THE INFLUENCE OF ECONOMIC OPENNESS ON INCOME INEQUALITY AMONG PROVINCES IN INDONESIA

Meikanur Sidiq[1], Toto Gunarto[2], Arivina Ratih[3], Neli Aida[4], Dedy Yuliawan[5]
[1,2,3,4,5] Fakultas Ekonomi dan Bisnis, Universitas Lampung, Indonesia
Email: meikanur.sidiq1597@gmail.com, toto.gunarto@feb.unila.ac.id, arivina.ratih@feb.unila.ac.id, neli.aida@feb.unila.ac.id, dedy.yuliawan@feb.unila.ac.id

ABSTRACT

Economic growth is a macro indicator to measure the success of development, so all countries strive to achieve high economic growth to create prosperity for the society, especially for developing countries. At the beginning of economic growth, income inequality will increase, but over time, income inequality will decrease. This research was conducted to analyze the influence of economic growth rate, non-oil export ratio, non-oil import ratio, and foreign direct investment ratio on income inequality among provinces in Indonesia. The data used in this study is panel data obtained from the Central Statistics Agency covering 34 provinces in Indonesia from 2018 to 2022. The results of this study indicate that the economic growth rate has a positive but not significant effect on income inequality in Indonesia, the non-oil import ratio has a positive and significant effect on income inequality in Indonesia, the foreign direct investment ratio has a negative but not significant effect on income inequality in Indonesia, while the non-oil export ratio does not have a significant effect on income inequality in Indonesia.

KEYWORDS	*Economic Growth, Non-Oil and Gas Exports, Non-Oil and Gas Imports, Foreign Investment*

INTRODUCTION

Economic growth is a macro indicator used to measure the success of development, so all countries strive to achieve high economic growth to create welfare for the society, especially for developing countries. However, rapid economic growth is often accompanied by widening income inequality, both among households and regions (Armstrong & Taylor, 2000). At the onset of economic growth, income inequality tends to increase, but over time it decreases (Kuznets,

1955). Economic inefficiency is caused by extreme income inequality, which increases the number of people living in poverty. Regional income inequality should receive attention in development efforts. Regardless of the average income level, higher inequality leads to a narrower population segment eligible for loans or other credit sources. Moreover, extreme income inequality damages social stability and solidarity and represents injustice to society (Kurniasih, 2017).

The following is a description of the 34 provinces used in this study from 2018 to 2022, summarized into several major islands to facilitate interpretation.
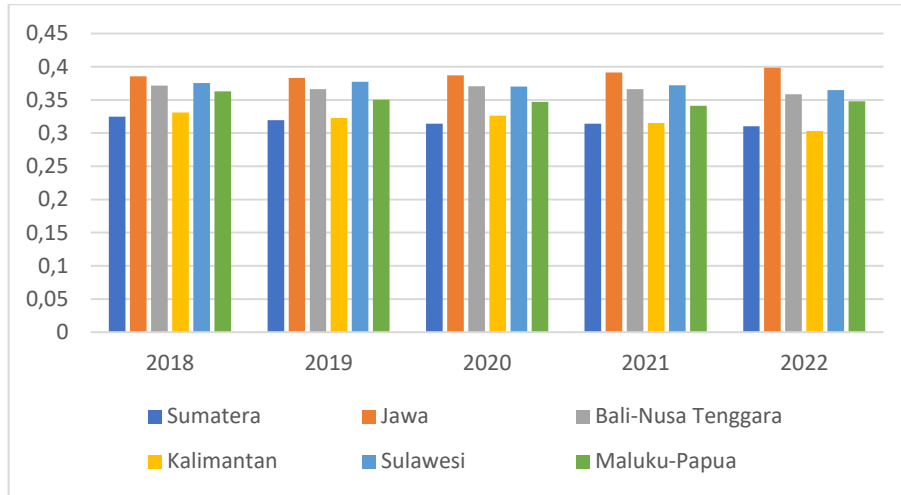

Figure 1. Gini Index of Major Islands in Indonesia from 2018 to 2022

Yogyakarta had the highest Gini index in 2018 at 0.422, increasing to 0.459 in 2022. Bangka Belitung Islands Province had the lowest Gini index in 2018 at 0.272, decreasing to 0.255 in 2022.

