



**INDUSTRIAL GROWTH, HUMAN DEVELOPMENT INDEX, GENDER DEVELOPMENT INDEX AND POPULATION TOWARDS THE SEVERITY OF POVERTY**

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**Abstract**

*Poverty is a problem that affects most countries in the world, including Indonesia. Central Java Province, located on the island of Java, has the second-highest poverty rate among the provinces. Addressing the issue of poverty promptly is essential, and analyzing the factors that influence poverty is crucial to ensure that poverty alleviation programs are effective and well-targeted. This research aims to examine the influence of industrial growth, the Human Development Index (HDI), the Gender Development Index (GDI), and population size on poverty levels in Central Java Province from 2011 to 2020. The study uses panel data analyzed with the Random Effect Model panel data regression, encompassing 35 regencies/cities in Central Java as research objects. The results indicate a negative and significant influence of industrial growth, HDI, and GDI on poverty levels. Conversely, population size does not have a significant impact on poverty levels. This implies that industrial growth, and the development of HDI and GDI, can reduce the severity of poverty. The Central Java Provincial Government must create a conducive environment for the growth and development of industrialization and enhance gender-oriented human development.*

**Keywords:** severity of poverty; industrial growth; human development index; gender development index

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## INTRODUCTION

Poverty is one of the problems faced by most countries around the world (Wulan et al., 2019). It brings misfortune to many people's lives, restricts their fundamental rights, reduces their opportunities to achieve their full potential, generates high social costs, and hinders sustainable development (Sompolska-Rzechuła & Kurdyś-Kujawska, 2022). Guo et al., (2022) define Poverty as a situation where there is an economic inability to meet the standard of living needs. Mansi et al., (2020) found that income inequality, unemployment, political instability, a lack of good investment opportunities, and living conditions have contributed to the driving factors of poverty. Despite the decrease in the poverty rate from 24% in 1999 to 9.8% in 2020, the average rate of decline has slowed from 1.9% between the

1970s and 1990s to just 0.5% between 2002 and 2017. This trend may also be exacerbated by increasing income inequality, with the Gini coefficient rising from 0.30 in 1999 to 0.39 in March 2020. Furthermore, Indonesia's vulnerability to poverty is relatively high, with 30% of the population classified as poor or vulnerable to poverty (Purwono et al., 2021).

As one of the regions with high population density on Java Island, based on the poverty percentage data from the Indonesian Statistics Agency for 2014-2020 in Table 1, Central Java ranks second with the highest percentage of poverty rate after the Special Region of Yogyakarta (DIY). Therefore, conducting research in this area will provide a more accurate depiction of poverty in Indonesia.

**Table 1.** Comparison of the Percentage of Poverty Levels on Java Island 2014-2020

No.	Provincial	2014	2015	2016	2017	2018	2019	2020	Average
1	DIY	14,55	14,91	13,34	13,02	12,13	11,70	12,28	15,32
2	Central Java	13,58	13,58	13,27	13,01	11,32	10,80	11,41	14,49
3	Esat Java	12,28	12,34	12,05	11,77	10,98	10,37	11,09	13,48
4	West Java	9,18	9,53	8,95	8,71	7,45	6,91	7,88	9,76
5	Banten	5,51	5,90	5,42	5,45	5,24	5,09	5,92	6,42
6	DKI Jakarta	4,09	3,93	3,75	3,77	3,57	3,47	4,53	4,51

Source: Statistics Indonesia Agency (BPS, 2022)

As one of province with the highest rate of poverty, the government of Central Java conduct several policies to conquer the poverty problem and to achieve the Sustainable Development Goal of poverty alleviation. One of the efforts undertaken by the Central Java Provincial Government is the implementation of the 'One Regional Device for One Assisted Village' Program, where one regional government organization assists one sector of a poor village to achieve prosperity. Hence, the initiatives and programs implemented by the Central Java provincial government have not achieved complete success and necessitate further review to effectively reduce poverty. Furthermore, it is necessary to analyze the factors influencing poverty in that area. Thus, policies and programs can be formulated to effectively address the causes of poverty. The government of Central Java province is strengthening the growth of the industrial sector which is crucial to national economies worldwide (Cheng et al., 2018), as it creates jobs and alleviates poverty, fueling both growth and prosperity (Janah & Nuraini, 2021).

