The Effects of Inequality and Poverty on Inclusive Economic Development in East Java Province

Qurotul A’yun
Faculty of Economics and Business
University of Jember
Jl. Kalimantan Tegalboto No.37 Jember
(+62)85219681904, 68121
qirratulayun7@gmail.com

Zainuri
Faculty of Economics and Business
University of Jember
Jl. Kalimantan Tegalboto No.37 Jember
(+62)81231797108, 68121
Zainuri.feb@unej.ac.id

ABSTRACT

This study aims to determine whether inequality, measured by the Gini ratio, and poverty, measured according to the number of poor people (thousand people), affect inclusive economic development in East Java Province. This research is descriptive quantitative research. The data type used in this study is secondary data, namely time series taken from 2011 to 2021 using panel data. Based on the results of testing the panel data, it was found that the Gini ratio has a negative and significant effect on inclusive economic development in East Java, and poverty also has a negative and significant influence on inclusive economic development in East Java.

Keywords: inequality, Gini Ratio, Poverty, Inclusive Development

1. INTRODUCTION

Basic, high economic growth is not only a means of achieving welfare in a country, but high economic growth is one indicator of the success of a region’s development. Because in addition to being determined by high economic growth factors, the size of development in an area can also be determined by the ability of the region to reduce unemployment or poverty, which includes the ability to reduce inequality between groups of people in an area. (Hapsari, 2019). High economic growth can certainly also lead the community to achieve prosperity. And the indicator is the opening or availability of broad employment opportunities balanced with a decrease in unemployment and will be followed by a decrease in poverty and inequality. If this can be fulfilled, it can be said that economic development in the country has been classified as inclusive development (Maryam and Irwan, 2022).

Inclusive development can generally be interpreted as the opposite of exclusive development, in which the pattern of exclusive development only benefits certain groups and is called exclusive. Therefore, a country needs to embrace inclusive development to help the country avoid the category of failed states because we can understand that countries whose political-economic institutions are inclusive tend to have the potential to become rich countries. Conversely, countries whose political-economic institutions are exclusive or, as they call, “extractive” tend to lead to failed states characterized by poverty and significant inequality, political and social instability, and stagnant economies (“Tambunan, 2016). Research from (Dewi Purwanti and Rahmawati, 2021) shows that inclusive economic growth in Indonesia has not been consistent every year in the last decade. Her research shows that government spending on education and health influences inclusive economic growth. Meanwhile, government spending on education has an inversely proportional impact on inclusive economic growth, while the open unemployment rate (TPT) has no significant effect on inclusive economic growth.

Economic inequality in a country is a difference in economic development between one region and another vertically and horizontally, which causes disparity or uneven development. One of the goals of economic development within a country is to reduce inequality. The increase in per capita income shows a region's economic progress level. However, increasing per capita income does not necessarily indicate that income distribution will be more even (Mujahid Shaleh et al., no date). Poverty is also a condition often associated with difficulties and shortcomings in the needs of all life. We can also define poverty as a condition with no one to meet the needs for primary consumption to improve the quality of life. The measure of poverty can be divided into two types: relative poverty and absolute poverty. Relative poverty is poverty related to differences in income levels in one group with another. In contrast, absolute poverty has no one to exceed a poverty line set for their lives (Rahmawati et al., 2021).

As in previous research conducted by (Breunig and Majeed, 2020), which examined new insights into the important relationship between poverty, inequality, and economic growth, the main findings of his research show that the proposition of inequality is harmful to economic growth and shows that inequality has a relationship with high poverty rates that have a negative and significant impact on economic growth. Ncube, Anyanwu, and Hausken (2014) have researched the effect of income inequality on economic growth and poverty in the East Central and North Africa regions of MENA. Its empirical results show that income inequality reduces economic growth and increases regional poverty. Other factors that significantly negatively affect economic growth in the MENA region include previous growth rates, exchange rates, government consumption expenditures or government burdens, initial GDP per capita, inflation, and basic education.
Aimon, Kurniadi, and Satrio (2020) analyzed inclusive growth in poverty, unemployment, and income inequality in West Sumatra Province. The analysis results for the long term are inclusive growth in poverty influenced positively and significantly by health, education, investment, and government spending. Meanwhile, health, education, investment, and government spending negatively and significantly affect inclusive unemployment and income inequality growth. If inequality and poverty are not considered and left alone in an area, it will cause negative impacts and cause problems such as criminal problems. Research conducted by (Kuciswara, Muslihatinningsih, and Santoso, 2021) states that the poverty rate positively affects crime in East Java Province. Meanwhile, income inequality has a positive but insignificant effect on crime in East Java Province.