Income inequality results in differences in a region's ability to promote economic growth and drive development processes. Economic growth, which reflects increased welfare through higher incomes due to increased production, leads to increased consumption. However, increased production benefits only a small segment of the population, leading to disparities (Ayuning Lestari & Amaliah, 2023).
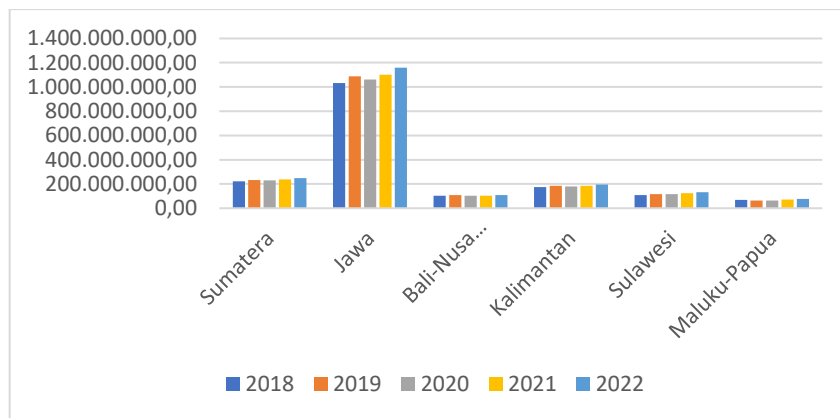

Figure 2. GDP Based on Constant Prices by Expenditure (2010=100) in Major Islands of Indonesia from 2018 to 2022

The Influence of Economic Openness on Income Inequality Among Provinces in Indonesia

DKI Jakarta had the highest GDP based on constant prices since 2018, reaching 1,735,208,291.06 million Indonesian Rupiah in 2018 and increasing to 1,953,455,853.41 million Indonesian Rupiah in 2022. Meanwhile, North Maluku Province had the lowest GDP based on constant prices in 2018 at 25,034,082.20 million Indonesian Rupiah, increasing to 40,248,385.16 million Indonesian Rupiah in 2022.

Kuznets (1955) found a correlation between income level and income distribution in an inverted U shape. According to Kuznets, during the development process, income distribution inequality initially increases due to industrialization and urbanization processes, which eventually affect the development stages. Income inequality decreases when urban sectors can absorb most of the labor force from rural areas. This shows a relationship between economic growth and income inequality.
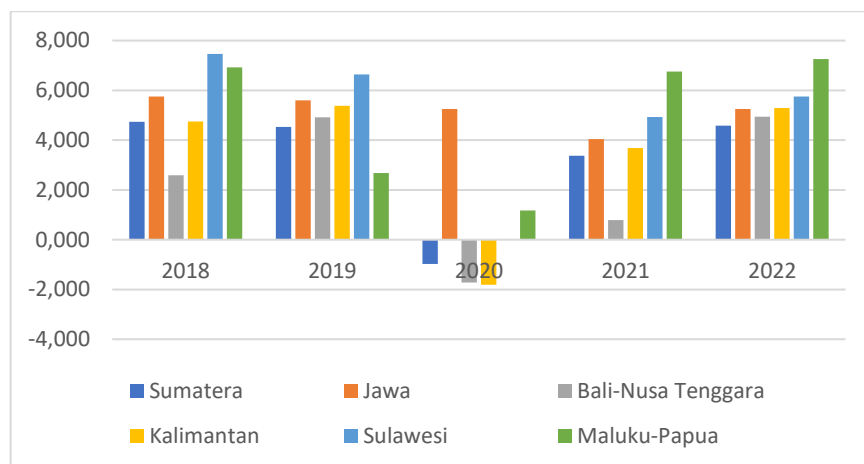

Figure 3. Year-on-Year GDP Growth Rate Based on Expenditure (2010=100) (Percent) in Major Islands of Indonesia from 2018 to 2022

Central Sulawesi Province had the highest GDP growth rate since 2018 at 20.6 percent, decreasing to 15.17 percent in 2022. West Nusa Tenggara Province had the lowest GDP growth rate in 2018 at -4.5 percent due to economic growth instability caused by inefficiencies in the economy relying on natural resources. It increased to 6.95 percent in 2022.