The Human Development Index (HDI) is a measurement of success in improving human quality which includes three main indicators such as education, health, and economy (Kaewnern et al., 2023). The quality and productivity of human labour are also assessed by the level of HDI. If a

person has low productivity and work quality, it can affect their income. Lower work productivity leads to lower income. Low income will cause poverty issues (Wijyanti & Karmini, 2014). Gender is also a key indicator of successful development. Both men and women play crucial roles in development. The Gender Development Index (GDI) is used to measure the level of gender development in a country or region. The GDI directly assesses gender disparities in human development achievements. It illustrates how society can benefit from development initiatives by providing equal access to education, income, health, and a decent standard of living.

Gender equality can be said to be equal, if the GDI gets closer to 100, and is also followed by an increase in the HDI (Hariadinata, 2019). GDI in Central Java highlights a persistent gap between men and women in human development achievements, keeping the GDI below 100 from 2010 to the present. Despite this, women's human development is growing faster than men's. Between 2011 and 2020, men's HDI grew by 0.72 percent on average, while women's grew by 0.93 percent. Central Java's HDI declined in 2017 due to slower growth in women's HDI compared to men.

The size of the population is also considered a factor causing poverty. Population growth is influenced by several factors including birth and death rates,

migration, and urbanization. Uncontrolled population growth is negatively affecting community welfare (Ritonga & Wulantika, 2020).

Industrial growth, HDI, GDI, and population size have different relationships with poverty. According to Rahman, (2019) industrial growth has a negative and significant influence on poverty, while HDI has a negative and significant influence on poverty (Andhyka et al., 2018), reducing gender inequality also has a positive effect on poverty reduction in China (GU & NIE, 2021) and Population size according to Ritonga & Wulantika, (2020) has a positive and significant influence on poverty in Batu Bara Regency. Therefore, it's important to have a deep exploration of the problem of poverty in Central Java Province by looking at the influence of industrial growth, HDI, GDI, and Population size.

## **THEORETICAL BACKGROUND**

### **The Role of Industry in Reducing poverty**

The term "industrial revolution" can be characterized as a significant economic transformation that led to shifts in people's livelihoods from rural agrarian settings to urban and town settings (Mhlanga, 2021). Zameer et al., (2020) revealed that the industrial sector is one of the factors that can reduce poverty because the processing industry sector makes the largest contribution to GRDP in Central Java, where every year it contributes 30% of the total

GRDP. This reveals that the driving force of the economy in Central Java is the industrial sector. With the rise of industrialization, both domestic enterprises and multinational corporations have introduced internships and contract-based employment opportunities into the economy. This influx not only enriches the job market but also fosters skill development and enhances workforce diversity, contributing to broader economic growth and stability (Khan et al., 2023). Based on Lewis' theory the existence of the industrial sector can increase a person's productivity, where increasing productivity increases a person's income which can help break the chain of poverty (Boianovsky, 2018).

The increase in the number of industrial business units in Central Java was followed by an increase in the number of workers working in the industrial sector (Rochmani et al., 2016). This was an initial assumption that industrial development could absorb workers in Central Java.

### **Human Development Index in Economic Development**

The existence of an HDI is very important for regions because it is used as a measure of the government's success in building the quality of human life (Mongan, 2019), it reflects the quality of human resources. The higher the HDI, the higher the quality of human resources, so that with the high quality of human resources, human

work productivity is also high. With high productivity, income can be increased so that it can meet life's needs and change the quality of life for the better. Therefore, it can be explained that human resources can increase productivity which helps someone to obtain job opportunities and increase income, thus having an impact on poverty.

