

ANALYSIS OF INCLUSIVE ECONOMIC GROWTH INDEX AND INFLUENCING FACTORS (CASE STUDY OF REGENCIES/CITIES IN EAST JAVA PROVINCE)

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ABSTRACT

The purpose of this study is to identify the variables that would affect East Java Province's Regency / City inclusive economic development index between 2017 and 2021. This study employed a descriptive quantitative research design. The Fixed Effect Model (FEM) was chosen as the suitable model for this research's panel data regression analysis, which was conducted using the Eviews 13 analytic tool. The results showed that the variable level of employment opportunities, good condition roads, residents who have health insurance and decent drinking water sources had a significant effect on the inclusive economic growth index. Meanwhile, the gini ratio and poor population variables do not have a significant effect on the inclusive economic growth index. These findings indicate that the indicators in Pillar 2 of Income Equality and Poverty Reduction are not sufficient to influence the East Java Province's districts' and cities' inclusive economic growth index.

Keywords: *Inclusive Economic Growth Index, Employment Opportunities, Roads in Good Condition, Gini Ratio, Population with Health Insurance, Adequate Drinking Water Sources.*

INTRODUCTION

Economic growth is defined as the increase in an economy's ability to produce goods and services. Economic growth indicates the extent to which economic activity will generate additional income for the community over a specific period (Sukirno, 2006).

The primary goal of development is to enhance the well-being of the population. Development is one of the main functions that the government, as a policy maker, must undertake. The development process has three goals: increasing the availability and distribution of essential goods and services, improving the standard of living, and expanding economic and social options for each individual and the nation as a whole (Todaro and Smith, 2006).

In Pillar 1, the economic growth and development of East Java in 2020 was at 4.90, while the national average was 4.64. Similarly, in Pillar 2, income distribution and poverty reduction in East Java reached 6.52, significantly higher than the national average of 4.62. Meanwhile, in Pillar 3, regarding access and opportunity expansion, East Java achieved a score of 7.83, whereas the national average was 6.56.

Although the economic growth conditions in East Java are better than the national average, poverty and inequality levels remain high. East Java's poverty rate is higher than the national average (BPS, 2019). This is due to the presence of many poor people in rural areas across most regencies in East Java.

Regency administrative areas are relatively larger than city administrations. Therefore, regencies in East Java still have underdeveloped villages, leading to unequal distribution. This contrasts with the high economic growth rates observed in many cities in East Java. This is evident from the fact that the growth rates of the Gross Regional Domestic Product (GRDP) in East Java's cities are higher than those in its regencies.

One reason for a region's lag in economic development is its low attractiveness and resources due to limited infrastructure facilities, resulting in low economic activity. A region that lacks resources, whether human or natural, and offers few incentives (such as infrastructure, hardware and software, and security) can fall behind in development.

Infrastructure development can impact economic growth both directly and indirectly.

Infrastructure itself is a prerequisite for other sectors to develop and serves as a means of creating connections between various entities. The empowerment of resources to build infrastructure will stimulate the economic process, resulting in both economic and social multiplier effects (Setiadi, 2006).

The reason for the East Java provincial government to build extensive infrastructure in the region is partly to enhance the well-being of the nation and its people. This development is intended to facilitate the flow of economic activity both within and outside East Java. The focus is on improving land, sea, and air infrastructure, as well as maintaining and upgrading provincial roads that provide access to production centers (Jean, 2018).

The economic sector is a crucial area of continuous attention for the government. The national macroeconomic goals include achieving economic stability, growth, and high levels of economic development. Essentially, development should reflect a total change in society towards a better living condition (Todaro & Smith, 2006).

The health sector also influences economic growth, as health impacts the entire population and workforce. Research by Pane et al. (2020) indicates that variables related to health facilities and population size have a positive and significant effect on economic growth. Improving public health quality remains a central focus for the government. Efforts to increase and expand access to healthcare facilities in Indonesia are ongoing to meet public health needs. Additionally, the government provides Health Insurance Social Security programs to all Indonesian citizens to ease and reduce the burden of healthcare payments.

Based on the above description and previous research on factors affecting inclusive economic growth within a province, the author conducted a study titled "**Analysis of Inclusive Economic Growth and Its Influencing Factors (Case Study of Districts/ Cities in East Java Province).**"

LITERATURE REVIEW

Public Policy Theory

Public policy is a series of actions and decisions made by the government designed to address social, economic, or political issues faced by society. According to the famous political scientist Dye (1972), public policy can be defined as "a program of activities pursued by a government to achieve specific goals in society."

According to James E. Anderson, as cited by Islamy (2009), policy is "a purposive course of action followed by an actor or set of actors in

dealing with a problem or matter of concern" (a series of actions with a specific purpose that are followed and implemented by an individual or group of actors to solve a particular problem).

Meanwhile, Fredrich, as cited in Agustino (2017), states that policy is a series of actions or activities proposed by an individual, group, or government in a specific environment where there are obstacles (difficulties) and possibilities (opportunities), and the policy is proposed to be useful in addressing these issues to achieve the intended goals.