The correlation of economic openness to inequality in developing countries with high populations entering the industrialization era should lead to a decrease in existing regional inequality. This aligns with the theory of new economic geography, where regional inequality in developing countries can be reduced through trade openness by creating economic agglomerations around economic centers to avoid congestion, high rental costs, and pollution costs (Krugman & Livas Elizondo, 1996).
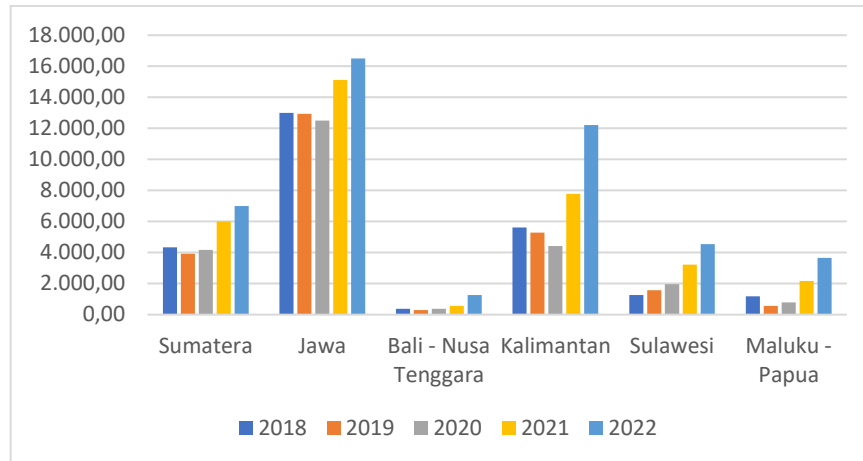
Figure 4. Non-Oil Exports in Major Islands of Indonesia (Million US Dollars) from 2018 to 2022

West Java Province had the highest non-oil exports in 2018 at 30,120.5 million US dollars, increasing to 38,275.2 million US dollars in 2022. Meanwhile, Gorontalo had the lowest non-oil exports in 2018 at 35.2 million US dollars, increasing to 52 million US dollars in 2022.
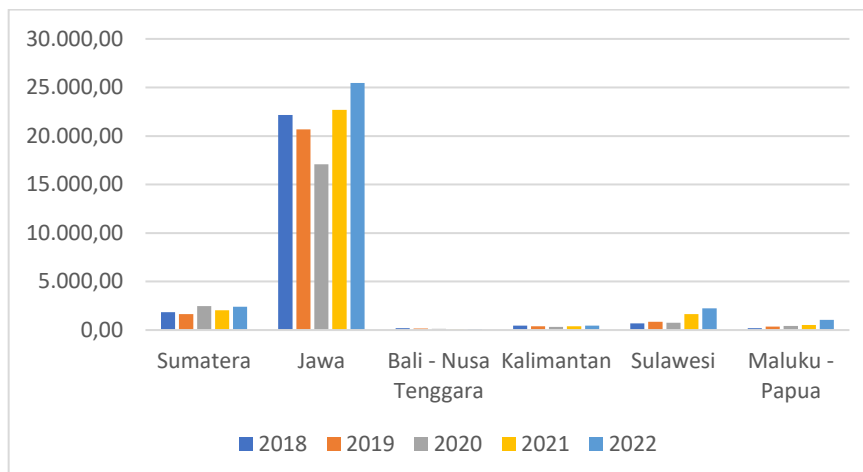

Figure 5. Non-Oil Imports in Major Islands of Indonesia (Million US Dollars)

DKI Jakarta had the highest non-oil imports in 2018 at 92,149.70 million US dollars, increasing to 106,317.4 million US dollars in 2022. Meanwhile, Gorontalo had the lowest non-oil imports in 2018 at 1 million US dollars, increasing to 3.5 million US dollars in 2022.

The determinant factors of economic growth are capital, divided into foreign capital known as Foreign Direct Investment (FDI) and domestic capital known as Domestic Direct Investment (DDI). Indonesia faces capital limitations like most developing countries. Although Indonesia has promising resources for foreign investors, there are obstacles preventing them from investing (Murti & Sahara, 2019).