According to Bhukuth et al., (2018) Enhanced human capital contributes to reducing poverty in developing countries. Because human capital is crucial in driving economic growth, Olopade et al., (2019) suggest increasing investments in education and healthcare to enhance the quality of human capital, thereby improving living standards and societal well-being. Improving access to education and healthcare is vital for impoverished individuals, as their main asset often lies in manual labor. Higher education equips them with valuable knowledge and skills that significantly boost their productivity in the workplace.

### **Impact Population and Poverty.**

The increasing population combined with limited employment opportunities is the root of the problem of poverty (Ritonga & Wulantika, 2020). Rahmattullah (2015) explains that there will be a disease outbreak caused by the exhaustion of natural resources if population growth is not controlled, he also states that population growth that is faster than the increase in the results of processing

resources will make it difficult for people to meet their needs and impact the problem of poverty. Many people move to other places to look for work because their place of origin is a poor or underdeveloped area. The high number of job seekers and intense job competition mean that job seekers are forced to get jobs that do not match their educational background and field of study (Prabowo & Florentine, 2014). Ritonga & Wulantika (2020) stated that the increasing population without being accompanied by developments in other factors will result in no increase in income which will then influence the emergence of poverty. In line with Saidu et al., (2023) showed a substantial long-term negative effect of population growth on poverty in Nigeria. Ritonga & Wulantika (2020) explains that population growth has a direct influence on the level of community welfare, where rapid population growth in developing countries causes the level of community welfare to decrease which has an impact on increasing the number of poor people. Wang et al., (2018) found that higher population density adversely affects rural poverty which means that as the population increases, there will be more people living in poverty. Furthermore, Damanik & Sidauruk, (2020) explained that population size has a positive and significant effect on poverty.

## **Gender Development Index and Poverty Reduction**

From a perspective focused on well-being and fairness, gender inequalities reduce individuals' welfare and represent a form of injustice. Conversely, from an instrumental viewpoint, gender inequalities affect economic growth and development (Espinoza-Delgado & Klasen, 2018). So, there is a need for strategies that can increase equality between women and men, so that the achievements of the GDI increase. Gender inclusivity and poverty are crucial values that require advocacy from institutions addressing gender issues. Women in poverty endure greater hardships compared to impoverished men and even more so when compared to women from more affluent economic backgrounds (Klasen, 2018).

Patriarchal culture restricts women's mobility, leading to the emergence of inequality and subsequent poverty issues. This cultural framework positions men as superior and women as subordinate, contributing to poverty problems. Poverty alleviation efforts must include women as primary targets. Gender analysis is crucial for understanding the underlying causes of poverty and ensuring that strategies effectively reach women, including those with disabilities (Sohrab Hossen, 2020).

The Ministry of Women's Empowerment and Child Protection plays an

active role in poverty alleviation and promoting equitable development by empowering women entrepreneurs. A study by the EPA on poverty alleviation programs revealed a reliance on women activists to enhance value through activities like home industries. Therefore, programs for women's empowerment are essential to promote gender equality and reduce poverty rates. Gender-focused poverty alleviation has proven effective in combating poverty (Triatmoko & Esariti, 2019).

## **RESEARCH METHODS**

### **Research Approaches and Models**

This research uses panel data and a quantitative approach. Panel data is a combination of cross-section data and time series data (Horas et al., 2020). There are several methods commonly used to estimate regression models with panel data: pooling least squares (Common Effect), fixed effects approach (Fixed Effect), and random effects approach (Random Effect). Time series data consists of variables collected over time within a specified period. Cross-section data comprises variables collected across several individuals or categories at a specific point in time. In this research, the time series data used spans from 2011 to 2020. Meanwhile, the cross-section data includes 35 regencies/cities in Central Java Province.