East Java Province is the largest province on the Java island and has 38 regencies or cities. The second largest population in Indonesia, with a population according to gender and regencies or towns of East Java Province (Jiwa) reported from the latest BPS data in 2023 is 41,416,407 people, and in 2021 it is 40,878,789 people. Of course, various social problems are faced in other regions, including inequality and poverty. The research results of (Yolanda, Yunitaningsiyas and Indahwati, 2019) show that poverty in East Java is related to spatial effects. Therefore, each district/city has different constants depending on the spatial weight matrix. Thus, the percentage of poor people by district/city in East Java Province is influenced by the Human Development Index (HDI), Poverty Gap Index, Poverty Severity Index, and spatial effects. Meanwhile, according to research (Prabandari, 2018), which analyzed the inclusivity of economic growth in East Java and the factors that influence it, it was found that a small number of districts / cities in East Java managed to achieve inclusive growth. In his research, it was explained that per capita income, a fiscal policy seen through education and health budgets, and an average length of schooling have a positive effect in supporting and accelerating the inclusiveness of economic growth in East Java.

Year after year, inequality and poverty persist and become social problems that must be solved with serious treatment. In addition, East Java also has optimism in building an inclusive economy, as explained by the East Java Provincial Cooperatives and SMEs Office in January 2023, which said that by continuing to encourage the growth of cooperatives and Micro, Small, and Medium Enterprises (KUMKM), it is hoped that it can generate an inclusive economy. However, it cannot be separated from inequality and poverty. Thus, our research here will focus on the effect of inequality and poverty on inclusive economic development, whether there is an influence together or only influenced by one of the variables. Due to the level of inequality and poverty in East Java in the semester of March 1, 2021, according to data from BPS measured based on the gini ratio was recorded at 0.374. The figure was quite high, although still below the average size of the gini ratio compared to other regions or provinces, while for poverty in East Java as measured by the number of poor people (thousand people) in the semester of March 1, 2021, was recorded at 4,572.73 thousand people. The number is quite high with several other provinces in Indonesia. And for the inclusive economic development index measure, East Java Province occupies the eighth position out of 38 Provinces in Indonesia in 2021 with an inclusivity value of 6.31.

### Table 1. Inequality & Poverty of East Java Province 2017-2021

<table>
<thead>
<tr>
<th>Year</th>
<th>Gini Ratio</th>
<th>Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>0.40</td>
<td>4617.01</td>
</tr>
<tr>
<td>2018</td>
<td>0.38</td>
<td>4332.59</td>
</tr>
<tr>
<td>2019</td>
<td>0.37</td>
<td>4112.25</td>
</tr>
<tr>
<td>2020</td>
<td>0.37</td>
<td>4419.10</td>
</tr>
<tr>
<td>2021</td>
<td>0.37</td>
<td>4572.73</td>
</tr>
</tbody>
</table>

Source: processed from the Central Statistics Agency (BPS)

In the table above, we can see the level of inequality in East Java according to data from BPS as measured by the Gini ratio index from 2017 to 2021. The highest Gini ratio occurred in 2017, recorded at 0.40, and the lowest Gini ratio occurred for three consecutive years from 2019 to 2021, recorded at 0.37. Likewise, poverty data in East Java was taken based on the number of poor people in thousand people in East Java from 2017 to 2021, where it was recorded that the highest number of poor people occurred in 2017 as many as 4617.01 thousand people and experienced a slight decrease in 2018 of 4332.59 thousand people, a decrease in the number of poor people in thousand people according to data from BPS it was noted that East Java Province from 2017 to 2019 continued to experience The lowest decrease was recorded at 4112.25 thousand people in 2019, but in 2020 to 2021 it continued to increase until in 2021 it was recorded at 4572.73 thousand people.