The Influence of Economic Openness on Income Inequality Among Provinces in Indonesia
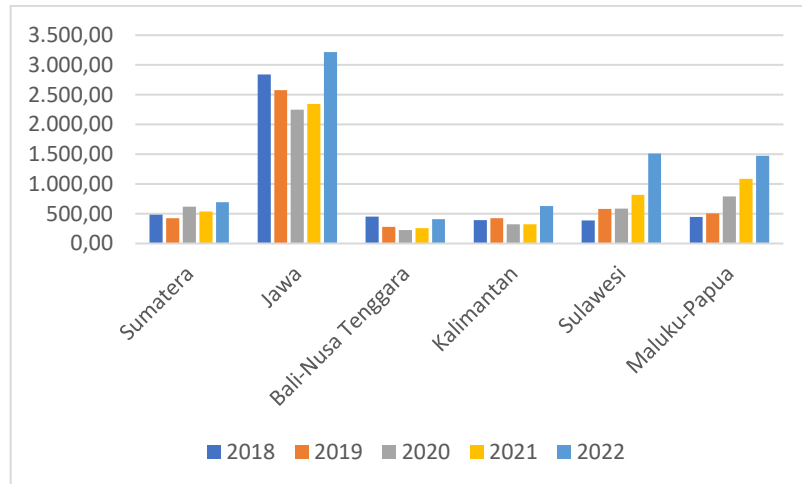
Figure 6. Foreign Direct Investment Realization by Major Islands of Indonesia
(Million US Dollars)

West Java Province had the highest foreign direct investment realization in 2018 at 5,573.5 million US dollars, increasing to 6,534.5 million US dollars in 2022. Meanwhile, Maluku Province had the lowest foreign direct investment realization in 2018 at 8 million US dollars, increasing to 73.4 million US dollars in 2022.

Based on the background description above, the author attempts to analyze the relationship between economic growth rate, non-oil exports, non-oil imports, and foreign direct investment on income inequality among provinces in Indonesia. The aim of this research is to provide references and recommendations for stakeholders to formulate policies related to economic growth, non-oil exports, non-oil imports, and foreign direct investment to reduce income inequality.

Literature Review
Lorenz Curve

The Lorenz curve is a graph used to depict the distribution of inequality or disparity in distribution. The further the Lorenz curve is from the diagonal line, the greater the income inequality experienced, and conversely, if the Lorenz curve is closer to the diagonal line, the smaller the income inequality experienced (Todaro, Michael P & Smith, 2011).
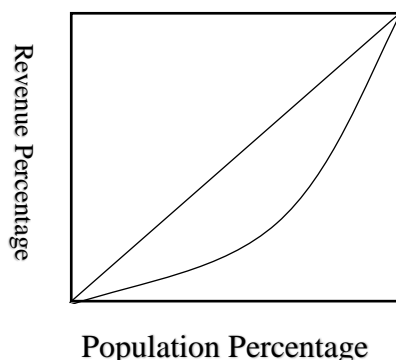

Figure 7. Kurva Lorenz

Gini Coefficient

The Gini coefficient is a concise measure of income distribution inequality in a country. The Gini coefficient measures overall inequality, ranging from zero (perfect equality) to one (perfect inequality) (Arsyad, 2010). The Gini coefficient ranges from 0 to 1, where a value of 0 indicates perfect distribution, while a value of 1 indicates extreme inequality. The higher the Gini coefficient, the greater the inequality in distribution (Todaro, Michael P & Smith, 2011).

Economic Openness

An open economy, also known as a four-sector economy, is an economic system that engages in exports and imports with other countries. In this context, export activities contribute to increased aggregate expenditure, ultimately leading to increased national income. However, in the context of imports, this will have the opposite effect by causing outflows or leaks, ultimately leading to a decrease in national income. When analyzing an open economy, it is important to realize that there is a difference between an open economy and a closed economy and to consider this difference in explaining equilibrium determination. The export and import processes are the first elements that differentiate the two, where exports can provide an additional injection into an open economy. In a closed economy, this additional injection consists of investments and government expenditures (I+G), while in an open economy, this additional injection consists of exports of goods and services (I+G+X). Additionally, imports will cause changes in terms of leaks, from savings and government taxes (S+T), to include imports (S+T+M). The two differences in open and closed economies can result in differences in the IS curve (Sukirno, 2012).

International Trade

International trade indicates a country that implements an open economic system. A country implementing such an economic system will facilitate its citizens to engage in economic activities between domestic and international communities. Trade is defined as an exchange process based on voluntary agreements from each party (Boediono, 1997). International trade encompasses the trading of goods and services between countries through export-import activities that can provide benefits to meet the needs of that country that cannot be met domestically. The aim of international trade is to improve the standard of living of the population and the economy of that country (Schumacher, 2013).