The data analysis method used is quantitative analysis, which is employed to estimate parameters. In this analysis,

statistical testing is conducted where collected data is processed and analyzed using panel regression with statistical tools, specifically Eviews 8. Panel data regression combines both time series and cross-section data. The number of panel data observations is determined by multiplying the number of time series observations by the number of cross-section units. Below is the panel data regression equation model, incorporating both time series and cross-section data:

$$KM_{it} = \alpha + \beta_1 IN_{it} + \beta_2 HDI_{it} + \beta_3 JP_{it} + \beta_4 GDI_{it} + \mu_{it} \quad (1)$$

The following is a panel data regression model after double logarithmic transformation, which can be seen as follows:

$$LogKM_{it} = \alpha + \beta_1 LogIN_{it} + \beta_2 LogHDI_{it} + \beta_3 LogJP_{it} + \beta_4 LogGDI_{it} + \mu_{it} \quad (2)$$

- KM = Poverty
- IN<sub>1</sub> = Industrial Growth
- HDI<sub>2</sub> = Human Development Index
- JP<sub>3</sub> = Populations
- GDI<sub>4</sub> = Gender Development Index
- α = Constanta
- β<sub>1</sub> - β<sub>4</sub> = Coefisien regresi
- i = Unit cross section (35 regencies/cities)
- t = Unit time series (2011-2020)
- μ = residual

### Model Test

The research model chosen was the Random Effects Model. This model is also referred to as the Error Component Model (ECM) or the Generalized Least Squares (GLS) technique:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \dots + \beta_k X_{kit} + vit \dots$$

(3)

Information: *Y<sub>it</sub>*, Dependent variable at *i* individual unit and time *t*; *α* Constanta; *X<sub>1</sub>* Independent Variable *1*; *X<sub>k</sub>* Independent Variable *k* from individual unit *i* and time *t*; *β* Intersep Regresion Model and *vit* overall disturbance variable (*vit*) + individual disturbance variable (*vit*).

Test the feasibility of the model to select the most appropriate model (Basuki, 2014). Selecting the most appropriate model for managing panel data involves several tests: the Hausman test determines whether the Fixed Effect or Random Effects model is more suitable for estimating panel data regression. Meanwhile, the autocorrelation test applies only to time series data; therefore, conducting this test on panel data is meaningless.

The Random Effects Model was chosen as the most appropriate model, so there is no need to conduct a heteroscedasticity test because the Random Effects Model uses the Generalized Least Squares (GLS) approach, which addresses heteroscedasticity issues. Therefore, the Random Effects Model is assumed to be free from heteroscedasticity problems. a heteroscedasticity test needs to be carried out to determine whether or not there are deviations from OLS assumptions in the form of estimated disturbance variance produced by non-constant OLS estimates.

**Statistic Test**

The statistical test to answer the hypothesis proposed in the research model is carried out through the Coefficient of Determination ( $R^2$ ) test to determine how much the independent variable can explain the dependent variable. The value of  $R^2$  is in the range 0-1, where the closer  $R^2$  is to 1, the greater the ability of the independent variable to explain the dependent variable and vice versa. Simultaneous Coefficient Test (F Statistical Test) to determine the

simultaneous influence of independent variables on the dependent variable. In this test, a significance level of 5% or 0.05 is used.

**RESEARCH RESULTS AND DISCUSSION**

The results of the regression analysis of panel data on industrial growth, HDI, GDI, and population on poverty levels in Central Java Province in 2011-2020 obtained the following results:

**Table 2.** Result of the Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.69119	0.601870	34.37818	0.0000
LOG_IN	-0.026019	0.012059	-2.157576	0.0317
LOG_HDI	-4.091760	0.156066	-26.21815	0.0000
LOG_JP	-0.013879	0.023292	-0.595891	0.5516
LOG_GDI	-0.114527	0.034353	-3.333845	0.0009
R-squared	0.825323	Mean dependent var		0.162922
Adjusted R-squared	0.823298	S.D. dependent var		0.127484

