

## Analysis of the Influence of Fiscal Decentralization, Dependency Ratio, and Ratio of Independence on the Human Development Index in East Region of Indonesia

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### ABSTRACT:

The objectives of this study is to examine the influence of fiscal decentralization, dependency ratio and ratio of independence on human development index in east region of Indonesia. The method used in this research is quantitative research. This study used a sample of provinces in Indonesia. The samples used in this study were from 12 provinces in Eastern Indonesia, namely, West Nusa Tenggara, East Nusa Tenggara, North Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, Gorontalo, West Sulawesi, Maluku, North Maluku, Papua, and West Papua. In this study, we used secondary data types with the time period 2010-2019. In this study, all variable data units are percent. The data used in this study is secondary data in the form of panels, which is a combination of cross-sectional data and time series data. The conclusion of this study is that the degree of fiscal decentralization has an effect, but not significantly, and shows a negative relationship to the human development index. This shows that if there is an increase in the degree of fiscal decentralization, it will reduce the human development index.

**Keywords:** fiscal decentralization, dependency ratio, ratio of independence, human development index

**JEL Classification:** 023; E24.

## INTRODUCTION

Autonomy is the concept of handing over power from the center to the regions to realize independence in regulating policies that suit the needs of each region. (Miriam Budiardjo, 2019) In the basics of political science, it is explained that the central government has the authority to hand over some of its powers to the regions based on autonomy rights. The granting of broad autonomy to the regions is solely to accelerate the realization of social welfare through service improvement, community empowerment, and participation. Furthermore, the regions are expected to be able to increase their competitiveness through broad autonomy by taking into account the principles of democracy, equity, and justice, as well as their own privileges and specificities within the system of the Unitary State of the Republic of Indonesia.

One form of regional autonomy policy is decentralization. Indonesia is a country with many islands; it would not be right if the authority of the government was only centralized, whereas in the elucidation of the 1945 Constitution it is guaranteed that autonomous rights and even special regional rights are guaranteed. Each region has its own diversity, such as resources, culture, and social problems, so it is felt necessary to implement regional autonomy policies, one of which is decentralization. Turner and Hulme (1997) stated that decentralization is the transfer of authority, responsibility, planning, decision-making, and governmental functions from the central government to regional governments, semi-governmental institutions, as well as the private sector. Reflecting on the problems of the 1998 crisis, it provided space for the central government to focus on macro policies that were strategic in nature and provided opportunities for the regions to increase independence and creativity in the development of regional progress.

Regions in eastern Indonesia are rich in natural resources. In this decentralized era, of course, the wealth of these natural resources can support the welfare of the people there and can also support government activities there. With fiscal decentralization, local governments have the authority to explore potential revenues as best as possible from available sources of income there, as well as carry out an allocation role independently in setting development priorities according to the needs of the area, such as road infrastructure, education, and health. Fiscal decentralization requires the economic capacity of each region to be independent and able to compete with other regions. Regional financial capacity provides optimal benefits for the community, because the essence of decentralization is service and empowerment.

Eastern Indonesia is an area whose income is supported by oil, gas, and mineral resources. Indicators of realizing fiscal decentralization can be seen in how to optimize regional financial capacity, which means that regions are able to use existing resources effectively and efficiently to finance their governments' agendas, and dependency on assistance from the central government must be as minimal as possible so that the role of regional own-source revenues and fund balance can benefit the region well. The degree of fiscal decentralization can be used to assess the effectiveness of local governments in managing natural resources and finances.

Regional financial independence is a reflection of the ability of a region to manage assets owned by the region, in the form of natural resources, humans, and other sources of income. Financial independence is an important aspect of the smooth running of local government, where people's needs can always be met quickly due to financial independence. Regions that have a poor ratio of regional independence will result in ineffective services for the main needs of the community, such as road infrastructure, health care, and education. Eastern Indonesia is a region that is very rich in natural resources, but if you look at the table above, Eastern Indonesia still has a relatively small value of regional financial independence. (Bima Yudistira, 2019) that income in Indonesia tends to comply, which is not good because many government policies are not appropriate for optimizing natural wealth. such as infrastructure development, which is not accompanied by the growth of the manufacturing industry there, the value of managing natural resources there is still low, such as cocoa.

