

Factors Affecting Income Inequality in Yogyakarta Province from 2017 to 2021**Fakhrizal Ahmad Nasiruddin^{1*} Muhammad Arif¹**¹Universitas Muhammadiyah Surakarta

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*Email: b300190174@student.ums.ac.id**ABSTRACT**

Income inequality refers to the disparity in income generated by the community, resulting in a noticeable disparity in income in society. Income inequality in a region can be caused by a variety of factors, including differences in economic growth, population, and poverty. The goal of this study is to examine the magnitude and direction of the effect of factors that influence income inequality, such as the human development index, regional (provincial) minimum wages, work participation rates, and the open unemployment rate. The data used in this study is panel data for the 2017-2021 period in Yogyakarta Province. The analysis technique used is panel data regression analysis with an econometric model (estimator). The model chosen in this study is FEM (fix effect model) model. The results of the study show that income inequality is only influenced by the open unemployment rate variable, while other variables, namely the human development index, regional (provincial) minimum wages, and work participation rates have no effect on income inequality in Yogyakarta Province in the 2017-2021 period.

Keywords: Income Inequality, Minimum Wage, Population

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INTRODUCTION

Economic indicators like growth and inequality, which are used to evaluate a nation or region's economic performance, are strongly linked to the development process. In Indonesia, there is a lengthy controversy over this indication. Gross Domestic Product (GDP) and Gross Regional Domestic Product (GRDP) are two terms used to describe how economic growth is typically measured (GDP). People's welfare improves with greater income levels in a country or region. Indicators of community welfare are typically calculated using national income and per capita income (Novianti & Panjaitan, 2022).

The difference in revenue generated by the community that causes a glaring disparity in income in society is known as income inequality (Nabila & Laut, 2021). Economic disparities, or the unequal distribution of money between high-income and low-income groups, and high levels of poverty, or the number of people living below the poverty line, are two prevalent issues that emerging nations, like Indonesia, must deal with (Nabila & Laut, 2021). Economic disparities or inequality in income distribution is a reality that exists in the midst of society in both developed and developing countries, and is still an important issue to be addressed.

Development can be thought of as a process with many different outcomes, such as modifications to social structures, societal attitudes, and governmental and communal organizations. Along with pursuing faster economic growth, it's essential to address income disparity and reduce poverty. When deciding on the development policies to be executed, inequality issues must be the primary consideration. It is anticipated that improving the quality of the people's overall wellbeing will come after improving the economic welfare of the population. Enhancing the degree of equity in the income distribution among the various economic groups in society can be the first step in one of them. Therefore, development must essentially reflect societal changes or alterations to the social system as a whole. Due to this, the Special Region of Yogyakarta (D.I. Yogyakarta) development process does not function on its own and instead necessitates continual efforts from numerous parties in order to bring about the greatest possible success for all people of D.I Yogyakarta. To ensure that the benefits of development are distributed more fairly, the role of those participating in development must be enlarged in tandem with population quality of life improvements.



Figure 1. Comparison of Income Inequality in Jogja and in Indonesia

Comparison of the Gini index of the DIY Province with the Gini index in Indonesia is the largest in the DIY Province with a percentage of 0.441% and in Indonesia itself with the

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largest percentage of 0.784%. With this comparison, the DIY province can be said to have quite large income inequality because the comparison with Indonesia has a large difference little for income inequality. This is because many DIY residents have income that is not evenly distributed with other people, so there is a large income inequality.

There are many things that can affect income disparity. It is vital to pinpoint the causes of income inequality if we are to address Indonesia's rising inequality. The ideal policy may be developed to close the income distribution gap once the cause of inequality has been discovered. According to (Wicaksono et al., 2017), income disparity in Indonesia is significantly influenced by factors including wealth, education, and employment. In contrast to the human development index and investment factors, (Nabila & Laut, 2021) indicated that economic growth and inflation had a negative impact on income distribution inequality.