From these data, we can conclude that the level of inequality and poverty in East Java Province is still quite high and continues to experience ups and downs or increases and decreases. And for the inclusive economic development index measure, East Java Province occupies the eighth position out of 38 Provinces in Indonesia in 2021 with an inclusivity value of 6.31. Even with the ups and downs of inequality and poverty and sometimes stagnant values in several years from 2017 to 2021 data, East Java has never influenced its optimism to make an inclusive Province.

**Graph 1. East Java Province Inclusive Economic Development Index 2021**
From this graph, we can know that the highest level of inclusive economic development in 2021, the first is Kediri City, with an inclusive value of 6.95, almost close to 7.00. The second is Madiun City 6.87, not much different from Kediri City. The third is Blitar City, with an inclusive value index of 6.68. The three cities have the highest inclusive development index value above 6.50, while other districts or cities have an inclusive economic development index value below 6.50. While the district or city that has the lowest inclusive index value is Bangkalan, with an inclusive index value of 4.88; the second is Sampang, which is not much different from Bangkalan, with an inclusive development index value of 4.98. The third lowest inclusive economic development index value is Probolinggo, with an index of 5.13. So we can conclude that inclusive economic development in East Java can still be said to be uneven because some of them are below 5.5 and others are above 5.5, and the highest with a value of 7.00.

Graph 2. National Inclusive Economic Development Index 2021

According to the measurement of the national inclusive economic index in 2021, East Java Province ranks eighth out of 38 provinces in Indonesia with an inclusive economic development index value of 6.31, and the highest inclusive economic development index value is DKI Jakarta, with an index value of 7.93. This value is the only highest inclusive economic development index value with an index value above 6.00, while for other regions, it is below 6.00.

The National Medium-Term Development Plan (RPJMN) 2010-2014 Book I Chapter V Economic Framework explicitly mentions the importance of inclusive economic development. As explained in the book, inclusive economic development includes all groups and groups of people and communities in border areas in the outer islands to achieve inclusive economic development, affirmative economic and social policies are needed to overcome inequality, underdevelopment, and poverty that still color the lives of most Indonesians. (‘Tambunan, 2016).

2. LITERATURE REVIEW

2.1 Inequality

High and increasing economic growth, in many cases in developing countries, cannot automatically eliminate inequality in development (disparity). Development inequality generally occurs in income, spatial, and sectoral aspects. The initial indication is that the rich will get richer while the poor will get poorer. Developed regions continue to overgrow, leaving underdeveloped regions with superior sectors contributing significantly to development while non-superior sectors are burdensome.
Development inequality occurs on a local and national scale. In the international scope, economic development inequality between regions occurs and is evident. Development inequality is one of the serious and frequent problems and becomes a serious problem, and if it cannot be eliminated, it can cause more complex crises such as population, economic, social, political, and environmental problems including in the macro scope, which will greatly harm the development process and results that a region wants to achieve in the development of a country. (Student of Sociology, 2017). In view (Wilkinson and Pickett, 2010), inequality is not only a problem for those at the bottom of society but can have a negative impact on society as a whole. They argue that high levels of inequality produce feelings of injustice, frustration, and social tension that undermine social cohesion and social stability. While according to (Ehrlich, 1968), the human population that is constantly growing will cause inequality or economic and social inequality that increases due to limited resources and is distributed more unevenly. Those with limited access to resources and opportunities will be marginalized and poorer, while the more fortunate will get richer.

High inequality can also negatively impact economic growth. And high inequality can hinder the accumulation of human capital. Inequalities in access to education, health, and economic opportunities limit individuals’ ability to develop the skills and productivity needed for inclusive economic growth (Aghion, Caroli, and García-Peñalosa, 1999).

