



THE DYNAMICS OF INCOME INEQUALITY IN THE SOLO RAYA REGION, 2008-2020

Nanda Adhi Purusa^a, Miftachul Mujib^b, Joni Prayogi^c, Fahrein All Sandra^d

^a Fakultas Ekonomi dan Bisnis / Manajemen, nandapurusa@dsn.dinus.ac.id, Universitas Dian Nuswantoro
^b Fakultas Ekonomi dan Bisnis / Manajemen, miftachul.mujib@dsn.dinus.ac.id, Universitas Dian Nuswantoro
^c Fakultas Ekonomi dan Bisnis / Manajemen, joniprayogi@dsn.dinus.ac.id, Universitas Dian Nuswantoro
^d Sejalan Kreatip Research Center, Surakarta www.sejalankreatip.com

Abstract

This study examines the effect of growth of the manufacturing sector, the human development index, and inflation on income inequality in the Solo Raya Region in 2008-2020. This study used panel data analysis with six districts and one city member of the Solo Raya Region. The data analysis stage was a selection test of the estimation technique and the classical assumption test to produce the best panel data regression model with the SUR cross-section weight. The regression estimation shows that the growth of the manufacturing sector and inflation positively and significantly affect income inequality. The human development index shows a negative and significant impact on income inequality. This analysis indicates that the economic development process in the Solo Raya region is in line with the development stages based on Rostow's view. The positive relationship between growth in the manufacturing sector and income inequality shows similarities to Kuznets's hypothesis that income inequality will increase in the initial phase of economic growth.

Keywords: income inequality, growth of the manufacturing sector, human development index, inflation

Abstrak

Penelitian ini bertujuan untuk menguji pengaruh dari pertumbuhan sektor industri pengolahan, indeks pembangunan manusia dan inflasi terhadap ketimpangan pendapatan di Wilayah Solo Raya Tahun 2008-2020. Metode analisis data panel digunakan dalam penelitian ini dengan objek enam kabupaten dan satu kota yang tergabung dalam wilayah Solo Raya. Tahap analisis data melalui uji pemilihan teknik estimasi dan uji asumsi klasik sehingga menghasilkan model regresi data panel terbaik dengan cross-section weight SUR. Hasil estimasi regresi menunjukkan pertumbuhan sektor industri pengolahan dan inflasi berpengaruh positif dan signifikan terhadap ketimpangan pendapatan. Sedangkan indeks pembangunan manusia menunjukkan pengaruh negatif dan signifikan terhadap ketimpangan pendapatan. Hasil analisis tersebut mengindikasikan bahwa pembangunan ekonomi di wilayah Solo Raya ini searah tahapan pembangunan berdasarkan pandangan dari Rostow. Hubungan positif antara pertumbuhan sektor industri pengolahan dengan ketimpangan pendapatan menunjukkan kemiripan dengan hipotesis Kuznet yang mengungkapkan ketimpangan pendapatan akan meningkat pada fase awal pertumbuhan ekonomi.

Kata Kunci: ketimpangan pendapatan, pertumbuhan sektor industri pengolahan, indeks pembangunan manusia, inflasi

1. INTRODUCTION

The manufacturing sector in the Solo Raya region shows a positive growth trend every year. It is also driven by the industrial relocation phenomenon from West Java to Central Java, especially the Solo Raya region. Increasing the Regional Minimum Wage (*Upah Minimum Regional*) in West Java encourages industries to move their production places to maintain product competitiveness (Arief, 2019). The relocation of the industry to the Solo Raya region has occurred since 2009, which 80 percent of the textile and textile product industries in Jakarta, Bogor, Depok, Tangerang, and Bekasi (Jabodetabek) regions moved to the Solo Raya region (Rahayu, 2019). Industrial relocation leads to the Solo Raya region because of several attractions, namely the availability of infrastructures such as land, electrical energy sources, water sources, and transportation to the port or airport (Aryono, 2009).