The implementation of fiscal decentralization provides such broad authority for the regions. On the one hand, this is a blessing, but on the other hand, it is a burden, which, in time, will demand regional readiness to be able to implement it. With the authority granted by the central government, several aspects must be prepared, including human resources, financial resources, facilities, and infrastructure, as well as organization and management (Darumurti, 2003). The success of the decentralization policy can be seen in the development of local communities.

## LITERATURE REVIEW

### Human Development Index

(BPS, 2009), interprets that the human development index is a measure of development achievement based on a number of basic components of quality of life. The human development index is calculated based on data that can describe the four components, namely: life expectancy, which measures success in the health sector; literacy rates and the average length of schooling, which measure success in the education sector; and the purchasing power of the people towards a number of basic needs. from the average per capita expenditure as an income approach that measures success in the field of development for a decent life.

In the concept of human development, development should be analyzed and understood from the human perspective, not only from the perspective of economic growth. According to the Human Development Report (1995), a number of important premises in human development include: development must prioritize the population as the center of attention. Development is intended to increase the choices for the population, not only to increase their income; therefore, the concept of human development must be centered on the population as a whole and not only on economic aspects. Human development pays attention not only to efforts to increase human capabilities but also to efforts to optimally utilize these human capabilities. Human development is supported by four main pillars, namely: productivity, equity, sustainability, and empowerment. The ultimate goal of development is human development.

### Regional Autonomy

The definition of regional autonomy contained in Law Number 32 of 2004 Article 1 Paragraph 5 is the right, authority, and obligation of the autonomous regions to regulate and manage their own government affairs and the interests of the local community in accordance with laws and regulations. Regional autonomy is the process of delegating planning authority, decision-making, or governance from the central government to regional implementing units, to semi-autonomous organizations, or to regional governments or non-governmental organizations. Autonomy is the delegation of central leadership in determining policies to the regions, which is expected to improve services to the community.

(Hossein, 2010) explains that the establishment of an autonomous region is simultaneously the birth of an autonomous status based on the participation and objective conditions of the people who are in a certain area as part of the nation and national territory. Communities organized according to autonomy through decentralization are transformed into autonomous regions as legal community units that have the authority to regulate and handle government affairs according to their own initiative based on community aspirations. With this autonomy, the government system will be more effective and efficient; if the government goes well in line with the needs of the community, then the goal of autonomy will be achieved. According to (Kansil in Rinaldi, 2009) the purpose of granting autonomy to the regions is development-oriented, namely development in a broad sense that includes all aspects of life and livelihood. Thus, regional autonomy tends to be an obligation rather than a right. This means that the region is obliged to carry out the course of development in earnest and with a full sense of responsibility as a means of achieving the ideals of the nation, namely, a just and prosperous society, both materially and spiritually. There are many objectives of autonomy, but the most important is to improve the quality of life in local communities.

### Decentralization

The decentralization policy is a declaration of the handing over of a number of central government affairs to regional governments so that they become regional household affairs themselves. Thus, the issues related to the area of authority and responsibility that are crucial for the community are fully handed over to the responsibility of the region itself, both regarding politics, policy, planning, and implementation, as well as regarding financing aspects of the implementation device (Kansil, 2009). According to Ryas Rasyid et al. (2010), decentralization is an implementation mechanism that concerns the pattern of relations between the central government and local governments; in this mechanism, the central government delegated authority to regional governments and local communities to be implemented in order to improve the welfare of people's lives. With this decentralization, the needs of the community will be more easily accommodated, as well as being a top priority in determining policies, which will later make policies more focused and have clear benchmarks for success.