High levels of inequality also create social and political instability. Extreme inequality can lead to social conflicts, discontent, and political tensions that discourage investment, create uncertainty, and undermine a business environment conducive to inclusive economic growth. In measuring the level of inequality in Indonesia, BPS uses expenditure data as a proxy for income sourced from Susenas. The Gini ratio is one measure of inequality in expenditure used. The Gini ratio value ranges between 0 (zero) and 1 (one). According to the World Bank measure, the Gini ratio is one measure of inequality, which refers to the percentage of expenditure of the bottom 40 percent of the population. The criteria for the level of inequality based on the World Bank Size are as follows:

1. If the percentage of expenditure in the lowest 40 percent of the population is less than 12 percent, then it is said that there is high inequality.
2. If the percentage of expenditure in the lowest 40 percent of the population is between 12 and 17 percent, then it is said that there is moderate/medium/medium inequality.
3. If the percentage of expenditure in the lowest 40 percent of the population is greater than 17 percent, then it is said that there is low inequality.

A value closer to one indicates a higher level of inequality. The cause of inequality in subsequent development is caused by uncontrolled population growth. We know that Indonesia is one of the most densely populated countries. Such uncontrolled overcrowding can cause problems faced in the country. The problems that will be faced are the large unemployment due to lack of employment, which also causes a lot of poverty in Indonesia. Thus, it will also impact many slum areas. The amount of crime that exists due to the absence of jobs in the quality of education aspects is low compared to developed countries. So, the statement will also produce human resources that are not optimal for development (Hariyati et al., 2017).

2.2 Poverty

Poverty is one of the most sacred problems in all countries, especially for developing countries such as Indonesia, as explained by UNDP in 2017, which said that poverty is a problem that has become a global issue where poverty reduction is contained or included in the first point of the 17 Sustainable Development Goals (SDGs), which is a plan related to global action and has been agreed by world leaders who aim to end poverty levels and protect planet earth with targets that are expected to be achieved by 2030 (Agustin, 2022). Poverty is also a complex thing that is influenced by various interrelated factors. Among these factors that cause poverty is the level of income of the community, unemployment rate, health conditions, quality of education, also the availability of access to goods and services, then geographical location, gender, and environmental location (Bisnis Muhammadiyah Bekasi and Sadikin, 2022).

Economic growth is also very influential on poverty, as written (‘Tambunan, 2016) states that in a region or country in the world, there are factors in economic growth that affect poverty, such as the average education of the population or labor force in particular, economic structure, income distribution patterns, availability of natural resources, mastery of technology, and the seriousness of the government in fighting poverty. For example, although economic growth in a country is high, there are no “pro-poor” government policies, but the share of economic growth will not be evenly distributed. The reason is simple the market mechanism does not work perfectly, so there needs to be government intervention so that the poor can also enjoy the benefits of this growth, and then we can also categorize it into an inclusive economy.

According to (World Development Report 2020: Trading for Development in the Age of Global Value Chains, 2020), poverty significantly negatively impacts inclusive economic development. Poverty hinders economic growth and can exacerbate social inequality. The main reasons why poverty negatively impacts inclusive economic development are:
1. Limited human capital: Poverty is often associated with limited access to education and healthcare. Individuals living in poverty are more likely to have limited skills and knowledge, limiting their ability to contribute productively to the economy.

2. Limited access to capital and credit: Poverty often hinders access to the capital and credit needed to start or develop a business. Without access to adequate capital, poor individuals find it challenging to take advantage of economic opportunities and achieve inclusion in economic development.

3. Economic instability and vulnerability: Individuals living in poverty tend to face unstable income levels and are vulnerable to economic crises or other natural disasters. Economic instability can also hinder an individual’s ability to plan for their future and invest in education, health, or productive endeavors.

4. Limited access to capital and credit: Poverty often hinders access to the capital and credit needed to start or develop a business. Without access to adequate capital, poor individuals will struggle to take advantage of economic opportunities and achieve inclusion in economic development.

### 2.3 Inclusive Economy

There is no common agreement on the definition or absence of a general definition of what is meant by inclusive economic development, but the concept of inclusive economy itself is built on the basis of two other concepts, namely inclusive and development. Inclusive is a process as well as a goal. Inclusiveness is about a changing society or community accommodating differences that exist in society by removing all existing barriers that discriminate or make certain individuals/groups of people executive. Whereas inclusive sees society, not individual people, as a problem.