The local government also supports the industrialization process in the Solo Raya region in terms of access to capital. It encourages the transformation from the agricultural sector to the manufacturing sector. This process results from economic development, especially in developing countries, which increases

Received Mei 18, 2021; Revised Mei 20, 2021; Accepted Juni 27, 2021

productivity through industrialization. Like Rostow's view in Todaro & Smith (2012), which reveals the stages in economic development: (1) the stage of traditional society; (2) preconditions to take-off stage that marked by the establishment of mining industries; (3) the take-off stage where there is an increase in industrialization and a decrease in labor in the agricultural sector; (4) the stage towards economic maturity, which characterized by sustainable economic growth, industrial diversification and widespread use of technology; (5) the era of high-level mass consumption with a high proportion of employment in the service sector.

In the end, economic development aims to achieve prosperity with an even distribution of income. Problems occur when economic policies only focus on growth. It results in income inequality calculated using the Gini index (a measure that shows the distribution of income across expenditure groups). Dabla-Norris et al. (2015) also found that economic growth and the income share of the wealthy (top 20 percent) have an inverse relationship. When the wealthy class's income percentage increases by 1 percent, GDP growth is only 0.08 percent. In contrast, with an increase in income for the poor (bottom 20 percent), GDP grew 0.38 percent. These findings indicate that there is no trickle-down effect on economic growth that occurs.

Economic development cannot be separated from human development because it is a suitable type of investment and aims to provide a leap for economic growth. Economic growth and progress in human development can also be a strong foundation for poverty alleviation (Hardoon et al., 2016). Human development is an effort to provide opportunities for humans to choose their life choices as independent persons. It is the ultimate goal of the entire development process (Alkire, 2010). Although human development is a step that requires an approach and does not show physical results, it must achieve sustainable economic development.

This study examines the effect of industrial sector growth, human development, and inflation on income inequality in the Solo Raya region. In Rostow's view, economic development in the Solo Raya region relates positively to development's economic stages. The indicators to measure are growth of the manufacturing sector, Human Development Index, a price level that has been seen from inflation, and Gini Index (income inequality) in the Solo Raya region from 2008-2020. Kuznets' hypothesis shows that income inequality will increase in the initial phase of economic growth and eventually decrease along with economic growth (Todaro & Smith, 2012). The price level indicated by an inflation indicator is positively related to income inequality and has a two-way relationship in the short and long term (Siami-Namini & Hudson, 2019).

2. LITERATURE REVIEW

2.1. Growth of The Manufacturing Sector on Income Inequality

The manufacturing sector is the foundation of the economy in several countries and is a crucial sector for creating structural changes, increasing productivity, and sustainable economic growth (Herman, 2016). The growth of this sector needs to involve various parties, such as policymakers, who create regulatory support. Flexible labor regulation will encourage the growth of the manufacturing sector compared to strict labor regulation (Kapoor, 2015). Conditions in the Solo Raya area also show the same thing, namely the existence of regulatory support from the local government to encourage the growth of the manufacturing sector and create a shift in the economic structure in line with the stages of Rostow development. This stage in the Solo Raya area is towards the take-off stage, where there is an increase in industrialization and a decrease in labor in the agricultural sector.

The relationship between economic growth and income inequality is still a debate today. There is still the possibility of a positive and negative relationship between the two variables. Shin (2012) concludes that both relationships can occur because high-income inequality can hamper growth in the early stages of economic development and encourage growth in stable conditions. Second, income redistribution through high-income tax increases does not necessarily reduce income inequality. This condition cannot reduce income inequality in the early stages of economic development. It shows that there is a link between the stages of development and the income inequality that occurs. If growth is at an early stage of growth, then income inequality will also rise. Rubin & Segal (2015) also revealed that growth and income inequality are positively related. It happens because the top income group has a large proportion of gross domestic product, so their wealth is more sensitive to growth than the income earned by the workforce.

H1: Growth of The Manufacturing Sector has a positive effect on Income Inequality

2.2. Human Development Index on Income Inequality

The strategy to creating sustainable development is to focus on improving human development. Human development is also a determining factor of competitiveness, economic growth, and a driver of

Nanda Adhi Purusa dkk / Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis Vol 1 No. 2 (2021) 57 - 64
 economic recovery from the crisis (Čadil et al., 2014). The case study in Indonesia found a joint movement between the human development index and income inequality (Haseeb et al., 2020). Therefore, it is necessary to pay special attention to policymakers to take this problem seriously. The human development index is measured from three aspects: health, education, and economic conditions. Meanwhile, income inequality is measured from the Gini index. The relationship between the two is negative, where an increase in the human development index will reduce income inequality (Rodionov et al., 2018). The most appropriate solution to fight against poverty is human development because humans are considered an asset in a country, and the development efforts are genuinely reflected in human resources (Yasmeen et al., 2011).