Foreign Direct Investment

Foreign direct investment, or Foreign Direct Investment (FDI), is real investment in the form of stocks, factory construction, company establishment, provision of capital goods, infrastructure, land, and raw materials in which investors are involved in managing such capital investment (Anwar et al., 2016). FDI is conducted by countries that implement an open economic system. FDI is a form of foreign investment in real assets made in one country by another country. The benefits of FDI for the investing country include positive impacts on the trade balance of the home country because it can create demand for exports of semi-finished goods, skilled labor, capital equipment, and complementary products. Meanwhile, the positive impact for the target country includes the addition of new capital, job creation, and technology transfer, which can drive economic growth (Pambudi, 2012).

Economic Growth

Economic growth is an important indicator for analyzing economic development in a country. This is obtained from the fact that if real national income or real gross national product increases, then the economy grows and develops. According to Todaro & Smith (2006), economic growth has three important and significant components for society, namely:

a. Accumulation of capital, which includes all new investments in land, human resources, and physical equipment by improving work skills, health, and education.
b. Population growth, which will eventually increase the labor force.
c. Technological progress, which will ultimately increase productivity.

RESEARCH METHOD

Types and Sources of Data

This study uses a quantitative descriptive type of analysis, which analyzes using numerical data and interprets it. The study utilizes panel data, which consists of a combination of time series and cross-sectional data. The time series data consist of annual data over ten years from 2018 to 2022, while the cross-sectional data involve 34 provinces in Indonesia. The data are sourced from the Central Bureau of Statistics (BPS) and the Ministry of Trade.

Operational Definition of Variables

The definition of each variable used in this study is as follows:

Gini Index

The value of the Gini index is measured using the Gini index of provinces in Indonesia from 2018 to 2022 obtained from the Central Bureau of Statistics.

Economic Growth Rate

The value of the economic growth rate is measured using the growth rate of Gross Regional Domestic Product (GRDP) at constant 2010 prices of provinces in Indonesia from 2018 to 2022 (in percentage) obtained from the Central Bureau of Statistics.

Non-Oil and Gas Export Ratio

The value of non-oil and gas exports is measured by the amount of non-oil and gas exports (US$) divided by the Gross Regional Domestic Product (GRDP) at constant 2010 prices (US$) of provinces in Indonesia from 2018 to 2022 (in percentage) obtained from the Ministry of Trade and the Central Bureau of Statistics.

Non-Oil and Gas Import Ratio

The value of non-oil and gas imports is measured by the amount of non-oil and gas imports (US$) divided by the Gross Regional Domestic Product (GRDP) at constant 2010 prices (US$) of provinces in Indonesia from 2018 to 2022 (in percentage) obtained from the Ministry of Trade and the Central Bureau of Statistics.

Foreign Direct Investment Ratio

The value of foreign direct investment is measured by the amount of foreign direct investment (US$) divided by the Gross Regional Domestic Product (GRDP) at constant 2010 prices (US$) of provinces in Indonesia from 2018 to 2022 (in percentage) obtained from the Central Bureau of Statistics.

Research Model

IG_{it} $\quad = \beta_0 + \beta_1\,LPE_it + \beta_2\,RENM_{it} + \beta_3\,RINM_{it} + \beta_4\,RPMA_{it} + eit$

where:

IG_{it}	= Gini index of Indonesia
LPE_{it}	= Economic growth rate of Indonesia (percent)
$RENM_{it}$	= Non-oil and gas export ratio of Indonesia (percent)
$RINM_{it}$	= Non-oil and gas import ratio of Indonesia (percent)
$RPMA_{it}$	= Foreign direct investment ratio of Indonesia (percent)
B_0	= Constant
$\beta_{1,2,3,4,}$	= Coefficients
e	= Residual (error term)
i	= Observed province (i = 1, ...N)
t	= Study period (t = 1, ….T)

RESULT AND DISCUSSION

Results of Panel Data Regression Test

Model Selection Criteria Test

The selection of the model for panel data regression is determined by conducting the Chow Test, Hausman Test, and Lagrange Multiplier (LM) Test. The Chow Test is used by comparing the Common Effect Model (CEM) method with the Fixed Effect Model (FEM) method, the Hausman Test is used by comparing the Random Effect Model (REM) method with the Fixed Effect Model (FEM) method, and the Lagrange Multiplier (LM) Test is used by comparing the Random Effect Model (REM) method with the Common Effect Model (CEM) method.

a. Chow Test

The Chow Test is conducted to choose the best method between the Common Effect Model (CEM) or Fixed Effect Model (FEM), using the Redundant Fixed Effect Likelihood Ratio. Conclusions are drawn from the test results by observing the probability value (P-value). If the P-value is smaller than the significance level (α), then the Fixed Effect Model (FEM) method is better, and vice versa if the P-value is greater than the significance level (α), then the better method is the Common Effect Model (CEM).