According to (Hariani, 2019), the HDI variable is the only one that significantly contributes to income inequality. This implies that high or low income inequality may be influenced by either a high or low HDI. The open unemployment rate (TPT) and the district/city minimum wage (UMK) are two additional variables that have no bearing on income disparity. In contrast, (Sholikah, 2022) discovered that an increasingly unequal pattern of income distribution had a favorable and negligible impact on economic growth. As measured by the human development index, it has no discernible detrimental impact on the disparity of income distribution because high labor productivity can lower inequality levels. The open unemployment rate, however, has a positive and considerable impact because the utilization of the labor force is still subpar.

Based on the available statistical data and the differences in the results of the study of the factors that influence income inequality above, this prompted the writer to review the determinants of the factors that affect income inequality. The purpose of this study is to analyze the direction and magnitude of the influence of factors that influence income inequality, namely the human development index, regional (provincial) minimum wages, work participation rates, and the open unemployment rate. The main urgency in this research is as an illustration for the provincial/regional government in taking the right policies in regional development, and from the description above this research also wants to examine whether the HDI, UMR, APK, and TPT affect income inequality in the Province of the Special Region of Yogyakarta.

METHOD

The types and sources of research data are crucial considerations while choosing the data gathering strategy. The secondary data used in this study includes panel data (time series) for the years 2017 through 2021 in Yogyakarta Province. Secondary data is a source of study information that was either acquired and documented by other parties or was indirectly acquired by researchers through intermediary media. Data for this study were sourced from the Central Statistics Agency and additional publications that covered the subject matter.

The analytical method that will be used to analyze this research is to use a panel data regression model, a combination of time series data with cross sections. In other words, panel data is data obtained from cross section data which is observed repeatedly on the same unit object at different times. Thus, an overview of the behavior of some of these objects will be obtained over several time periods (Nabila & Laut, 2021). Panel data regression analysis with the econometric model (estimator) in this study is as follows:

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$$1. INQ_t = \beta_0 + \beta_1 IPM_{it} + \beta_2 UMR_{it} + \beta_3 APK_{it} + \beta_4 TPT_{it} + \varepsilon_t \dots \dots \dots (1)$$

Where: *INQ* = Income Inequality; *HDI* = Human Development Index; *UMR* = Regional Minimum Wage (Province); *APK* = Work Participation Rate; *TPT* = Open Unemployment Rate; ε = Error term (error factor); β_0 = Constant; $\beta_1 \dots \beta_5$ = Regression coefficient of independent variable; *t* = year to *t*

The method offered by panel data regression can be selected with several tests to determine which of the PLS, FEM, or REM models is the most appropriate. The tests used include: Chow test, Hausman test, and Langrage Multiplie (LM) test.

The F statistical test is used to determine whether the independent variables contained in the regression equation simultaneously or together have an influence on the dependent variable. The conclusion drawn in the F statistical test is to look at the F-Statistics prob 35 with the condition whether it is greater or less than alpha $\alpha = 0.05$ or 5%. The criteria used in testing the F statistic test is if the F-statistic probability $> \alpha (0.05)$, H_0 is accepted then the model used does not exist, conversely if the F-statistic probability $< \alpha (0.05)$, H_0 is rejected it can be concluded that the model used exists.

The t test is used to see the significance level of each independent variable whether it has an influence on the dependent variable. Test the validity of the effect seen by the probability of each independent variable whether it is greater or less than alpha (α) = 0.1 or $\alpha = 10\%$. The criterion for testing the validity of the effect is if the probability $> \alpha = 0.1$, H_0 is accepted, then the independent variable does not have a significant effect on the dependent variable. If probability $< \alpha = 0.1$, H_0 is rejected, it can be concluded that the independent variable has a significant effect on the dependent variable.

The coefficient of determination (Goodness of Fit), which is denoted by R^2 indicates that the variation in the dependent variable in the study can be explained by the variation in the independent variables. R square is also an important measure in regression, because it can inform whether the estimated regression model is good or not. Or in other words, this number can measure how close the estimated regression line is to the actual data (Sukma et al., 2019).

RESULT AND DISCUSSION
Model Conformity Test Results
Chow Test

According to (Nabila & Laut, 2021) the Chow test was carried out to determine the most appropriate model between the common effect model or the fixed effect model.