H2: Human Development Index has a negative effect on Income Inequality

2.3. Inflation on Income Inequality

Few studies examine economic growth against income inequality that consider the risk of inflation. If nominal wages are relatively fixed, inflation can reduce real purchasing power (Easterly & Fischer, 2001). Inflation reduces real income disproportionately affecting low-income people. They often do not have access to passive income, which has a nominal rate and is positively correlated with inflation. Thus, an increase in inflation can increase income inequality (Albanesi, 2007). An increase in inflation reduces the value of the real minimum wage. Therefore, income inequality will also increase along with inflation (Khattak et al., 2014). Monetary policy aims to control the annual inflation rate in the long term, focusing on the short term to reduce the output gap (economic growth) and create jobs. Thus, macroeconomic policymakers must be careful because managing inflation has implications for income inequality (Siami-Namini & Hudson, 2019).

H3: Inflation has a positive effect on Income Inequality

3. RESEARCH METHOD

3.1. Research Design and Data Collection

This research examines the effect of growth in the manufacturing sector, the human development index, and inflation on income inequality using the Gini index as a proxy. Data analysis used time-series data from 2008 to 2020 and cross-section data consisting of the Solo Raya Region. The research objects include six districts and one city, namely Boyolali, Sukoharjo, Karanganyar, Wonogiri, Sragen, Klaten and Surakarta City. Data for each variable was obtained from secondary data issued by the Central Java Statistics Agency (Badan Pusat Statistik) in 2008-2020, except for data on the growth of the manufacturing sector, which were obtained from each regional Statistics Agency.

3.2. Operational Definition and Variable Measurement

3.2.1. Income Inequality (ING)

Regional economic development can be measured from the aspect of the income distribution. This can assess the development achievements of an area that is reflected in the income of a region that can be divided among its population so that elements of justice and equity are also achieved. The level of inequality of income distribution in this study is measured by the Gini index indicator. The smaller Gini index value (close to 0) means that people's income in an area is more evenly distributed. Conversely, the more excellent Gini index value (close to 1) indicates that there is income inequality in an area.

3.2.2. Growth of The Manufacturing Sector (IND)

The growth variable of the manufacturing sector is measured by the increase in the Gross Regional Domestic Product (GRDP) of the manufacturing sector (oil and gas and non-oil and gas) based on constant prices. In this study, the data used are data from the years 2008-2020 based on reports from the Central Statistics Agency of each Regency or City.

3.2.3. Inflation (INF)

Inflation indicates a continuous increase in the price level of goods and services. An increase in the price of goods causes a decrease in the currency's value against the value of goods and services. The data used is the inflation rate (in percent) from 2008 to 2020.

3.2.4. Human Development Index (HDI)

Human development in this study was measured by the Human Development Index (HDI) from 3 primary dimensions: longevity and healthy life, knowledge, and a decent standard of living. This variable is measured using HDI data from 2008 to 2020.

3.3. Data Analysis Method

Analysis data panel is a time-series data during 2008-2020 combination with cross-section data from Boyolali, Sukoharjo, Karanganyar, Wonogiri, Sragen, Klaten Regencies, and Surakarta City. E views 9 software is used to support the analysis data panel. The equation formulates the panel data model:

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 X_{it} + \beta_3 X_{it} + \mu_{it} \dots \dots \dots (1)$$

This stage tests three models: common effect (pooled least square), fixed-effect, and random effect. The model test determines the best model used for regression estimation. The testing technique to get the best model for regression estimation is the Likelihood and Hausman Test, shown in Table 1 and Table 2.

Table 1. Likelihood Test

Effect Test	Stat	d.f.	Prob
Cross-section F	7.314056	(6,81)	0.0000
Cross-section F Chi-square	39.397434	6	0.0000

The results show that with a significant level of 5% and a probability value of 0.000, then the value is below the significance level of 0.05. This indicates that H_0 is rejected and H_1 is accepted, so additional testing (Hausman Test) is needed to determine the best model.