Policy can also be viewed as a system. A system is a series of interconnected and interdependent parts that are organized under specific rules to form a whole. According to Dunn (1994), the policy system includes the reciprocal relationship between three elements: public policy, policy actors, and the policy environment. The system and components of public policy are also explained by William Dunn, as cited in Ayuningtyas (2014), as follows:

a. Policy content

The policy content consists of a list of decision options concerning public affairs (including decisions to take no action) made by government institutions and officials. The content of a policy responds to various public issues that encompass different areas of life, such as defense, security, energy, health, education, welfare, and more.

b. Policy stakeholders

Policy stakeholders or policy actors are individuals or groups directly related to a policy, who can either influence or be influenced by the decisions or policies. These policy actors can include groups of citizens, labor organizations, street vendors, journalist communities, political parties, government institutions, and similar entities.

C. Policy environment

The policy environment is the specific setting in which a policy occurs, which both influences and is influenced by the policy actors and the public policy itself.

The process of making public policy is complex because it involves many processes and variables that need to be analyzed. Therefore, some political scientists interested in studying public policy divide the policy-making process into several stages. The purpose of this division is to make it easier to study public policy. However, different scholars may divide these stages in varying sequences.



Figure 1. Policy Stages

Source: William Dunn in Winarno (2007)

Economic Growth

Economic growth refers to efforts to increase production capacity to achieve higher output, which is measured using Gross Domestic Product (GDP) or Gross Regional Domestic Product (GRDP) in a given area (Adisasmita, 2013).

According to Kuznets, as cited in Todaro (2000), economic growth is the long-term increase in a country's capacity to provide a variety of economic goods to its population. This capacity increase is made possible by technological advancements, institutional adjustments, and ideological adaptations to the existing conditions.

Economic growth is a process of increasing per capita output over the long term. It focuses on three aspects: process, per capita output, and long-term. Economic growth is a process, not a snapshot of an economy at a specific point in time. Here, we observe the dynamic aspect of an economy, which is how an economy develops or changes over time. The emphasis is on the change or development itself (Boediono, 1999).

Economic growth is a process where output per capita increases over the long term. The term "process" refers to a change or development. Economic growth is typically observed over a certain period; if the period is one year, economic growth is represented by a chained index of GRDP at constant prices minus 100 percent, as follows:

$$PE = \frac{PDRB_t - PDRB_{(t-1)}}{PDRB_{(t-1)}} \times 100\%$$

Information:

PE : Economic Growth

GDP_t : GDP at constant prices in year t

GRDP_(t-1) : GDP at constant prices for the year (t-1)

Inclusive Economic Growth

Inclusive economic growth is the result of the emergence of sustainable economic growth, which has long been outlined in global agreements on the Sustainable Development Goals (SDGs). Inclusive economic growth refers to economic growth that reduces poverty and unemployment, creates equity, and accelerates economic growth. It is an indicator of economic progress that not only aims to increase income but also to reduce poverty, improve income distribution, and expand employment opportunities. In Indonesia, inclusive economic growth is one of the focal studies of the National Development Planning Agency (BAPPENAS).

Inclusive economic growth can be measured using the Inclusive Economic Development Index (IPEI), which is issued by BAPPENAS. This index combines the results of economic and non-economic variables that influence inclusive economic growth. To facilitate decision-making, BAPPENAS uses the following classification to identify whether the IPEI score is categorized as unsatisfactory or otherwise:

1. Unsatisfactory category: IPEI score ranging from 1 to 3.
2. Satisfactory category: IPEI score ranging from 4 to 7.
3. Highly satisfactory category: IPEI score ranging from 8 to 10 (BAPPENAS, 2022).

Klasen (2010) defines inclusive growth as growth that reduces disparities between income groups. Based on previous research, it can be

concluded that economic growth can be considered inclusive if it reduces poverty, income distribution inequality, and unemployment.

According to Ramos et al. (2013), inclusive economic growth is defined as economic growth that not only focuses on output growth as an end goal but emphasizes the impact of that growth, particularly the increase in employment opportunities and the involvement of all societal layers in supporting economic growth, which will lead to a reduction in poverty and inequality. Singosari (2017) argues that growth is considered inclusive if it enhances social opportunity functions, which depend on two factors: (i) the average opportunities available to society and (ii) how those opportunities are distributed among society.

Citing research conducted by McKinley (2010), the Asian Development Bank (ADB) measures inclusive economic growth using several key variables, including:

1. Economic Growth: GRDP per capita growth, share of agriculture, industry, and services.
2. Employment: Percentage of the labor force employed.
3. Economic Infrastructure: Households with access to electricity, internet, and mobile phone ownership.
4. Poverty: Percentage of the population living in poverty.
5. Inequality: Gini Ratio.
6. Gender: Gender Development Index, Female Human Development Index, percentage of births assisted by medical professionals.
7. Health and Nutrition: Percentage of children immunized against measles, life expectancy.
8. Education: Net enrollment rate in senior high school.
9. Water and Sanitation: Access to clean water and sanitation.
10. Social Protection: Social protection guarantees.

The World Economic Forum (WEF) uses seven main pillars and indicators to measure inclusive economic growth:

1. Education and skills development: Expected years of schooling and net enrollment rate in senior high school.
2. Public services and infrastructure: Access to clean water, electricity, and sanitation.
3. Corruption: Anti-corruption index.
4. Asset ownership and entrepreneurship: Percentage of homeownership.
5. Employment: Open unemployment rate.
6. Social protection: Funding for subsidized rice programs (Raskin).