Table 1. Results of Chow Test

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.342530	(4,16)	0.0015
Cross-section Chi-square	26.056625	4	0.0000

Source: Data processed, 2022

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The results of testing using the Chow test in the table above can be concluded that the most appropriate model between the common effect and fixed effect models is the fixed effect because the chi-square probability value is 0.0000 which is less than 0.01 (0.0000<0.01).

Hausman Test

The Hausman test was carried out to determine the most appropriate model between the fixed effect or random effect models (Sukma et al., 2019).

Table 2. Results of Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	29.370117	4	0.0000

Source: Data processed, 2022

Based on the table above, the results of the Hausman test show the probability value. Random cross section of 0.0000 or less than 0.01, so it can be concluded that the hypothesis Ho is rejected. That is, the right model to use is the fixed effect model. From the test results above, it can be concluded that a more appropriate model is used to analyze the influence of factors that affect income inequality, namely the human development index, regional (provincial) minimum wages, work participation rates, and the open unemployment rate is the fixed effect model.

Panel Data Regression Analysis Results

According to (Sukma et al., 2019) panel data regression analysis is a method of regression analysis that is carried out by stacking time series data observations with cross section data. In panel data regression the researcher observes the same individual unit from time to time.

Table 3. Results of Fixed Effect Model (FEM) Regression

	Coefficient	Std. Error	t-Statistic	Prob.
C	1.388349	0.666956	2.081618	0.0538
IPM	-0.009861	0.025638	-0.384618	0.7056
LOG(UMR)	-0.010331	0.150419	-0.068680	0.9461
APK	-0.001691	0.001486	-1.137720	0.2720
TPT	0.010838	0.005641	1.921128	0.0727

Source: Data Processed, 2022

Based on the regression results using the Eviews 10 program in the table above, the following equation is obtained:

$$2. Y = 1.388349 - 0.009861 \cdot IPM - 0.010331 \cdot LOG(UMR) - 0.001691 \cdot APK + 0.010838 \cdot TPT + \epsilon_{it} \dots\dots\dots(2)$$

From the results of the regression equation above, it can be interpreted as follows:

- 1) A constant value of 1.388349 states that if all the independent variables, namely the human development index (IPM), regional (provincial) minimum wage (UMR), work participation rate (APK), and open unemployment rate (TPT) have a fixed value, then income inequality in D.I Yogyakarta PERIOD 2017-2021 will be worth 1.388349 percent.

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- 2) The regression coefficient of the human development index variable (IPM) is -0.009861, meaning that if the human development index increases by 1 percent assuming other variables are constant, it will reduce income inequality in DI Yogyakarta by -0.009861 percent.
- 3) The regression coefficient of the regional (provincial) minimum wage variable (LOG UMR) is -0.010331, meaning that if the regional (provincial) minimum wage increases by 1 percent assuming other variables are constant, it will reduce income inequality in DI Yogyakarta by -0.010331.
- 4) The regression coefficient of the work participation rate variable (APK) is -0.001691, meaning that if the work participation rate increases by 1 percent, assuming other variables are constant, it will reduce income inequality in DI Yogyakarta by -0.001691.
- 5) The regression coefficient of the open unemployment rate variable (TPT) is 0.010838, meaning that if the open unemployment rate increases by 1 percent, assuming other variables are constant, it will increase income inequality in DI Yogyakarta by 0.010838.
- 6) Of the four variables above, what is significant is the variable open unemployment rate (TPT) because many people in DI Yogyakarta still wish to continue their education level, on the other hand many people who have completed education in the past year are still many who have not been absorbed into the market work.

Statistic Test

Partial Test (t test)

The t test was conducted to determine the effect of each independent variable (human development (IPM), regional (provincial) minimum wage (UMR), work participation rate (APK), and open unemployment rate (TPT) on the dependent variable (Income Inequality) partially. If the value of $t_{count} < t_{table}$, then partially the independent variables have no effect on the dependent variable. Meanwhile, if the $t_{count} > t_{table}$ then partially the independent variables affect the dependent variable.