Table 1. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	75,623129	(30,275)	0,0000
Cross-section Chi-square	508,471743	30	0,0000

Source: Eviews 12 Output

Based on Table 1, for the Chow Test, the probability value (P-value) obtained is 0.000, which is smaller than (α) 5 percent, and the value of the calculated Chi-square is 508.623, which is greater than the critical Chi-square value of 47.399. Therefore, the null hypothesis (H0) is rejected, concluding that the Fixed Effect Model (FEM) method is better than the Common Effect Model (CEM) method for analyzing the data in this study.

The Influence of Economic Openness on Income Inequality Among Provinces in Indonesia

b. Hausman Test

The Hausman Test is conducted to choose the best method between the Random Effect Model (REM) and the Fixed Effect Model (FEM), using the Correlated Random Effects-Hausman Test. Conclusions are drawn from the test results by observing the Probability value (Prob.). If the Probability value (Prob.) is smaller than the significance level (α), then the Fixed Effect Model (FEM) method is better, and vice versa if the Probability value (Prob.) is greater than the significance level (α), then the better method is the Random Effect Model (REM).

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3,609200	4	0,4615

Source: Eviews 12 Output

Based on Table 2, the Probability value (Prob.) obtained is 0.461, which is greater than α (0.05), and the Chi-Square Statistic value is 3.609, which is greater than the critical Chi-Squares table value of 9.487. Therefore, the null hypothesis (H0) is accepted, concluding that the Random Effect Model (REM) is better than the Fixed Effect Model (FEM) for analyzing the data in this study.

c. Breusch-Pagan LM Test

The Breusch-Pagan Lagrange Multiplier Test is conducted to choose the best method between the Common Effect Model (CEM) and the Random Effect Model (REM), using the Omitted Random Effects-Lagrange Multiplier. Conclusions are drawn from the test results by observing the Cross-section Breusch-Pagan value (χ calculated). If the χ calculated is smaller than the significance level (α), then the Common Effect Model (CEM) method is better, and vice versa if the χ calculated is greater than the significance level (α), then the better method is the Random Effect Model (REM).

Table 3. Breusch-Pagan Lagrange Multiplier Test

Test Hypothesis	Cross-section	Chi-Sq d.f.	Prob
Breusch-Pagan	278,5813	4	0,000

Source: Eviews 12 Output

Based on Table 3, the Cross-section Breusch-Pagan value is 278.5813, which is greater than the critical Chi-Square table value of 9.487. Therefore, the null hypothesis (H0) is rejected, concluding that the Random Effect Model (REM) is better than the Common Effect Model (CEM) for analyzing the data in this study.

Regression Calculation Results

Based on the three tests conducted, namely the Chow Test, Hausman Test, and Lagrange Multiplier Test, it was found that the Random Effect Model (REM) is considered the best for analyzing the data in the study. Therefore, the results of the regression calculations are available in the table below.

Table 4. Regression Calculation Results Fixed Effect Model (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0,350250	0,006508	53,82091	0,0000
LPE	0,000266	0,000212	1,255660	0,2110
RENM	-0,000187	0,0000496	-3,782092	0,0002
RINM	0,000296	0,000122	2,435565	0,0159
RPMA	-0,000181	0,000121	-1,499280	0,1357

Source : Output Eviews 12

$IG_it = \beta o + \beta 1\ LPE_{it} + \beta_2\ RENM_{it} + \beta 3\ RINM_{it} + \beta 4\ RPMA_{it} + e_{it}$

$IG_{it} = 0,350250 + 0,000266\ LPE_{it} - 0,000187\ RENM_{it} + 0,000296\ RINM_{it} - 0,000181\ RPMA_{it} + e_{it}$

[53,82091]   [1,255660]   [-3,782092]   [2,435565]   [-1,499280]

$R^2 = 0,137730$

F Count = 6,588851

Classical Assumption Testing

a. Normality Test

Table 5. Normality Test

Jarque-Bera	Probability	Description
1,301601	0,521628	Residuals are Normally Distributed