7. Financial intermediation: Percentage of Gross Fixed Capital Formation (GFCF) to GRDP.

RESEARCH METHOD

Research Design

The type of research applied in this study is quantitative research, specifically descriptive research, which aims to depict events as they are. Descriptive research, as defined by Sukmadinata (2011), aims to explain or describe phenomena, whether natural or man-made. This study aims to comprehensively analyze the variables influencing economic development in urban and rural communities within the East Java region.

Type and Source of Data

Type of Data

The type of data used is time series data, which is collected over a series of time points. This research employs secondary data. Secondary data refers to information that has been previously collected and is available from existing sources. Secondary data sources include company records or documentation, government publications, industry analyses by media, websites, the internet, and other sources (Sekaran, 2011).

Source of Data

The secondary data used includes information on the Inclusive Economic Development Index (IPEI), Employment Rate, Good Road Conditions, Gini Ratio, Poverty Rate, Population with Health Insurance, and Households with Access to Safe Drinking Water from the Central Bureau of Statistics (BPS).

Data Analysis

According to Sugiyono (2013), data collection techniques are crucial in research as the primary goal of research is to obtain data and the methods for collecting it. Among the various data collection techniques, this research employs triangulation. Triangulation refers to the data collection technique that combines different data collection methods and sources.

Data collection was conducted using documentary methods, gathering secondary data from the Central Bureau of Statistics (BPS). The collected data was then processed and analyzed quantitatively using Eviews 12 software.

Population and Sample

Population

The population consists of all subjects, elements, or events that have the nominal and qualitative characteristics to be considered and included in the study (Morissan, 2012). The population for this research includes the urban and rural communities in the East Java region.

Sample

According to Sugiyono (2010), a sample is a subset of the population that is selected for analysis. Arikunto (2010) defines a sample as a portion of the population that is studied or represents the population. For this study, the sample focuses on data from the years 2017-2021.

RESULT AND DISCUSSION

Analysis and Discussion

The analysis involves interpreting the results of panel data processing using E-Views 13 software. These results will influence the research objectives.

Estimation of the Inclusive Economic Development Index Model

The estimation aims to assess the impact of variables including the Inclusive Economic

Development Index (IEDI), Employment Opportunity Rate (EOR), Good Road Conditions, Gini Ratio, Poverty Rate, Population with Health Insurance, and Households with Access to Safe Drinking Water. The steps in panel data analysis are as follows:

1. Model Selection Testing

To select the appropriate model, a Chow test was conducted to determine whether the correct model is the Common Effect Model (CEM) or the Fixed Effect Model (FEM). The results, shown in Table 4.1, indicate that the p-value from the chi-square test is $0.0000 < 0.05$. Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted, concluding that the appropriate model is FEM.

Table 1. Chow Test Results

Testing	Prob. Chi-Square	Information
<i>Chow Test</i>	0.0000*	<i>Fixed Effect Model (FEM)</i>

* Significant α 5%

Source: Data Processed with E-Views 13 Software (2024)

The results of the Chow test indicate that FEM is the selected model. Subsequently, a Hausman test was conducted to determine whether the appropriate model is the Random Effect Model (REM) or FEM. The results show that the probability value from the cross-section random is

$0.0000 < 0.05$, leading to the acceptance of the alternative hypothesis (H_a). Therefore, it can be concluded that the chosen model is FEM, as illustrated in Table 2. Thus, FEM is determined to be the appropriate model.

Table 2. Hausman Test Results

Testing	Prob. Chi-Square	Information
<i>Hausman Test</i>	0.0000*	<i>Fixed Effect Model (FEM)</i>

* Significant α 5%

Source: Data Processed with E-Views 13 Software (2024)

2. Hypothesis Testing

The results for the CPO demand model in Indonesia are shown in Table 3, with the following explanation:

a. Coefficient of Determination

Based on the test results in Table 2, the Adjusted R-Squared value is 0.594051 or 59.40%. This indicates that the independent variables—Tingkat Kesempatan Kerja (TKK),

Jalan Kondisi Baik, Gini Ratio, Penduduk Miskin, Penduduk yang Memiliki Jaminan Kesehatan, and Rumah Tangga dengan Sumber Air Minum Layak—explain 59.40% of the behavior of the dependent variable, Indeks Pembangunan Ekonomi Inklusif (IPEI). The remaining 40.60% is explained by other variables not included in the model.

Table 3. Fixed Effect Model Estimation Results

Dependent Variable: IPEI?				
Independent Variable	Coeffisient	Tstat	Prob	Conclusion
C	2064.646	207.4046		
TKK?	4.109647	4.677658	0.0000	(+) Sig
JKB?	-0.706879	-11.84918	0.0000	(-) Sig
GINI?	0.025459	1.682149	0.0947	(+) TdkSig
PM?	0.183667	0.048948	0.9610	(+) Tdk Sig
JK?	-0.374347	-2.447815	0.0156	(-) Sig
AML?	0.010740	6.265684	0.0000	(+) Sig
<i>R-squared</i>	0.686410			
<i>Adjusted R-squared</i>	0.594051			
F-stat	7.432004			
Prob F-stat	0.000000			

b. Simultaneous Test (F-Test)

The results for the overall model test are shown with an F-statistic value of 7.432004. The probability value of the F-statistic is 0.000000 < 0.05, which leads to rejecting the null hypothesis (Ho) and accepting the alternative hypothesis (Ha). This indicates that at least one of the independent variables significantly affects the dependent variable, Indeks Pembangunan Ekonomi Inklusif (IPEI).

c. Partial Test (T-Test)

H1: Tingkat Kesempatan Kerja (Employment Rate) has a significant positive effect on Indeks Pembangunan Ekonomi Inklusif (IPEI).