Based on the tests that have been carried out, the results can be obtained as in the following table:

Table 4. Results of Partial Test (t test)

Variable	t-statistic	t-table	Prob	Alpha	Conclusion
IPM	-0.384618	2.04227	0.7056	>0,01	No Effect
LOG (UMR)	-0.068680	2.04227	0.9461	>0,01	No Effect
APK	-1.137720	2.04227	0.2720	>0,01	No Effect
TPT	1.921128	2.04227	0.0727	<0,01	Effect

Source: Data processed, 2022

Based on the table above, it can be seen that the probability t-statistic for HDI (Human Development Index) is 0.7056 (> 0.01), so H_0 is not rejected or HDI has no effect on income inequality. Then Log (UMR) or provincial regional minimum wage has a t-statistical probability of 0.9461 (> 0.01), so that H_0 is not rejected or Log (UMR) has no effect on Income Inequality. Then APK (Work Participation Rate) has a t-statistical probability value of 0.2720 (> 0.01), so that H_0 is not rejected or APK does not affect Income Inequality. Meanwhile, TPT (Open Unemployment Rate) has a t-statistical probability value of 0.0727 (< 0.01), so H_0 is rejected or TPT has an effect on Income Inequality.

F Test (Simultaneous Test)

The F test shows whether the independent variables together have an influence on the dependent variable.

Table 5. Results of F Test

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F-statistic	14.23115
Prob(F-statistic)	0.000006

Source: Data processed, 2022

The results obtained are $F_{count} 14.23115 > F_{table} 2.69$ with a probability value of $0.000006 < 0.05$ so from these results it can be concluded that H_a is accepted and H_o is rejected meaning, variable human development index, regional (provincial) minimum wage, work participation rate, and unemployment rate open simultaneously or jointly affect income inequality in DI Yogyakarta Province for the 2017-2021 period.

Coefficient of Determination (R²)

The coefficient of determination is used with the aim of describing the degree of relationship between one or several bound variables. To find out the coefficient of determination can be seen in the R-squared values in the table below:

Table 6. Results of 3. Coefficient of Determination (R²)

R-squared	0.876780
Adjusted R-squared	0.815170

Sumber: Data processed, 2022

From the results of the calculation above, it can be seen that the value of R-squared is 0.876780, which means that the independent variables, namely the human development index, regional (provincial) minimum wages, work participation rates, and the open unemployment rate affect income inequality (Y) of 87.67% while the remaining 12.33% is influenced by other variables not included in the regression model.

DISCUSSION

The effect of the human development index on income inequality in DI Yogyakarta Province for the 2017-2021 period

The results of the analysis show that the probability t-statistic for HDI (Human Development Index) is 0.7056 (> 0.01), so H_0 is not rejected or HDI has no effect on income inequality. The results of this study are in line with (Sholikah, 2022) where the human development index variable has no significant negative effect on income distribution inequality. However, this study is in contrast to (Nabila & Laut, 2021), the human development index variable has a positive and significant effect on inequality. The higher the HDI, the higher the productivity of the population so that the level of income will be higher, conversely if the HDI is low then productivity will be low and will affect income. Income inequality can also occur if the unemployment rate in a region is high.

The effect of regional (provincial) minimum wages on income inequality in DI Yogyakarta Province for the 2017-2021 period

The results of the analysis show that the Log (UMR) or provincial regional minimum wage has a t-statistical probability of 0.9461 (> 0.01), so that H_0 is not rejected or Log (UMR) has no effect on Income Inequality. The enactment of the minimum wage is one of the instruments considered capable of improving income distribution thereby reducing income inequality. The minimum wage will directly affect workers' earnings who make low wages

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(less than the minimum wage) and will have a knock-on effect on workers' wages who make more than the minimum wage. The wage Gini ratio in the period from 2017 to 2021 shows that an increase in the nominal and real provincial minimum wage is accompanied with a rise in wage inequality. The findings of this study are consistent with (Nabila & Laut, 2021) that regional UMK has little bearing on regional income disparity. The findings of this study contradict (Nabila & Laut, 2021) who found that the minimum wage has a positive impact on the wage gini ratio. Accordingly, an increase in the minimum wage will ultimately result in an increase in the wage Gini ratio. The distribution of salaries below the median wage is significantly impacted by the minimum wage, but the distribution of wages above the median is not much impacted. The earnings gap between the lowest-paid workers and those with average incomes will widen as the minimum wage rises.