Table 2. Hausman Test

Test Summary	Chi-sq Stat	Chi-sq d.f.	Prob
Cross section random	43.669474	3	0.0000

Based on the Hausman test, it is found that the model probability value is 0.0000, which means it is smaller than the significant level of 0.05. These results indicate that Fixed Effect Model is the best model used to panel data estimation.

The model that has been selected is then estimated by regression. However, the assumptions must be fulfilled (Classical Assumption Test) consisting of Multicollinearity Test, Normality Test, Heteroscedasticity, and Autocorrelation Test. The results are shown in the Figure 1, Table 3 and Table 4.

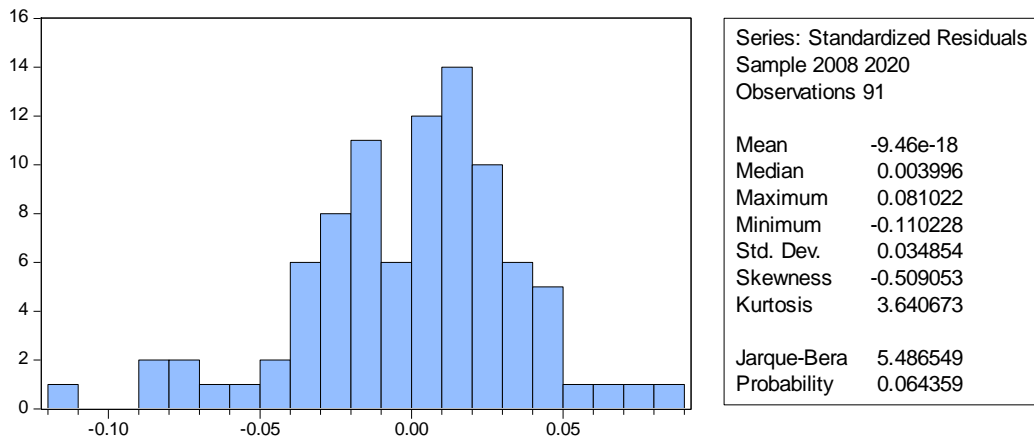


Figure 1. Normality Test

Figure 1 shows a probability value of 0.064359 which means greater than 0.05, so the residual value in the regression model used in this study is typically distributed, or there are no symptoms of normality.

Table 3. Multicollinearity Test

	IND	IPM	INF
IND	1.000000		
IPM	-0.425038	1.000000	
INF	0.281441	-0.189335	1.000000

Table 3 shows the multicollinearity symptom that is seen from the coefficient value is less than 0.8. So, in this regression model, there is no multicollinearity symptom.

Table 4. Autocorrelation Test

dL	dU	DW	4-dU	4-dL	Explanation
1,5245	1,7028	1,1461	2,2972	2,4755	there is a positive autocorrelation

Based on Table 4 above, with the testing criteria $0 < d < dL$ and it is known that the Durbin Watson value is 1.4899, then there is positive autocorrelation in the regression model.

Table 5. Glejser Test

Variable	Coefficient	Std. Error	t- Statistics	Prob.
C	0.138942	0.052129	2.665343	0.0092
IND	-0.002775	0.000914	-3.036227	0.0032
IPM	-0.001308	0.000676	-1.935240	0.0562
INF	-4.73E-05	0.000821	-0.057680	0.9541

The Glesjer test identifies the presence or absence of heteroscedasticity symptoms. The regression results show that the inflation variable (INF) has a probability of 0.9541 or above 0.05. Based on these results, there are symptoms of heteroscedasticity in the Fixed Effect Model used for regression estimation. Autocorrelation and heteroscedasticity symptoms in the model can be cured by selecting the cross-section weight to form a Generalized Least Square (GLS) model.