Source: Eviews 12 Output

The normality test results yield a Jarque-Bera probability of 0.521, which is greater than α 0.05. Thus, in this study, H0 is accepted, meaning that the residuals are normally distributed.

b. Multicollinearity Detection

Table 6. Multicollinearity Test

	LPE	RENM	RINM	RPMA
LPE	1,000000	0,442883	0,333083	0,456760
RENM	0,442883	1,000000	0,604486	0,678693
RINM	0,333083	0,604486	1,000000	0,616024
RPMA	0,456760	0,678693	0,616024	1,000000

Source: Eviews 12 Output

It is observed that the correlation coefficients among independent variables are less than 0.85 (<0.85), indicating no multicollinearity issues.

c. Heteroskedasticity Test

Table 7. Heteroskedasticity Test

F-statistic	1,634919	Prob. F(4,305)	0,1678
Obs*R-squared	6,480977	Prob. Chi-Square(4)	0,1660
Scaled explained SS	4,982970	Prob. Chi-Square(4)	0,2890

Source: Eviews 12 Output

The value of Obs*R-squared (Chi-square calculated) is 6.48, which is less than the critical Chi-square table value of 9.49, indicating no heteroskedasticity issues (6.48 < 9.49). Additionally, the Prob. Chi-Square result is 0.166, which is greater than the significance level α of 5% (0.166 > 0.05), indicating that the model in this study is free from heteroskedasticity issues.

d. Autocorrelation Test

Table 8. Autocorrelation Test

DW count	DW table		Description
	d_L	d_U	
1,278340	1,7012	1,7975	Autocorrelation Detected

Source: Eviews 12 Output

The value of 0 < 1.278 < 1.701, Rejecting the null hypothesis indicates positive autocorrelation. According to (Ghozali & Ratmono, 2022), the autocorrelation test is only relevant when the data used is time series to determine the correlation in a linear regression model between residual errors at period t and the errors at period t-1 (previous). Furthermore, according to Basuki & Prawoto (2017), autocorrelation testing is not necessary for panel data because autocorrelation is used on data that must be sorted in a certain pattern and cannot be changed, namely time series data

Hypothesis Testing
1. Partial Hypothesis Testing (t-test)

Table 11. Partial Hypothesis Testing Results

Independent Variable	t – calculated	t - table	Probability	Conclusion
LPE	1,203016	2,261429	0,2311	H_0 Accepted
RENM	-3,479529	2,261429	0,0007	H_0 Rejected
RINM	2,242425	2,261429	0,0266	H_0 Accepted
RPMA	-1,487240	2,261429	0,1393	H_0 Accepted

Source : Output Eviews 12

2. Joint Hypothesis Testing (F-test)

Table 12. Joint Hypothesis Testing

Df (k - 1 ; n – k - 1)	A	F – calculated	F – table	Conclusion
(4 ; 165)	5%	79,99861	2,864249	H_0 Rejected

Source: Output Eviews 12

3. Coefficient of Determination Results

Based on the regression calculation results using the Random Effect Model (REM), an R-Squared value of 0.137730 is obtained. This means that 13.77% of the dependent variable, the Gini Index, is explained by the independent variables used in the model, namely Economic Growth Rate, Ratio of Non-Oil and Gas Exports, Ratio of Non-Oil and Gas Imports, and Ratio of Foreign Direct Investment, while the remaining 86.23% can be explained by other variables outside the model.

Discussion of Research Results

The Effect of Economic Growth Rate on Provincial Income Inequality in Indonesia

The results of the regression random *effect model* in table 4 variables of economic growth rate have a positive insignificant effect on the level of 95% confidence in the variable of provincial income inequality in Indonesia. The result of the regression coefficient of 0.000266 means that if the value of the economic growth rate increases by 1 percent, then income inequality will increase by 0.001604 percent assuming other things remain.

The Effect of Non-Oil and Gas Export Ratio on Provincial Income Inequality in Indonesia

The results of the regression random *effect model* in table 4 of non-oil and gas export ratio variables have a negative and significant effect on the 95% confidence level in the variable of provincial income inequality in Indonesia. The result of the regression coefficient of -0.000187 means that if the value of the non-oil and gas export ratio increases by 1 percent, then income inequality will decrease by 0.000187 percent assuming other things remain.