The effect of work participation rates on income inequality in the DI Yogyakarta Province for the 2017-2021 period

The results of the analysis show that APK (Work Participation Rate) has a t-statistical probability value of 0.2720 (>0.01), so that H_0 is not rejected or APK does not affect Income Inequality. The labor force participation rate (TPAK) itself is an employment indicator that provides an overview of the population who are economically active in their daily activities referring to a time during the survey period. The greater the number of residents who are classified as not in the labor force, the smaller the number of labor force which results in a smaller TPAK (Mala et al., 2017). The results of this study are not in line with (Rahma, 2018), the TPAK variable has a positive and insignificant effect on income inequality between provinces.

The effect of the open unemployment rate on income inequality in the DI Yogyakarta Province for the 2017-2021 period

The results of the analysis show that TPT (Open Unemployment Rate) has a t-statistical probability value of 0.0727 (<0.01), so that H_0 is rejected or TPT has an effect on Income Inequality. The results of this study are in line with (Rahma, 2018), that TPT has a positive and significant effect on income inequality between provinces. This study also supports (Khoirudin & Musta'in, 2020), showing that the district/city open unemployment rate has a positive and significant effect on the level of inequality in income distribution. (Yoertiara & Feriyanto, 2022), the TPT variable has a positive and significant effect on income inequality. The problem of unemployment is one of the problems that occur in developing countries. The high unemployment rate causes a person to be unable to receive income or wages resulting in a widening of the gap between the rich and the poor. ka, because it relates to equal distribution of income (Yoertiara & Feriyanto, 2022). The open unemployment rate which tends to be high proves that people's income and welfare are still low. The open unemployment rate can show how much the economy is able to provide jobs so that it can absorb the available supply of labor. The higher the value of the open unemployment rate, the more workers who do not have jobs.

CONCLUSION

Based on the results obtained, it shows that income inequality is only influenced by the open unemployment rate variable, while other variables, namely the human development index, regional (provincial) minimum wages, and work participation rates have no effect on income inequality in Yogyakarta Province in the 2017-2021 period. The high open unemployment rate in some areas of the island of Java suggests that there are still plenty of

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people who have not had the chance to find employment and who are not productive at their jobs, preventing them from earning earnings or income. Income inequality in a community will increase if there is someone without a job or a source of income. The fact that Indonesia's open unemployment rate soared during the Covid-19 outbreak shows that unemployment is a severe issue that requires extraordinary management. When formulating policies to lower unemployment rates, starting at the provincial level, the findings of this study, which show that the open unemployment rate has a major impact on income disparity in the province, might be utilized as a guide.