4. RESULTS

This section will present a discussion of the results of the panel data regression estimates that have been carried out. The variables examine the effect of growth in the manufacturing sector, the human development index, and inflation on income inequality as measured by the Gini index. The results of the regression estimation are as follows:

Table 6. Estimation of Regression Result

Variable	Coefficient	Std.Error	t- Statistics	Prob.
C	2.603780	0.325983	7.987470	0.0000
IND	0.006540	0.001572	4.158754	0.0001
IPM	-0.033059	0.004450	-7.429679	0.0000
INF	0.006168	0.002496	2.471155	0.0156
R-squared	0.565453	Mean dependent var		0.725295
Adjusted R-squared	0.517170	S.D. dependent var		1.834534
S.E. of regression	0.951451	Sum squared resid		73.32591
F-statistic	11.71122	Durbin-Watson stat		1.786382
Prob (F-statistic)	0.000000			

The table above shows the coefficients of each variable with their respective probabilities. These results, when included in the regression model, are as follows:

$$Y_{it} = \beta_{1i} + \beta_2 X_{it} + \beta_3 X_{it} + \beta_4 X_{it} + \mu_{it}$$

$$ING = 2.603780 + 0.006540 \text{ IND} - 0.033059 \text{ IPM} + 0.006168 \text{ INF} \dots \dots \dots (2)$$

The regression estimation results show that all the independent variables have a significant effect on the dependent variable. The interpretation of each variable relationship is as follows:

4.1. The Influence of Growth in the Manufacturing Sector on the Gini Index

The estimation result of panel data regression from the growth variable of the manufacturing sector shows that the variable has a significant and positive effect on the income inequality variable as indicated by the Gini index. It can be seen from the probability value of the industrial growth variable, which is equal to 0.0001. These results suggest that the influence of the growth variable in the manufacturing sector on the variable income inequality in the Solo Raya region in 2008-2020 is significant. In comparison, the positive effect is shown from the coefficient value of the industrial growth variable, which is 0.006540. This means if 1 percent growth of the manufacturing sector or the Gross Regional Domestic Product (GRDP) growth of the manufacturing sector in the Solo Raya, the Gini index increases by 0.006540. Based on these results,

when the growth of the manufacturing sector in the Solo Raya region increases, the Gini index will also increase, or it can be said that income will be increasingly unequal.

4.2. The Effect of the Human Development Index on the Gini Index

The panel data regression analysis on the human development index variable in the Solo Raya region from 2008 to 2020 shows a negative and significant effect on income inequality. This important result can be seen from the probability value of the human development index variable, which is 0.0000. This value is smaller than the significance level of 5% or 0.05. It can be interpreted that the influence of the human development index variable is significant on the income inequality variable. The negative effect can be seen from the coefficient value of the human development index variable, which is -0.033059. This means if there is an increase in the human development index in the Solo Raya area by 1 unit, the Gini index will decrease by 0.033059.

4.3. The Influence of Inflation on the Gini Index

The panel data regression analysis on the inflation variable shows a significant and positive effect on income inequality. The significant effect based on the probability value of the inflation variable of 0.0156 indicates that the value is smaller than the significance level of 0.05 or 5 percent. Meanwhile, a positive relationship indicated by the coefficient value of the inflation variable is 0.006168. This coefficient value can be interpreted if there is an increase in inflation in the Solo Raya Region by 1 percent. The Gini index will increase by 0.006168, or the growth of inflation variable will increase income inequality in the Solo Raya region from 2008 to 2020.

4.4. The difference in Coefficient of Each Area

Each district or city has a constant value that is different from one another. This constant value indicates a difference in the influence of the independent variable on the dependent variable between one district or city. The constant value of each district or city can be seen in the table below.

Table 7. Constant Value of Each Region

District or City	Constant Value
Surakarta	0,230675
Boyolali	-0,066431
Sukoharjo	0,038654
Karanganyar	0,038452
Wonogiri	-0,163092
Sragen	-0,088541
Klaten	-0,010282

The difference in the value of the constant shows the different characteristics of each district or city. The interpretation is to add the constants from each district or city to the constants in the panel data model, which is 2.603780. So it can be interpreted that in Surakarta, when there is no value for the growth variable of the manufacturing sector, inflation, and human development or these variables are zero, the level of inequality from Solo is 2.834455. Meanwhile in other districts, the Gini index value when the independent variables are zero, namely Boyolali = 2.537349, Sukoharjo = 2.642434, Karanganyar = 2.642232, Wonogiri = 2.440688, Sragen = 2.515239, and Klaten = 2.593498.