The Effect of Non-Oil and Gas Import Ratio on Provincial Income Inequality in Indonesia

The results of the regression random *effect model* in table 4 of non-oil and gas import ratio variables have a positive and significant effect on the level of 95% confidence in provincial income inequality variables in Indonesia. The result of the regression coefficient of 0.000296 means that if the value of the ratio of non-oil and gas imports increases by 1 percent, then income inequality will increase by 0.000296 percent assuming other things remain.

The Effect of Foreign Direct Investment Ratio on Provincial Income Inequality in Indonesia

The results of the random *effect regression model* in table 4 variable foreign investment ratio have a negative but not significant effect on the level of 95% confidence in the variable of provincial income inequality in Indonesia. The result of the regression coefficient of -0.000181 means that if the value of the foreign investment ratio increases by 1 percent, then income inequality will decrease by 0.000181 percent assuming other things remain.

CONCLUSION

Based on the data management and discussion conducted, the following conclusions can be drawn: 1. The economic growth rate has a positive but not significant influence on the Gini index of provinces in Indonesia. 2. The ratio of non-oil and gas exports does not have a significant negative effect on the Gini index of provinces in Indonesia. 3. The ratio of non-oil and gas imports has a positive and significant effect on the Gini index of provinces in Indonesia. 4. The ratio of foreign

The Influence of Economic Openness on Income Inequality Among Provinces in Indonesia

direct investment has a negative but not significant effect on the Gini index of provinces in Indonesia. 5. Collectively, the independent variables, namely economic growth rate, ratio of non-oil and gas exports, ratio of non-oil and gas imports, and ratio of foreign direct investment, collectively influence the dependent variable, the Gini index.

REFERENCES

Anwar, C. J., Kuswantoro, & Dewi, S. F. (2016). Faktor-Faktor Yang Mempengaruhi Foreign Direct Investment (Fdi) Di Kawasan Asia Tenggara. *Media Trend*, *11*(2), 175. https://doi.org/10.21107/mediatrend.v11i2.1621

Armstrong, H., & Taylor, J. (2000). *Regional economics and policy*. Blackwell.

Arsyad, L. (2010). *Ekonomi Pembangunan*. UPP STIM YKPN.

Ayuning Lestari, T., & Amaliah, I. (2023). Pengaruh Laju Pertumbuhan Ekonomi dan Indeks Pembangunan Manusia Terhadap Ketimpangan Pendapatan di Provinsi Jawa Barat Tahun 2017-2021. *Bandung Conference Series: Economics Studies*, *3*(1), 246–250. https://doi.org/10.29313/bcses.v3i1.7086

Basuki, A. T., & Prawoto, N. (2017). *Analisis Regresi Dalam Penelitian Ekonomi*. Rajagrafindo Persada.

Ghozali, I., & Ratmono, D. (2022). *Analisis Multivariat dan Ekonometrika Teori, Konsep, dan Aplikasi dengan EViews*. Badan Penerbit Universitas Diponegoro.

Krugman, P., & Livas Elizondo, R. (1996). Trade policy and the Third World metropolis. *Journal of Development Economics*, *49*(1), 137–150. https://doi.org/10.1016/0304-3878(95)00055-0

Kurniasih, E. P. (2017). Effect of economic growth on income inequality, labor absorption, and welfare. *Economic Journal of Emerging Markets*, *9*(2), 181–188. https://doi.org/10.20885/ejem.vol9.iss2.art7

Kuznets, S. (1955). The American Economic Review. *American Economic Review*, *45*(1), 1–28. https://doi.org/10.1257/aer.99.2.i

Murti, T. H., & Sahara. (2019). Pengaruh Pengaruh Investasi terhadap Pertumbuhan Ekonomi Regional di Indonesia. *Jurnal Ekonomi Dan Kebijakan Pembangunan*, *8*(2), 163–181. https://doi.org/10.29244/jekp.8.2.2019.163-181

Pambudi, A. E. (2012). *Perbandingan Faktor Ekonomi Makro Dan Karakteristik Negara Sebagai Determinan FDI Di Asean 5 Dan China Periode 1988-2009*.

Sukirno, S. (2012). *Pengantar Teori Makroekonomi*. Rajawali Press.

Todaro, Michael P & Smith, S. C. (2011). *Pembangunan Ekonomi* (Edisi 11 J). Erlangga

Todaro, M. P., & Smith, S. C. (2006). . Pembangunan Ekonomi (1st ed.). Erlangga.

Todaro, M. P., & Smith, S. C. (2011). Pembangunan Ekonomi (9th ed.). Erlangga.