The statistical test results show a probability value for Tingkat Kesempatan Kerja of (0.0000) < 0.05 (alpha 5 percent), leading to accepting the alternative hypothesis (Ha) with an estimated coefficient value of 4.109647. Thus, it can be concluded that Tingkat Kesempatan Kerja has a significant positive effect on Indeks Pembangunan Ekonomi Inklusif.

H2: Jalan Kondisi Baik (Good Road Conditions) has a significant positive effect on Indeks Pembangunan Ekonomi Inklusif.

The statistical test results show a probability value for Jalan Kondisi Baik of (0.0000) < 0.05 (alpha 5 percent), leading to accepting the alternative hypothesis (Ha) with an estimated coefficient value of -0.706879. Thus, it can be concluded that Jalan Kondisi Baik has a significant negative effect on Indeks Pembangunan Ekonomi Inklusif.

H3: Gini Ratio has a significant negative effect on Indeks Pembangunan Ekonomi Inklusif.

The statistical test results show a probability value for Gini Ratio of (0.0947) > 0.05 (alpha 5 percent), leading to rejecting the alternative hypothesis (Ha) with an estimated coefficient value of 0.025459. Thus, it can be concluded that Gini Ratio does not have a significant effect on Indeks Pembangunan Ekonomi Inklusif.

H4: Penduduk Miskin (Poor Population) has a significant negative effect on Indeks Pembangunan Ekonomi Inklusif.

The statistical test results show a probability value for Penduduk Miskin of (0.9610) > 0.05 (alpha 5 percent), leading to rejecting the alternative hypothesis (Ha) with an estimated coefficient value of 0.183667. Thus, it can be concluded that Penduduk Miskin does not have a significant effect on Indeks Pembangunan Ekonomi Inklusif.

H5: Penduduk yang Memiliki Jaminan Kesehatan (Population with Health Insurance) has a significant positive effect on Indeks Pembangunan Ekonomi Inklusif.

The statistical test results show a probability value for Penduduk yang Memiliki Jaminan Kesehatan of (0.0156) < 0.05 (alpha 5 percent), leading to accepting the alternative hypothesis (Ha) with an estimated coefficient value of -0.374347. Thus, it can be concluded that Penduduk yang Memiliki Jaminan Kesehatan has a significant negative effect on Indeks Pembangunan Ekonomi Inklusif.

H6: Rumah Tangga dengan Sumber Air Minum Layak (Households with Access to Safe Drinking Water) has a significant positive effect on Indeks Pembangunan Ekonomi Inklusif.

The statistical test results show a probability value for Rumah Tangga dengan Sumber Air Minum Layak of $(0.0000) < 0.05$ (alpha 5 percent), leading to accepting the alternative hypothesis (H_a) with an estimated coefficient value of 0.010740. Thus, it can be concluded that Rumah Tangga dengan Sumber Air Minum Layak has a significant positive effect on Indeks Pembangunan Ekonomi Inklusif.

d. Fixed Effect Model Regression Analysis

$$IPEI_{it} = 2064.646 + 4.109647TKK_{it} - 0.706879JKB_{it} + 0.025459GINI_{it} + 0.183667PM_{it} - 0.374347JK_{it} + 0.010740AML_{it}$$

The results of the Fixed Effect Model regression test, with a 5% error level for each variable, are as follows:

- 1) **Constant (α) = 2064.646:** This indicates that if the variables for the Level of Employment Opportunities, Road Conditions, Gini Ratio, Poor Population, Population with Health Insurance, and Households with Access to Clean Drinking Water are all at 0, the Inclusive Economic Growth Index will increase by 2064.646.
- 2) **$\beta_1 = 4.109647$:** This indicates that if the Level of Employment Opportunities increases by 1 unit, the Inclusive Economic Growth Index will increase by 4.109647.

- 3) **$\beta_2 = -0.706879$:** This indicates that if Road Conditions increase by 1 unit, the Inclusive Economic Growth Index will decrease by 0.706879.
- 4) **$\beta_3 = 0.025459$:** This indicates that if the Gini Ratio increases by 1 unit, the Inclusive Economic Growth Index will increase by 0.025459.
- 5) **$\beta_4 = 0.183667$:** This indicates that if the Poor Population increases by 1 unit, the Inclusive Economic Growth Index will increase by 0.183667.
- 6) **$\beta_5 = -0.374347$:** This indicates that if the Population with Health Insurance increases by 1 unit, the Inclusive Economic Growth Index will decrease by 0.374347.
- 7) **$\beta_6 = 0.010740$:** This indicates that if Households with Access to Clean Drinking Water increases by 1 unit, the Inclusive Economic Growth Index will increase by 0.010740.

e. Analysis of Intercept per District/City

The Fixed Effect Model in panel data assumes that the coefficients of the slopes for each variable are constant, but the intercepts vary across each cross-sectional unit. Based on the E-views results, the following calculations were made to construct the FEM model:

