of regional income.

Poverty in East Java has more impact on disparities and human development. Although when viewed directly poverty does not affected human development but when viewed indirectly poverty affected human development through disparities. So it can be concluded that the main problem in poverty in East Java is disparities because it can affect other variables indirectly. Path analysis only figure one linear relationship cannot see the relations in two directions reciprocally so that it becomes one of the limitations in this study.

V. Conclusion

This study purpose to look at the relations of poverty, disparities, human development in East Java and from the results of path analysis using the GSCA it can be concluded that in East Java poverty is affected by disparities. Whereas indirectly poverty affects regional income and human development. So the main problem in East Java is disparities, because these variables can affect human development and regional income.

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