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REFERENCES

- Anis Kurnianingsih. (2019). Analysis Of Factors Influencing Income Inequality In The Special Region Of Yogyakarta In 2013-2019. *Dinamic: Directory Journal Of Economics* Volume 3 Number 1.
- Bps. 2019. Development Of The Gross Domestic Product Of The Province Of D.I Yogyakarta.
- Damayanti Sari. (2022). Tax Revenue And Income Inequality In Indonesia: A Provincial Level Evidence. *Jurnal Perencanaan Pembangunan: The Indonesian Journal Of Development Planning* Volume Vi No. 2 - August 2022/Page: 155 – 172.
- Ellza Alfya Rahma. (2018). Analysis Of Factors Influencing Income Inequality Between Provinces In Java Island In 2010-2016. *Publication Journal. Indonesian Islamic University.*
- Fachri Rasyidi. (2021). Analysis Of The Factors Affecting Inequality Of Income Distribution In The Province Of The Special Region Of Yogyakarta In 2010-2019. *Uns-Fak. Economics And Business-F0117045.*
- Ghozali, I. (2017). *Structural Equation Model Concept And Program Application.* Amos 24. Semarang: Diponegoro University Publishing Agency.
- Gujarati, Damodar N., And Dawn C. Porter. 2013. *Fundamentals Of Econometrics.* Edition 5 Book 2. Mangunsong Translation, R. C. Jakarta: Salemba Empat.
- Hariani, E. (2019). Analisis Faktor-Faktor Yang Mempengaruhi Ketimpangan Pendapatan Di 38 Kabupaten/ Kota Jawa Timur Tahun 2012-2015. *The International Journal Of Applied Business Tijab*, 3(1), 1–11.
- Hindun, H., Soejoto, A., & Hariyati, H. (2019). Effects Of Education, Unemployment, And Poverty On Income Inequality In Indonesia. *Journal Of Business Economics And Entrepreneurship*, 8(3), 250. <https://doi.org/10.26418/Jebik.V8i3.34721>.
- Khoirudin, R., & Musta'in, J. L. (2020). Analisis Determinan Ketimpangan Pendapatan Di Daerah Istimewa Yogyakarta. *Tirtayasa Ekonomika*, 15, 17. <https://doi.org/10.35448/Jte.V15i1.6407>
- Lubis, Daniel Bastian. (2019). *The Effect Of Provincial Minimum Wage On Wage Inequality In Indonesia.* Ipb University Bogor Indonesia.
- Mala, V. S. N., Suyadi, B., & Sedyati, R. N. (2017). Analisis Tingkat Partisipasi Angkatan Kerja Berdasarkan Kegiatan Ekonomi Masyarakat Desa Tegalsari Kecamatan Tegalsari

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- Kabupaten Banyuwangi Tahun 2015. *Jurnal Pendidikan Ekonomi: Jurnal Ilmiah Ilmu Pendidikan, Ilmu Ekonomi Dan Ilmu Sosial*, 11(1), 130.
<https://doi.org/10.19184/jpe.v11i1.5014>
- Nabila, L. M., & Laut, L. T. (2021). Determinan Ketimpangan Pendapatan Provinsi D.I. Yogyakarta Tahun 2012-2020. *Syntax Idea*, 3(8), 1874.
<https://doi.org/10.36418/syntax-idea.v6i8.1410>
- Novianti, T., & Panjaitan, D. V. (2022). Income Inequality In Indonesia: Before And During The Covid-19 Pandemic. *International Journal Of Economics And Financial Issues*, 12(3), 29–37. <https://doi.org/10.32479/ijefi.12996>
- Rahma, E. A. (2018). Analisis Faktor-Faktor Yang Mempengaruhi Ketimpangan Pendapatan Antar Provinsi Di Pulau Jawa. *Journal Of Chemical Information And Modeling*, 1–9.
- Sholikhah, N. R. (2022). *Jurnal Pendidikan Ekonomi (Jupe) Vol . 10 No . 3 (2022)*, 247 - 253. 10(3), 247–253.
- Sukma, D. A., Indrawati, L. R., & Juliprijanto, W. (2019). 269 | *Dinamic: Directory Journal Of Economic Volume 1 Nomor 3 Tahun 2019*. 1(1), 269–281.
- Vina Shofia Nur Mala. (2017). Analysis Of The Labor Force Participation Rate Based On The Economic Activities Of The Tegalsari Village Community, Tegalsari District, Banyuwangi Regency In 2015. *Journal Of Economic Education: Scientific Journal Of Education, Economics, And Social Sciences Issn 1907-9990 | E-Issn 2548-7175 | Volume 11 Number 1 (2017)*.
- Wicaksono, E., Amir, H., & Nugroho, A. (2017). *Inequality In Indonesia : Asian Development Bank Institute*. 667.
- Widarjono, Agus. 2018. *Introductory Econometrics And Its Applications. Fifth Edition*. Yogyakarta : Upp Stim Ykpn.
- Yoertiara, R. F., & Feriyanto, N. (2022). Pengaruh Pertumbuhan Ekonomi, Ipm, Dan Tingkat Pengangguran Terbuka Terhadap Ketimpangan Pendapatan Provinsi-Provinsi Di Pulau Jawa. *Jurnal Kebijakan Ekonomi Dan Keuangan*, 1(1), 92–100.
<https://doi.org/10.20885/jkek.vol1.iss1.art9>