According to the International Disability and Development Consortium (IDDC), inclusive development is a process to ensure that all marginalized communities are fully involved in the development process. (Sabir, 2019) Inclusive growth is a growing arena in the economy that tries to integrate all important areas, such as human well-being, poverty, income inequality, employment levels, gender inequality, and economic growth. Participation and benefit sharing are two important components of inclusive growth.

Inclusive growth is economic growth that results in significant, sustained improvements in well-being, and its fruits or benefits can be distributed fairly among individuals and groups. In other words, inclusive growth is growth with low inequality also declining, the economy and the participation of the poor in politics in the growth process, and the sharing of benefits from all those processes. It is growth that creates economic opportunity and ensures equal opportunity and access for all groups of society. Equality in the provision of public services, especially education, health, and employment opportunities. Inclusive growth is a major concern in the development literature (Albagoury, 2021).

The Inclusive Economic Development Index is a tool to measure and monitor the level of inclusivity of Indonesia’s economic development at the national, provincial, district, and city levels. The inclusive economic development index is a comprehensive measure in looking at or measuring Indonesia’s current and future development level of inclusivity. And the inclusive economic development index issued by BAPPENAS is divided into three pillars with eight main sub-pillars.

**Figure 1. Inclusive Economic Development Index**

Source: from National Development Planning Agency BAPPENAS

The Inclusive Economic Development Index measures various aspects of development that can support the direction of inclusive development so that Indonesia’s economic development is not only measured from the level of economic growth but also from various socio-economic aspects included in the 21 predetermined indicators. Such indicators are:

**Figure 2. Indicators of Inclusive Economic Development**
So that the existence of an inclusive economic development index both on a national and provincial scale can be known every year, for example, in the table below, which is taken from the official page of the Inclusive Economic Development Index (IPEI) issued by the National Development Planning Agency (BAPPENAS) on a national scale in all provinces or regions in Indonesia, which has been measured based on the three pillars of the inclusive economic development index starting from 2011 to 2021 with the achievement of the highest inclusive economic development index occurring in 2021 recorded at 6.00, the index value is the highest value from previous years which experienced a continuous increase from 2011.

Table 2. National Inclusive Economic Development 2011-2021

3. RESEARCH METHODOLOGY
The type of research used in this study is descriptive quantitative research. The type of data used in this study is secondary data, where the data obtained is sourced from the Central Statistics Agency (BPS). Using the dependent variable (bound), namely East Java Inclusive Economic Development in years, the independent variable (free) uses inequality data with the Gini coefficient ratio of East Java years and poverty data according to the number of poor people in East Java province in thousand years. The data used are panel data using the annual time series data analysis method from 2017 – 2021 and cross sections as many as thirty-eight districts/cities in East Java Province.

The data analysis technique used is descriptive statistics with classical assumption tests. The classical assumption test consists of four tests: the normality test, the multicollinearity test, the heteroscedasticity test, and the autocorrelation test. In testing the hypothesis, multiple linear regression analysis is used, which is an analysis used to obtain an overview of the effect of inequality and poverty on inclusive economic development. The equation to test the hypothesis used in this study is as follows:

\[ Y = \alpha + \beta_1 \times X_1 + \beta_2 \times X_2 + \epsilon \]

4. RESULT AND DISCUSSION
The estimation method with regression models using panel data can be done through three approaches, including:

4.1.1 Chow Test
H0: CEM model selected (Prob > 0.05)
H1: Selected FEM model (Prob < 0.05)

This test is carried out to determine whether the selected model is a common effect or a fixed effect. H0 is rejected if the value of the probability F is smaller than alpha, which is smaller than 0.05, where H0 is the common effect model, and H1 is the fixed effect model.

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>60.617390</td>
<td>(37,150)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>526.224449</td>
<td>37</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

From these results, the results of the Chow test for this model have a probability value of F of 0.0000 because it is <0.05, so if H0 is rejected and H1 is accepted, then the appropriate model of this Chow test is a fixed effect model.

4.1.1.1 Hausman Test
H0: Selected REM model (Prob > 0.05)
H1: Selected FEM model (Prob < 0.05)

Hausman test is a test carried out to determine the best method, whether fixed effect or random effect. The selection criteria if H0 is accepted or the P value is less than 0.05, then the method we choose is fixed effect. If H0 is rejected or the P value is greater than 0.05, then the method we choose is a random effect.