Source: Author Processed

Based on the model equation using the Random Effect Model (REM) approach, it shows that the Industrial Growth variable has a coefficient of -0.026019 and a probability value of 0.0319 which is smaller than the significance level of 0.05, so it can conclude that Industrial Growth (IN) has a negative and significant influence to the poverty level (KM). The results of this research are inline with research conducted by Primadi, (2019) and Rahman, (2019) which states that industry has a negative and significant effect on the number of poor people. However, the

results of this research are not by research conducted (Febriani, 2018) which shows that the industrial sector does not have a significant effect on poverty. The results of this research apply to Central Java Province, namely that the higher industrial growth will reduce the level of poverty because industrialization growth can encourage productivity and absorb labor in Central Java which will later have an effect on increasing income so that it can break the chain of poverty. This research supports research conducted by Prajanto (2019) which states



that most regions in Central Java provide a contribution from the industrial sector to GRDP of more than 20% and states that regions with the processing industrial sector as the main driver of the economy have a poverty percentage. Lower, therefore the industrial sector has better performance in poverty alleviation than other sectors in Central Java.

Meanwhile, the HDI variable has a coefficient of  $-4.091760$  and a probability value of  $0.0000$  which is smaller than the significance level of  $0.05$ , so it can be concluded that the HDI has a negative and significant influence on poverty levels. The results of this research are in line with research conducted by Andhyka et al., (2018) which shows that HDI has a negative and significant influence on poverty levels. However, the results of this research are not by research conducted by (Palaneven et al., 2018) which shows that HDI has a positive and insignificant effect on poverty. According to Boianovsky (2018) low productivity will cause poverty. A person's productivity is reflected in human development, so if the HDI is high then human quality is also high and productivity is high too. With high productivity, humans can increase their income and get out of poverty.

The results of this research apply to Central Java Province, namely that a higher HDI can reduce the level of poverty because HDI is closely related to poverty, where

increasing the quality of human resources can increase the productivity of the population in Central Java and will have an influence on reducing poverty. The results of the research, for the variable Population, has a coefficient of  $-0.013879$  and a probability value of  $0.5516$  which is greater than the significance level of  $0.05$ , so it can be concluded that population size does not have a significant effect on the poverty level. These results are not by the theory and research conducted by Ritonga & Wulantika (2020) that population size has a positive and significant effect on poverty levels. Apart from that, the results of this research are not by the theory that is the basis for this research, namely the theory according to Ritonga & Wulantika (2020) that population growth has a direct influence on the level of social welfare, where rapid population growth in developing countries causes the level of social welfare to increase. Experienced a decline which increased the number of poor people.

However, the results of this research are in line with research conducted by Agustina et al., (2019) which states that population size has a negative and insignificant effect on poverty. These results apply to Central Java, indicating that the decline in population does not affect the rise or fall of poverty in Central Java. The research results for the GDI variable have a coefficient of  $-0.114527$  and a probability value of  $0.0009$

which is smaller than the significance level of 0.05, so it can be concluded that the GDI has a negative and significant effect on the poverty level. Empowerment programs are needed that provide access to women to improve the quality of women in terms of education, health, and economics so that they can increase development achievements that are equal to those of men. Therefore, increasing equality between women and men, which is illustrated through high GDI figures, will reduce poverty. According to the Indonesian Statistic Agency, the smaller the gap between the GDI number and 100, it can be concluded that the more equal development is between the male and female population. Meanwhile, the greater the gap between the GDI and the value of 100, the greater the difference in achievement between women and men. The results of this research are in line with research conducted by Auzar, (2021) which shows that GDI has a negative and significant effect on poverty levels.

## **CONCLUSIONS AND SUGGESTIONS**

### **Conclusions**

This research proves that industrial growth, HDI, and GDI have a significant negative effect on poverty in Central Java. Meanwhile, population size does not influence poverty. Increasing the number of industries and improving the quality of gender-oriented human development will

reduce the poverty rate in Central Java. This can be used as a basis and recommendation for the Central Java Provincial Government in its efforts to overcome poverty, where Central Java Province is still ranked second in provinces on the island of Java.