5. DISCUSSIONS

This research shows that economic development must focus on human development to reduce income inequality. Human development is a determinant of increasing competitiveness and economic growth. Human development positively impacted productivity and innovation, then human capital investment focused on underdeveloped areas efficiently reduces inequality between regions (Fleisher et al., 2010). A robust economic structure must accompany human capital to encourage economic growth because relying on human capital cannot guarantee to make economic stability and underlie the recovery from the economic crisis (Čadil et al., 2014). Increased human development in each region causes regional economic growth and allows as a determinant of differences in wage levels, productivity, regional income, and associated with migration (Faggian et al., 2019).

The development economy in the Solo Raya region leads to the Rostow development stage, where the manufacturing sector grows every year. The Solo Raya region has also responded positively to relocating industries from West Java because of the need to absorb labor (relocation of labor-intensive industries) and encourage regional economic growth. However, the findings in this study reveal that annual growth in the industrial sector has not been able to reduce income inequality. Based on the Kuznets hypothesis, the Solo Raya region, in this case, is included in the initial phase of growth, because along with

Nanda Adhi Purusa dkk / Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis Vol 1 No. 2 (2021) 57 - 64
 economic growth, income inequality also rises (Todaro & Smith, 2012). It is still a phenomenon widely discussed today. High-income disparities in the early stages of economic development will slow down economic growth, but this stage of the steady state condition can boost economic growth (Shin, 2012).

This study provides an overview of changes in the price level as seen from the inflation rate and determines their effect on income inequality. The measurement results in the Solo Raya region show a positive relationship where an increase in the inflation rate will also increase income inequality. Cross-country evidence from the relationship between inflation rate and income inequality also offers the same result: a positive relationship between inflation and income inequality (Albanesi, 2007; Thalassinou et al., 2012). In the long term, monetary policy will try to control the annual rate of inflation, and the short-term focus will be on reducing the output gap and creating jobs so that the management of inflation will produce a transmission mechanism and have implications for income inequality (Siami-Namini & Hudson, 2019).

6. CONCLUSION

This study indicates that a decreased level of income inequality did not follow the growth of the industrial sector in the Solo Raya region. This region makes it possible to encourage economic growth through other sectors, not relying on the manufacturing sector. The manufacturing sector is expected to absorb labor because most of them are labor-intensive industries. Still, with the results of this study which show that the growth of the manufacturing industry affects and is positively related to income inequality, it is hoped that there will be encouragement from other sectors for growth. Economic development should be focused on human development. Human development shows a negative and significant effect. Meanwhile, regional macroeconomic policies must stabilize the price level because this study shows that inflation has a positive and significant effect on income inequality.

7. LIMITATIONS AND RECOMMENDATIONS

This research is only limited to the analysis of the Solo Raya Region, so it does not represent the conditions nationally. So, economic development policies in this study are limited to a regional scope. Policies related to industrial development and equitable income distribution are already in the direction of national economic policies. So that further research is expected to expand to the national and even cross-national scope.