<table>
<thead>
<tr>
<th>Correlated Random Effects - Hausman Test</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>4.797251</td>
<td>2</td>
<td>0.0908</td>
</tr>
</tbody>
</table>

Based on the results of the Hausman test showing a significance value of 0.0908, then an alpha value of >0.05, then the best model according to this Hausman test is the random effect model. Because the Chow test and Hausman test results did not find the same method, it must proceed to the third test, namely the Lagrange Multiplier.

4.1.1.2 Lagrange Multiplier Test

<table>
<thead>
<tr>
<th>Null (no rand. effect)</th>
<th>Cross-section</th>
<th>Period</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative</td>
<td>One-sided</td>
<td>One-sided</td>
<td></td>
</tr>
<tr>
<td>Breusch-Pagan</td>
<td>298.5096</td>
<td>0.650972</td>
<td>299.1605</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.4198)</td>
<td>(0.0000)</td>
<td></td>
</tr>
<tr>
<td>Honda</td>
<td>17.27743</td>
<td>0.806828</td>
<td>12.78750</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.2099)</td>
<td>(0.0000)</td>
<td></td>
</tr>
<tr>
<td>King-Wu</td>
<td>17.27743</td>
<td>0.806828</td>
<td>6.163023</td>
</tr>
<tr>
<td>(0.0000)</td>
<td>(0.2099)</td>
<td>(0.0000)</td>
<td></td>
</tr>
<tr>
<td>GHM</td>
<td>--</td>
<td>--</td>
<td>299.1605</td>
</tr>
<tr>
<td>--</td>
<td>--</td>
<td>--</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

The results of the Lagrange multiplier test in the table above can be seen from the value of Prob>Chi-Square with the Breusch-Pagan method is 0.0000. This shows that Prob> Chi-Square is smaller than alpha, which is 0.0000 < 0.05. Therefore, the right model to use is the random effect model. Based on the results of the estimation selection, a random effect model is obtained as the best model. The following will be continued with the classical assumption test using a random effect model.

4.1.1.3 Classical Assumption Test
- Normality Test
From the normality test results, we can conclude that the data is normally distributed with the value of Jarque Bera >0.05, so the data can be accepted.

- **Multicollinearity**

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.000000</td>
<td>-0.303501</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2</td>
<td>-0.303501</td>
<td>1.000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the results of the multicollinearity test, it can be concluded that the data does not have a multicollinearity problem or there is no high correlation value between independent variables because it does not exceed 0.90 (Ghozali, 2013: 83), so it can be concluded that there is no multicollinearity between independent variables.

- **Heteroscedasticity Test**

    | Variable | Coefficient | Std. Error | t-Statistic | Prob. |
    |----------|-------------|------------|-------------|-------|
    | C        | 0.416789    | 0.124815   | 3.339249    | 0.0010|
    | X1       | -0.206546   | 0.326565   | -0.632481   | 0.5278|
    | X2       | -0.000379   | 0.000398   | -0.951881   | 0.3424|

The results of the heteroscedasticity test show that the probability value of the variables X1 and X2 >0.05 can be concluded that the data is free from heteroscedasticity problems.

- **Autocorrelation**

    | Variable | Coefficient | Std. Error | t-Statistic | Prob. |
    |----------|-------------|------------|-------------|-------|
    | C        | 6.673161    | 0.150817   | 44.24663    | 0.0000|
    | X1       | -1.663369   | 0.353236   | -4.708949   | 0.0000|
    | X2       | -0.002869   | 0.000654   | -5.642224   | 0.0000|

The results can be found by the following Durbin-Watson equation:
DW = 1.638004
K = 2
Number of observations = 190 samples
DL = 1.7413
DU = 1.7838
4 – DL = 4 – 1.7413 = 2.2587
4 – DU = 4 - 1.7838 = 2.2162

Durbin Watson chart

So it can be concluded that the value of durbin watson lies in a positive autocorrelation because it is smaller than other values.