Table 4. Individual Effect Results

<i>Cross ID</i>	<i>Individual Effect</i>	<i>Cross ID</i>	<i>Individual Effect</i>
Kabupaten Sampang	16813.66	Kabupaten Ponorogo	963.7726
Kabupaten Sumenep	12418.82	Kabupaten Malang	929.3447
Kabupaten Probolinggo	11045.84	Kabupaten Kediri	843.6433
Kabupaten Pacitan	10901.39	Kabupaten Pasuruan	-2210.02
Kabupaten Bangkalan	10431.65	Kabupaten Jombang	-2359.29
Kabupaten Pamekasan	10112.12	Kabupaten Tulungagung	-2512.44
Kabupaten Bondowoso	7756.532	Kabupaten Banyuwangi	-2862.11
Kabupaten Situbondo	7735.902	Kabupaten Gresik	-3063.47
Kabupaten Tuban	5468.739	Kota Mojokerto	-3499.19
Kabupaten Trenggalek	5120.727	Kota Batu	-3703.3
Kabupaten Ngawi	4567.986	Kabupaten Mojokerto	-3973.76
Kabupaten Lumajang	3163.669	Kota Probolinggo	-6916.65
Kabupaten Bojonegoro	2900.687	Kota Pasuruan	-8562.01
Kabupaten Madiun	2697.404	Kabupaten Sidoarjo	-10544.5
Kabupaten Lamongan	2343.72	Kota Kediri	-11391.1
Kabupaten Nganjuk	2014.43	Kota Blitar	-12317.4
Kabupaten Jember	1993.874	Kota Surabaya	-15291.7
Kabupaten Magetan	1517.732	Kota Malang	-16203.6
Kabupaten Blitar	1482.887	Kota Madiun	-17814

Source: Processed Data from E-views 13 (2024)

Based on the Individual Effect results, each district/city has different impacts, such as the effects of employment opportunities, road conditions, Gini Ratio, poor population, population with health insurance, and households with access to clean drinking water on the Inclusive Economic Growth Index. As seen in Table 4, some districts/cities show negative impacts on the Inclusive Economic Growth Index. The largest impact is seen in Sampang Regency at 16813.66, while the smallest impact is in Madiun City at -17814. Each district/city has its own policies for managing its region.

3. Discussion and Economic Analysis

a. Economic Analysis of Employment Opportunities (X1)

Based on the statistical test results, the probability value for Employment Opportunities is $0.0000 < 0.05$ (alpha 5 percent), indicating that the null hypothesis (H_0) is rejected. This means that Employment Opportunities have a significant effect on the Inclusive Economic Growth Index.

The coefficient value shows that the impact of Employment Opportunities on the Inclusive Economic Growth Index is 4.109647. This means that if Employment Opportunities increase by 1 unit, the Inclusive Economic Growth Index will increase by 4.109647.

Employment Opportunities significantly affect the Inclusive Economic Growth Index with a positive coefficient value. According to theory, the level of employment opportunities has a positive effect on IPEI. The broader the employment opportunities in a region, the greater the economic growth and development. Expanding job opportunities directly increases productivity and influences economic development. High economic growth and development provide a fundamental basis for creating and expanding economic opportunities and job prospects, ultimately leading to inclusive economic development.

Ramos et al. (2013) explains that inclusive economic development is growth that enhances job opportunities and maximizes participation across all segments of society, supporting economic growth (participation dimension). This, in turn, reduces inequality and poverty (benefit sharing dimension). Similarly, Afriyana et al. (2023) assert that inclusive economic growth is an indicator of

economic progress that can expand job opportunities.

b. Economic Analysis of Road Conditions (X2)

Based on the statistical test results, the probability value for Road Conditions is $0.0000 < 0.05$ (alpha 5 percent), indicating that the null hypothesis (H_0) is rejected. This means that Road Conditions have a significant effect on the Inclusive Economic Growth Index.

The coefficient value shows that the impact of Road Conditions on the Inclusive Economic Growth Index is -0.706879. This means that if Road Conditions improve by 1 unit, the Inclusive Economic Growth Index will decrease by 0.706879.

There is a negative relationship between road infrastructure and the inclusive economic growth index, meaning that as the length of roads increases, the Inclusive Economic Growth Index decreases, and vice versa. This is due to the large size of districts/cities in East Java, as seen from the percentage of roads in good condition, which is still below 50% on average, and the average index on pillar 1 remains in the "satisfactory" category.

This contrasts with the study by Panjaitan et al. (2019), which showed that road infrastructure development has a positive and significant impact on inclusive economic growth. This means that road infrastructure can improve job opportunities and more equitable income distribution.

c. Economic Analysis of the Gini Ratio (X3)

Based on the statistical test results, the probability value for the Gini Ratio is $0.0947 > 0.05$ (alpha 5 percent), indicating that the alternative hypothesis (H_a) is rejected. This means that the Gini Ratio does not have a significant effect on the Inclusive Economic Growth Index.

The coefficient value shows that the impact of the Gini Ratio on the Inclusive Economic Growth Index is 0.025459. This means that if the Gini Ratio increases by 1 unit, the Inclusive Economic Growth Index will increase by 0.025459.