REFERENCES

- Albanesi, S. (2007). Inflation and inequality. *Journal of Monetary Economics*, 54(4), 1088–1114. <https://doi.org/10.1016/j.jmoneco.2006.02.009>
- Alkire, S. (2010). Human Development: Definitions, Critiques, and Related Concepts. In *OPHI Working Paper* (No. 36). <https://doi.org/10.2139/ssrn.1815263>
- Arief, M. A. (2019). *Upah Pekerja Kompetitif, Eksodus Pabrik ke Jateng Kian Marak*. <https://ekonomi.bisnis.com/read/20191118/257/1171372/upah-pekerja-kompetitif-eksodus-pabrik-ke-jateng-kian-marak>
- Aryono, A. M. (2009). *Soloraya Jadi Tujuan Relokasi Industri Tekstil*. <https://www.solopos.com/soloraya-jadi-tujuan-relokasi-industri-tekstil-3981>
- Čadil, J., Petković, L., & Blatná, D. (2014). Human Capital, Economic Structure and Growth. *Procedia Economics and Finance* 12, 85–92. [https://doi.org/10.1016/S2212-5671\(14\)00323-2](https://doi.org/10.1016/S2212-5671(14)00323-2)
- Dabla-Norris, E., Kochhar, K., Suphaphiphat, N., Ricka, F., & Tsounta, E. (2015). Causes and Consequences of Income Inequality: A Global Perspective. In *Staff Discussion Notes* (Vol. 15, Issue 13). International Monetary Fund. <https://doi.org/10.5089/9781513555188.006>
- Easterly, W., & Fischer, S. (2001). Inflation and the Poor. *Journal of Money, Credit and Banking*, 33(2), 160–178. <https://doi.org/10.2307/2673879>
- Faggian, A., Modrego, F., & Mccann, P. (2019). Human capital and regional development. In R. Capello & P. Nijkamp (Eds.), *Handbook of Regional Growth and Development Theories: Revised and Extended Second Edition* (2nd ed., pp. 149–171). Edward Elgar. <https://doi.org/10.4337/9781788970020.00015>
- Fleisher, B., Li, H., & Zhao, M. Q. (2010). Human capital, economic growth, and regional inequality in China. *Journal of Development Economics*, 92(2), 215–231. <https://doi.org/10.1016/j.jdeveco.2009.01.010>
- Hardoon, D., Fuentes-Nieva, R., & Ayele, S. (2016). An Economy for the 1%: How privilege and power in the economy drive extreme inequality and how this can be stopped. In *OXFAM Briefing Papers* (Vol. 210, Issue January 2016). Oxfam International. <https://doi.org/10.21201/2016.592643>
- Haseeb, M., Suryanto, T., Hartani, N. H., & Jermisittiparsert, K. (2020). Nexus Between Globalization, Income Inequality and Human Development in Indonesian Economy: Evidence from Application of

- Nanda Adhi Purusa dkk / Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis Vol 1. No. 2 (2021) 57 - 64
Partial and Multiple Wavelet Coherence. *Social Indicators Research*, 147(3), 723–745.
<https://doi.org/10.1007/s11205-019-02178-w>
- Herman, E. (2016). The Importance of the Manufacturing Sector in the Romanian Economy. *Procedia Technology*, 22, 976–983. <https://doi.org/10.1016/j.protcy.2016.01.121>
- Kapoor, R. (2015). Creating jobs in India's organised manufacturing sector. *Indian Journal of Labour Economics*, 58(3), 349–375. <https://doi.org/10.1007/s41027-016-0032-5>
- Khattak, D., Muhammad, A., & Iqbal, K. (2014). Determining the Relationship between Income Inequality, Economic Growth & Inflation. *International Journal of Social Economics*, 1(3), 104–114.
- Rahayu, T. (2019). *Industri Tekstil Migrasi ke Wilayah Soloraya*.
<http://www.koransolo.co/2019/03/21/industri-tekstil-migrasi-ke-wilayah-soloraya/>
- Rodionov, D. G., Kudryavtseva, T. J., & Skhvediani, A. E. (2018). Human development and income inequality as factors of regional economic growth. *European Research Studies Journal*, 21(Special Issue 2), 323–337.
- Rubin, A., & Segal, D. (2015). The effects of economic growth on income inequality in the US. *Journal of Macroeconomics*, 45, 258–273. <https://doi.org/10.1016/j.jmacro.2015.05.007>
- Shin, I. (2012). Income inequality and economic growth. *Economic Modelling*, 29(5), 2049–2057. <https://doi.org/10.1016/j.econmod.2012.02.011>
- Siami-Namini, S., & Hudson, D. (2019). Inflation and income inequality in developed and developing countries. *Journal of Economic Studies*, 46(3), 611–632. <https://doi.org/10.1108/JES-02-2018-0045>
- Thalassinos, E., Uğurlu, E., & Muratoğlu, Y. (2012). Income inequality and inflation in the EU. *European Research Studies Journal*, 15(1), 127–140. <https://doi.org/10.35808/ersj/347>
- Todaro, M., & Smith, S. C. (2012). *Economic Development* (11th ed.). Addison-Wesley.
- Yasmeen, G., Begum, R., & Mujtaba, B. G. (2011). Human Development Challenges and Opportunities in Pakistan: Defying Income Inequality and Poverty. *Journal of Business Studies Quarterly*, 2(3), 1–12.