Implementation of decentralization as an effort to improve government performance and accountability to the community, as well as guaranteeing the quantity and quality of the provision of public services. So, decentralization here is a tool to bring the government's role closer to the community in order to realize people's welfare. Litvack categorizes decentralization into three types: political decentralization (the delegation of greater decision-making authority), economic decentralization, and social decentralization. Administrative decentralization, namely the delegation of authority, responsibility, and resources between various levels of government. Fiscal decentralization, namely the delegation of authority to explore sources of income and determine routine spending and investment

### **Degrees of Fiscal Decentralization**

The aim of the regional autonomy policy is to empower the regions according to their potential so that society can progress. This needs to be supported by regional financial independence. Regions that are financially independent are no longer reliant on the center for any development financing; financial independence is measured by the degree of fiscal decentralization. This degree describes the ability of a region to meet regional needs from a financial perspective. The degree of fiscal decentralization measures the level of authority and responsibility given by the central government to regional governments to carry out development (Bisma, 2010). For those authorized by the central government, the regions will experience a significant empowerment process to increase regional income. Their initiative and creativity will be encouraged, enhancing their abilities to analyze various domestic problems. Regions that have a good degree of fiscal decentralization will improve progress in their regions. The degree of fiscal decentralization is a measure of the regional government's financial capacity in financing regional expenditures; based on this measure, the amount of ability to collect funds originating from the region itself can be seen.

### **Regional Financial Independence**

The financial capacity of the region can reveal regions that are good at managing. Regional financial independence depicts local government's reliance on central and provincial government funding sources. The higher the regional financial independence, the lower the regional dependence on government and provincial assistance. To determine the region's financial capacity for financing regional expenditures, consider how much each source of regional own-source revenue contributes to total regional income and how effective the planning targets are for realization.

### **Regional Financial Dependence**

The problem that often occurs related to the enactment of regional autonomy and decentralization is how the regions can overcome their dependence on the central government in terms of fiscal dependence for the needs of all regional development activities (Kuncoro, 2004). The success of regional autonomy is inseparable from the ability of the financial sector, which is one of the important indicators in dealing with regional autonomy. In this case, the local government is required to run the wheels of government effectively and efficiently to encourage community participation in development, as well as improve welfare by increasing equity and justice. Regional financial dependence reflects the ratio of the amount of transfer revenue received by the regional government to the total regional income. The higher this ratio, the greater the level of dependence of local governments on central and/or provincial government revenues (Mahmudi, 2010).

## **RESEARCH METHOD**

The method used in this research is quantitative research. This study used a sample of provinces in Indonesia. The samples used in this study were from 12 provinces in Eastern Indonesia, namely, West Nusa Tenggara, East Nusa Tenggara, North Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, Gorontalo, West Sulawesi, Maluku, North Maluku, Papua, and West Papua. In this study, we used secondary data types with the time period 2010-2019. In this study, all variable data units are percent. The data used in this study is secondary data in the form of panels, which is a combination of cross-sectional data and time series data. As a result, the panel data set will contain observational information for each individual sample. Panel data can be useful for researchers to see the economic impact that cannot be separated between each individual over several periods. This cannot be obtained from the use

of cross-sectional data or time-series data separately.

## RESULT AND DISCUSSION

The coefficient of determination test is used to explain how much the independent variables affect the dependent variable used in this study. The coefficient of determination ranges from 0 to 1. If the coefficient of determination is close to one, it can be concluded that the independent variable can explain the dependent variable well; otherwise, if it is close to zero, it can be concluded that the independent variable cannot explain the dependent variable well. Based on the results obtained from the coefficient of determination test above, it shows that the value of Adjusted R-Squared is 0.836644. If the independent variable is greater than 2, then what is seen in the coefficient of determination test is the value of Adjusted R-Squared. It can be concluded that the independent variables (the degree of fiscal decentralization, the regional financial independence ratio, and the regional financial dependency ratio) can explain their influence on the dependent variable (the human development index) in Eastern Indonesia to an extent of 83.66%, and the remaining 13.95% is influenced by other variables outside of this research.