The Gini Ratio does not significantly affect the Inclusive Economic Growth Index, although there is a positive relationship as indicated by the coefficient value. However, according to Aoyagi & Ganelli (2015), in countries experiencing inclusive economic growth, Gross Domestic Product (GDP)

increases and the Gini Ratio decreases. This differs from the findings of Dinda (2014) and Qiu & Zhao (2019), which show that the Gini Ratio positively affects inclusive economic growth, especially in developed countries.

d. Economic Analysis of the Poor Population (X4)

Based on the statistical test results, the probability value for the Poor Population is $0.9610 > 0.05$ (alpha 5 percent), indicating that the alternative hypothesis (H_a) is rejected. This means that the Poor Population does not have a significant effect on the Inclusive Economic Growth Index.

The coefficient value shows that the impact of the Poor Population on the Inclusive Economic Growth Index is 0.183667. This means that if the Poor Population increases by 1 unit, the Inclusive Economic Growth Index will increase by 0.183667.

The Poor Population does not significantly affect the Inclusive Economic Growth Index, despite a positive relationship indicated by the coefficient value. However, contrary to the theory, where inclusive economic growth is expected to be enhanced by a decrease in the percentage of the poor population, inclusive economic growth aims to create quality economic growth, reduce income distribution inequality, diminish regional development disparities, and reduce poverty.

This finding contrasts with the study by Maknun & Luk (2024), which showed that the percentage of the poor population has a negative and significant impact on the inclusive economic growth index. The study indicated that there is no bias effect due to the almost similar values across districts and cities, while the percentage of the poor population remains below 50%, at 22.42%.

e. Economic Analysis of the Population with Health Insurance (X5)

Based on the statistical test results, the probability value for the Population with Health Insurance is $0.0156 < 0.05$ (alpha 5 percent), indicating that the null hypothesis (H_0) is rejected. This means that the Population with Health Insurance has a significant negative effect on the Inclusive Economic Growth Index.

The coefficient value shows that the impact of the Population with Health Insurance on the Inclusive Economic Growth Index is -0.374347. This means that if the Population

with Health Insurance increases by 1 unit, the Inclusive Economic Growth Index will decrease by 0.374347.

The Population with Health Insurance significantly affects the Inclusive Economic Growth Index with a negative relationship as indicated by the coefficient value. However, contrary to the theory, health insurance is expected to improve quality of life and support people in health matters without financial constraints, which should ideally benefit economic growth.

This result aligns with the research by Damayanti (2021), which found that health insurance has a negative and significant impact on inclusive growth. This is contrary to the findings of Klassen (2010) & Safitri et al. (2021), who stated that health functions have a positive and significant relationship with the Inclusive Economic Growth Index (IPEI).

f. Economic Analysis of Households with Access to Safe Drinking Water (X6)

Based on the statistical test results, the probability value for Households with Access to Safe Drinking Water is $0.0000 < 0.05$ (alpha 5 percent), indicating that the null hypothesis (H_0) is rejected. This means that Households with Access to Safe Drinking Water have a significant positive effect on the Inclusive Economic Growth Index.

The coefficient value shows that the impact of Households with Access to Safe Drinking Water on the Inclusive Economic Growth Index is 0.010740. This means that if Households with Access to Safe Drinking Water increases by 1 unit, the Inclusive Economic Growth Index will increase by 0.010740.

This finding aligns with the theory that expanding access to basic infrastructure, such as the percentage of households with access to safe drinking water, facilitates economic growth for relatively disadvantaged groups. The result is consistent with the studies by Alius (2024) & Afriyana et al. (2023), which show that water infrastructure has a positive and significant impact on the level of inclusive economic growth.

CONCLUSION

Based on the formulation and objectives of the research, the theoretical foundation, and the

research methods described in the previous chapters, the results of this study are as follows:

1. **Employment Opportunities:** Employment opportunities have a significant positive effect on the Inclusive Economic Growth Index. This means that as the scope of employment opportunities in a region expands, economic growth and development will increase.
2. **Road Conditions:** The condition of roads has a significant negative effect on the Inclusive Economic Growth Index. This indicates that while the total length of well-maintained roads reflects better infrastructure accessibility and smoother economic activities, in the case of districts/cities in East Java, it does not lead to an improvement in IPEI or enhance economic growth to reach a broader population.
3. **Gini Ratio:** The Gini Ratio does not have a significant effect on the Inclusive Economic Growth Index. This suggests that a high Gini Ratio does not reflect an increase or decrease in IPEI among districts/cities in East Java.
4. **Poor Population:** The poor population does not have a significant effect on the Inclusive Economic Growth Index. This indicates that poverty alleviation alone is not sufficient for achieving inclusive economic development in districts/cities in East Java.
5. **Health Insurance:** The population with health insurance has a significant negative effect on the Inclusive Economic Growth Index. This implies that health insurance is an indicator of better quality of life and should contribute to higher and more inclusive economic development. However, in the case of districts/cities in East Java, an increase in the population with health insurance does not sufficiently improve IPEI.
6. **Access to Safe Drinking Water:** Access to safe drinking water has a significant positive effect on the Inclusive Economic Growth Index. This means that expanding access to basic infrastructure, specifically access to quality drinking water, is essential for inclusive economic growth in districts/cities in East Java.