- Linearity Test Results

After several tests on the classical assumption test, we can regress the data to get the following results:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>6.673161</td>
<td>0.150817</td>
<td>44.24663</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>-1.663369</td>
<td>0.353236</td>
<td>-4.708949</td>
<td>0.0000</td>
</tr>
<tr>
<td>X2</td>
<td>-0.003692</td>
<td>0.000654</td>
<td>-5.642224</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Effects Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>S.D.</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>0.345266</td>
<td>0.9228</td>
</tr>
<tr>
<td>Idiosyncratic random</td>
<td>0.099838</td>
<td>0.0772</td>
</tr>
</tbody>
</table>

Weighted Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.222279</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.213961</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.100582</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.638004</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Regression Equation

Y = 6.67 + -1.66 X1 + -0.003 X2

H0 = no effect of X on Y (Prob >0.05)
Ha = there is an effect of X on Y(Prob <0.05)

From the results of the equation can be obtained the probability value of F statistic of 0.000000, which means H0 is rejected, and Ha is accepted because the probability value is <0.05, and it can be concluded that if together X1 and X2 have a negative and significant effect on Y.
5. DISCUSSION
From the analysis results, it can be explained that the effect of inequality with the Gini coefficient ratio to inclusive economic development is negative and significant, with a probability value of 0.000. Poverty, measured by the number of poor people in thousand people with a probability value of 0.0000, shows that the influence of the number of poor people on inclusive economic development has a negative and significant influence. And based on the F test shows a statistic F probability value of 0.0000 that together inequality or gini ratio and poverty measured based on the number of poor people have a significant effect on inclusive economic development.

The results of these calculations follow the theory from which it is explained that inclusive economic growth or development is where growth or development in the economy in a country or region has a low level of inequality and poverty. As explained by (Aghion, Caroli, and García-Peñalosa, 1999), High inequality can also negatively impact economic growth. And high inequality can hinder the accumulation of human capital. Inequalities in access to education, health, and economic opportunity and limiting individuals’ ability to develop the skills and productivity needed for inclusive economic growth. Likewise, poverty, as described in theory from (World Development Report 2020: Trading for Development in the Age of Global Value Chains, 2020), significantly negatively impacts inclusive economic development because poverty can hinder economic growth and exacerbate social inequality.

We can see from the level of inequality in East Java is quite high, with the highest Gini index ratio occurring in 2017 recorded at 0.40, while from 2019 to 2021, the Gini ratio value stagnated at 0.37. Likewise, poverty data in East Java where it was recorded that the highest number of poor people occurred in 2017, as many as 4617.01 thousand people, while in 2021, there were 4572.73 thousand people out of the total population in 2021 of 40,878,789 people, where the value of the inclusive economic development index was 6.31. So we can analyze quantitatively that inequality and poverty both negatively influence the index of inclusive economic development in East Java. And this result is also in line with research from (Ncube, Anyanwu, and Hausken, 2014) which from his research shows that the proposition of inequality is harmful to economic growth, and shows that inequality has a relationship with high poverty rates that have a negative and significant impact on economic growth.

Inclusive growth in East Java can still be said to be underdeveloped in economic growth and less integrated into all important areas because there are still many shortcomings if we rematch the meaning of how an area can be said to be inclusive, as explained in the theory that one of them is that a region will be said to be inclusive if there is a decrease in inequality and poverty in the area continuously and able to achieve the welfare of the community so that economic development can be said to be inclusive.

6. CONCLUSION
Based on the analysis carried out in this study, it can be concluded that. The results of this test show the effect of inequality with the Gini coefficient ratio on inclusive economic development is negative and significant, with a probability value of 0.0000. At the same time, poverty measured by the number of poor people in thousand people has a probability value of 0.0000, which shows that the influence of the number of poor people on inclusive economic development has a negative and significant influence. And based on the F test shows a statistic F probability value of 0.0000 that together inequality with the Gini coefficient ratio and poverty measured by the number of poor people (thousand people) significantly affect inclusive economic development.

7. REFERENCES


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Publikasi Badan Pusat Statistik:
https://www.bps.go.id/subject/23/kemiskinan-dan-ketimpangan.html#subjekViewTab3

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