The t-statistic test is used to determine whether the independent variable has a partial effect on the dependent variable. This test compares the probability value with a significance level of = 5%, or 0.05. If the probability value is > 0.05, then the relationship between the independent variables and the dependent variable is not significant; otherwise, if the probability value is < 0.05, then there is a significant relationship between the independent variables and the dependent variable. Based on the t-statistic test, it shows that each variable has the following effect: The fiscal decentralization level variable has a t-statistical probability value of 0.2121, which is greater than the 0.05 significance level. It can be interpreted that H1 is rejected and H0 is accepted, which means that the degree of fiscal decentralization has no significant effect on the human development index. The regional financial dependency ratio variable has a t-statistical probability value of 0.0000, meaning it is smaller than the 0.05 significance level. It can be interpreted that H1 is accepted and H0 is rejected, which means that the regional financial dependency ratio has a significant effect on the human development index. The regional financial independence ratio variable has a t-statistical probability value of 0.0184, which means it is smaller than the significance level of 0.05. It can be interpreted that H1 is accepted and H0 is rejected, which means that the ratio of regional financial independence has a significant effect on the human development index. From the explanation of the t-statistic test, it can be concluded that the variable regional financial independence ratio and regional financial dependency ratio have a significant effect on the human development index in Eastern Indonesia in 2010–2019, while the degree of fiscal decentralization has no significant effect.

The f test is used to describe whether all the independent variables simultaneously or as a whole can affect the dependent variable. In determining the simultaneous significant or insignificant effect of the independent variable (independent variable) on the dependent variable (dependent variable), it can be seen by comparing the f-count value with the f-table. If f-count < f-table, then H1 is accepted, which means that the independent variables simultaneously have a significant influence on the dependent variable. However, if f-count > f-table, then H0 is accepted, meaning that the independent variables do not have a significant effect on the dependent variable. But other than that, looking at the simultaneous f-test, it can be seen from the probability of the f-statistic, if the probability is below 0.05, it means that the variable simultaneously has a significant influence on the dependent variable, but if the probability of the f-statistic is greater than alpha 0.05, it means that the explanation of the variable simultaneously does not have a significant influence. Based on the results of the fixed effect model regression, the f-statistic value is 44.53355. The probability value of the f-statistic is 0.000000, so the probability value of the f-statistic is smaller than the significance level of 5% or 0.05 ( $0.000000 < 0.05$ ). With these results, accept H1, and it is concluded that the independent variables (degree of fiscal decentralization, ratio of regional financial dependence, and ratio of regional financial independence) simultaneously have a significant effect on the dependent variable of the human development index in Eastern Indonesia in 2010–2019.

The results of this study show that the variable degree of fiscal decentralization has a negative relationship to the variable human development index with a value of -0.125852, meaning that it has a negative effect on the variable human development index because the degree of fiscal decentralization in the eastern region is included in the unfavorable category. This reflects management performance at the regional level carried out by the local government, which is still not running optimally, so an increase in the degree of fiscal decentralization that is not good will cause a



decrease in the human development index in Eastern Indonesia because of the negative relationship. When there is a one percent increase in the degree of fiscal decentralization, it will decrease the human development index by 0.125852, assuming other variables are constant. The degree of fiscal decentralization variable has a probability value of 0.0670, so the variable degree of fiscal decentralization has no significant effect on the negative development index variable because the probability t-statistic for the variable degree of fiscal decentralization is greater than 0.05. The findings of this study are in accordance with research conducted (Hadi et al., 2016) that indicates that the degree of fiscal decentralization in regions that still have poor quality will lead to a decrease in the quality of the region as measured by the human development index. This era of decentralization has given the regions broad financial authority, but if the management by the local government tends to be bad, it will only produce inefficiencies, which in the end will be detrimental to the community and economy. The degree of fiscal decentralization illustrates the ability of financial management to carry out development in the region; if the quality of the degree of fiscal decentralization in a region is poor, it will not be optimal in carrying out basic development for the community.