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May this research provide valuable contributions to various parties, particularly to the East Java government, in enhancing inclusive economic growth in the province.

BIBLIOGRAPHY

- Adisasmita, Rahardjo. (2013). *Theories of Economic Development, Economic Growth, and Regional Growth*, First Edition, Graha Ilmu, Yogyakarta, p. 4.
- Afriyana, Lina., Salmah, Emi., Sriningsih, Siti., & Harsono, Iwan. (2023). Analysis of the Impact of Infrastructure Development on Inclusive Economic Growth in Districts/Cities in West Nusa Tenggara Province 2016-2021. *Journal of Development Economics* Vol. 5 No. 1, March 2023.
- Agustino, Leo. (2017). *Fundamentals of Public Policy*. Bandung: Alfabeta Bandung.
- Ali, Ifzal and Son, Hyun Hwa. (2007). Measuring Inclusive Growth. *Asian Development Review* Vol. 24, No. 1, pp. 11–31. Manila: ADB.
- Amalina, Solihah.DH., Hutagaol, Parulian., & Asmara, Alla. (2018). Inclusive Growth: The Phenomenon of Inclusive Growth in Western and Eastern Indonesia. *Journal of Economics and Development Policy* 2(2):85-112 February 2018 DOI:10.29244/jekp.2.2.2013.85-112
- Anand et al. (2013). Inclusive Growth Revisited: Measurement and Determinants, (122), pp. 1–7. Available at: <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.690.837>.
- Aoyagi, C., & Ganelli, G. (2015). Asia's Quest for Inclusive Growth Revisited. *Journal of Asian Economics*, 40, 29–46.
- Arikunto, S. (2010). *Research Procedures: A Practical Approach*. Jakarta: Rineka Cipta.
- Aschauer, D. A. (1989). Is Public Expenditure Productive. *Journal of Monetary Economics*, (23): 177–200.

- Asian Development Bank. (2012). *Infrastructure for Supporting Inclusive Growth and Poverty Reduction in Asia*. Manila: ADB.
- Ayuningtyas, Dumilah. (2014). *Health Policy: Principles and Practice*. Jakarta: Raja Grafindo Persada.
- Azwar. (2016). Inclusive Growth in South Sulawesi Province and Its Influencing Factors. *Journal of BPPK* Vol. 9 No. 2 pp. 216-242.
- Central Bureau of Statistics. (2014). *Human Development Index 2014*. ISSN/ISBN: 2086-2369 Jakarta. Accessed December 20, 2023 (<https://www.bps.go.id/id/publication/2015/11/24/25966cc343193d0f0e257855/indeks-pembangunan-manusia-2014.html>).
- Central Bureau of Statistics. (2016). *Concept of Poor Population*. Accessed May 20, 2024 (<https://sulut.bps.go.id/subject/23/kemiskinan.html>).
- Central Bureau of Statistics. (2019). *Percentage of Poor Population in East Java September 2019*. Accessed March 22, 2024 (<https://jatim.bps.go.id/pressrelease/2020/01/15/1135/persentase-penduduk-miskin-di-jawa-timur-september-2019-mencapai-10-20-persen-.html>).
- Baltagi, B. H. (2008). *Econometrics* (4th ed.). New York: Springer.
- BAPPENAS. (2018). *Inclusive Economic Development Index*. <https://inklusif.bappenas.go.id//indeks>
- BAPPENAS. (2020). *Inclusive Economic Development Index*. <https://inklusif.bappenas.go.id//indeks>
- Basitas. (2011). *Economics in Health*. Tangerang: TEK.
- Bhattacharya, Rudrani., Gupta, Abhijit.Sen., & Sikdar, Satadru. (2020). *Building Infrastructure to Promote Inclusive Growth*. Working Paper No. 321.
- Boediono. (1999). *Series Synopsis of Introduction to Economics* No. 4: *Economic Growth Theory*, BPFE, Yogyakarta, 1999, p. 1.
- Budi, Winarno. (2007). *Public Policy: Theory and Process*, (Revised Edition), Yogyakarta: Media Pressindo.
- Calderon, C & Serven, Luis. (2005). *The Effects of Infrastructure Development on Growth and Income Distribution*. World Bank Policy Research Working Paper Series No. 3643. Washington DC: World Bank.
- Chaerunnisa, D. N. (2014). *The Effect of Infrastructure on Economic Growth in Sukabumi City: 1990-2012*. Bogor Agricultural University.
- Damayanti, Herlina. (2010). *Analysis of Inclusive Growth in Poverty, Unemployment, and Income Inequality in Indonesia*. Thesis. Tidar University.
- Dinda, S. (2014). *Inclusive Growth through Creation of Human and Social Capital*. *International Journal of Social Economics*.
- Dunn, W. N. (1994). *Public Policy Analysis: An Introduction*, New Jersey: Pearson Education.
- Dye, Thomas L. (1972). *Understanding Public Policy*, Prentice Hall. New Jersey: Inc.
- Firdaus, M. (2012). *Econometrics Applications for Panel and Time Series Data*. Bogor: IPB Press.
- Gibson, J & Olivia, Susan. (2009). *The Effect of Infrastructure Access and Quality on Non-Farm Enterprises in Rural Indonesia*. *World Development*. 38(5): 717–726.
- Gujarati, D.N. (2012). *Essentials of Econometrics*. Jakarta: Salemba Empat.
- Greene, W. H. (2012). *Econometric Analysis* 7th Edition (7th ed.). New Jersey: Pearson.
- Hapsari, T. (2011). *The Effect of Infrastructure on Economic Growth in Indonesia*. UIN Syarif Hidayatullah Jakarta.
- Harahap, Sofyan.Syafri. (2006). *Critical Analysis of Financial Statements*. Jakarta: PT. Raja Grafindo Persada.
- Hartati, Yuniar Sri. (2021). *Analysis of Inclusive Economic Growth in Indonesia*. *Journal of Economics & Business* Volume 12, Number 1, July 2021.
- Hay, C., Hunt, T., & McGregor, J. A. (2022). *Inclusive Growth: The Challenges of Multidimensionality and Multilateralism*. *Cambridge Review of International Affairs*, 35(6), 888–914.
- Hudiyanto. (2014). *Development Economics*. Yogyakarta: Muhammadiyah University of Yogyakarta.
- Islamy, M. Irfan. (2009). *Principles of State Policy Formulation*. Jakarta: Bumi Aksara.
- Jean, L. Ermine. (2018). *Knowledge Management (The Creative Loop) Vol.5. Ed 1*, Wiley-ISTE ISBN 9781119516262.
- Kakwani N., & Pernia, EM. (2000). *What is Pro-Poor Growth?.* *Asian Development Review*. 18(1): 1-16.
- Ministry of National Development Planning/BAPPENAS. (2018). *Inclusive Economic Development Index*, National Development Planning Agency. Available