The results of this study indicate that the regional financial dependency ratio variable has a positive relationship to the human development index variable with a value of 13.69213, meaning that it has a positive effect on the human development index variable. When there is a one percent increase in the regional financial dependency ratio, it will increase the human development index by 13.69213 percent, assuming other variables are constant. This positive relationship occurs because the development of basic community needs such as health, schools, and road infrastructure in eastern Indonesia still relies on financing from central transfers. The regional financial dependency ratio variable has a probability value of 0.0000, so the regional financial dependency ratio variable has a significant influence on the human development index variable because the probability t-statistic for the regional financial dependency ratio variable is smaller than 0.05. The results of this study are in line with the findings of research conducted by Haryadi and Eka (2016), which found that regional financial dependence affects the human development index due to high financial dependence on central government assistance, which is intended for the provision of public services for the community such as health and education. Eastern Indonesia is an area that can be categorized as a region that has not been able to be independent in meeting its regional needs. Judging from the regional income, which is still relatively small, and the performance of the government, which has not been running effectively, local governments are expected to increase regional financial capacity through local revenue. According to (Sidik, 2002), the growth rate of regional original income has a positive correlation with improving the condition of people's welfare.

This study shows that the regional financial independence ratio variable has a positive relationship to the human development index variable with a value of 2.181700, meaning that it has a positive effect on the human development index variable. When there is a one percent increase in the regional financial independence ratio, it will increase the human development index by 2.181700 percent assuming other variables are constant. This positive relationship occurs because if regional financial independence increases, supported by regional income, the development process needed by the community will run smoothly. The regional financial independence ratio variable has a probability value of 0.0184, so the regional financial independence ratio variable has a significant influence on the human development index variable because the probability t-statistic for the regional financial independence ratio variable is smaller than 0.05. The results of this study are in accordance with research conducted (Gaousario and Darmastuti, 2015) that shows the ratio of regional financial independence has a significant positive effect on the human development index in Eastern Indonesia. Regional financial independence reflects government performance that can generate a good income and meet community needs. Regional financial management that is economically, efficiently, and effectively carried out, or that provides value for money, as well as participation, transparency, accountability, and justice, will encourage economic growth, which in turn will increase regional income, which in turn can reduce the number of unemployed and poverty levels, thereby improving the quality of life for all.

## CONCLUSION

The conclusion of this study is that the degree of fiscal decentralization has an effect, but not significantly, and shows a negative relationship to the human development index. This shows that if there is an increase in the degree of fiscal decentralization, it will reduce the human development index. The government of eastern Indonesia is still not maximally implementing financial management in the regions, setting the right policies and strategies to create satisfactory services for the community. This is what causes the existing fiscal decentralization policies there to not run

optimally. Good decentralization is underway where local revenue can support all needs in the region. The regional financial dependency ratio has a significant effect and shows a positive relationship to the human development index; this shows that if there is an increase in the regional financial dependency ratio, it will increase the human development index. This is because the Eastern Indonesia region has not been able to maximize the wealth potential that exists in the region and the government there has not run effectively, which has caused infrastructure development for community needs such as health and education to still depend on costs from the central government. The ratio of regional financial independence has a significant effect and shows a positive relationship to the human development index; this shows that if there is an increase in the ratio of regional financial independence, it will increase the human development index. Regional financial independence reflects good government performance in which income is maximized while community needs are met. Regions that have financial independence will easily make expenditures to meet the needs of their people. Government spending on infrastructure development such as health and education will improve the quality of community resources.

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