- at: <http://inklusif.bappenas.go.id/indeks> (Accessed: 26 July 2020).
- Keynes, John Maynard. (1991). *The General Theory of Employment, Interest and Money*. Gadjah Mada University Press. Yogyakarta.
- Kim, YL. (2006). *Spatial Econometric Analysis of Highway and Regional Economy in Missouri*. Dissertation. Missouri (DC): University of Missouri.
- Kireyev, A. (2017). *Inclusive Growth: Decomposition, Incidence, and Policies Lessons for Asia*. ADBI Working Paper 689. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/inclusive-growth-decomposition-incidence-policies-lessons>.
- Klasen, Stephen. (2010). *Measuring and Monitoring Inclusive Growth: Multiple Definitions, Open Questions, and Some Constructive Proposals*. ADB Sustainable Development Working Paper Series.
- Kodoatie, J. Robert. (2003). *Management of Water Resources in Regional Autonomy*. Indonesian Hydraulic Engineering Association. Jakarta.
- Kristyanto, Visi. Saujaningati & Kaluge, David. (2018). *Increasing Economic Inclusiveness Through Human Capital Investment Financing*. *Journal of Applied Quantitative Economics* Vol. 11 No. 2 pp. 182-189.
- Lincoln, Arsyad. (2004). *Development Economics*. Fourth Edition. Yogyakarta: STIE YKPN.
- Luiz, O. R., Mariano, E. B., & Silva, H. M. R. da. (2021). *Pro-poor Innovations to Promote Instrumental Freedoms: A Systematic Literature Review*. *Sustainability*, 13(24), 13587.
- Maknun, II & Luk, Luk. (2024). *The Effect of Human Development Index on Inclusive Economic Growth Index in Gorontalo Province*. *Journal of Economics JIE*. Vol. 8 No. 02 pp. 199–209. DOI: 10.30984/jie.v8i2.567.
- Mankiw, N. Gregory. (2010). *Principles of Economics*. Jakarta: Erlangga.
- Noh, B. W. (2020). *The Role of Infrastructure in Economic Growth: Evidence from Korea*. *Journal of Economic Studies*, 47(2), 467-485.
- O'Neill, D. & Seidman, R. (2009). *The Impact of Infrastructure Investment on Economic Growth in Developing Countries*. *Journal of Development Economics*. 88: 130–138.
- Prasetyo, A. B., & Praptiwi, E. (2022). *The Role of Infrastructure Development in Achieving Inclusive Economic Growth in Central Java*. *Journal of Development Economics* Vol. 18 No. 1, March 2022.
- Purboyo, M. (2016). *Structural Equation Modeling: An Introduction*. Jakarta: Gramedia.
- Robinson, J. A., & Acemoglu, D. (2008). *Institutions and Economic Performance*. Working Paper.
- Rosenberg, M. (2015). *Economic Growth: Theories and Policies*. New York: Routledge.
- Sen, Amartya. (1999). *Development as Freedom*. Oxford University Press.
- Suryana, A. & Kholid, M. (2022). *The Effect of Infrastructure Development on Inclusive Growth in East Nusa Tenggara Province*. *Journal of Regional and City Planning*, Vol. 3, No. 1, January 2022, pp. 16-30.
- Temby, O. (2014). *Infrastructure Investment and Economic Growth: A Comparative Study of Developing Countries*. *International Journal of Economics and Finance*, 6(4), 45-62.
- World Bank. (2011). *Infrastructure and Inclusive Growth: Asia's Experience*. Washington DC: World Bank.
- Zhang, X. (2018). *The Role of Infrastructure in Promoting Inclusive Economic Growth: Evidence from China*. *Economic Modelling*, 70, 290-298.