There is no influence between population and poverty levels because population growth in Central Java is accompanied by an increase in the number of people of productive age. Apart from that, the high number of available labor forces can increase productivity which has an impact on increasing economic growth. Therefore, the population of Central Java with a high population of productive age cannot directly influence the poverty that occurs because the high opportunity to improve the welfare of life comes from the population of productive age.

### **Suggestions**

This research was conducted using a quantitative approach and cross-section method. The limitation of research data is that it only uses time ranges for the last 10 years, so to produce estimates that suit the conditions in the research object, researchers can then develop different research models and methods to draw generalizations from the findings. This research was conducted before the COVID-19 pandemic took place, so it is necessary to include control of the situation of the COVID-19 pandemic that occurred in Indonesia and especially in

Central Java so that research findings can be obtained whether industrialization development and gender-oriented human development which influence poverty levels are affected by the impact of the Covid-19 pandemic.

## REFERENCE

- Agustina, E., Syechalad, M. N., & Hamzah, A. (2019). Pengaruh Jumlah Penduduk, Tingkat Pengangguran Dan Tingkat Pendidikan Terhadap Kemiskinan Di Provinsi Aceh. *Jurnal Perspektif Ekonomi Darussalam*, 4(2), 265-283. <https://doi.org/10.24815/jped.v4i2.13022>
- Andhyka, R., Handayani, H. R., & Woyanti, N. (2018). Analisa Pengaruh PDRB, Tingkat Pengangguran, dan IPM Terhadap Tingkat Kemiskinan di Provinsi Jawa Tengah. *Media Ekonomi Dan Manajemen*, 33(2), 113-123.
- Auzar, Z. (2021). Kemiskinan, Gender, dan Covid-19 Jatim : Feminization of Poverty, Multiple Pandemic, and Feminization of Pandemic. *Prosiding Seminar Nasional Penanggulangan Kemiskinan*, 1(1), 248-287.
- Basuki, A. T. (2014). *Regresi Model PAM, ECM dan Data Panel dengan EVIEWS 7*. Yogyakarta: Katalog Dalam Terbitan (KDT). 75. <https://ekonometrikblog.wordpress.com/wp-content/uploads/2015/10/regresi-pam-ecm-dan-data-panel.pdf>
- Bhukuth, A., Roumane, A., & Terrany, B. (2018). Cooperative, human capital and poverty: A theoretical framework. *Economics and Sociology*, 11(2), 11-18. <https://doi.org/10.14254/2071-789X.2018/11-2/1>
- Boianovsky, M. (2018). When the history of ideas meets theory: Arthur Lewis and the classical economists on development. *History of Political Economy*, 50, 172-190. <https://doi.org/10.1215/00182702-7033920>
- Cheng, Z., Li, L., Liu, J., & Zhang, H. (2018). Total-factor carbon emission efficiency of China's provincial industrial sector and its dynamic evolution. *Renewable and Sustainable Energy Reviews*, 94(November 2017), 330-339. <https://doi.org/10.1016/j.rser.2018.06.015>
- Damanik, R. K., & Sidauruk, S. A. (2020). Pengaruh Jumlah Penduduk Dan Pdrb Terhadap Kemiskinan Di Provinsi Sumatera Utara. *Jurnal Darma Agung*, 28(3), 358. <https://doi.org/10.46930/ojsuda.v28i3.800>
- Espinoza-Delgado, J., & Klasen, S. (2018). Gender and multidimensional poverty in Nicaragua: An individual-based approach. *World Development*, 110, 466-491. <https://doi.org/10.1016/j.worlddev.2018.06.016>
- Febriani, A. R. (2018). *Analisis Pengaruh Tingkat Pengangguran, Rata-Rata Lama Sekolah, dan Pertumbuhan Sektor Industri Terhadap Kemiskinan Di Provinsi Jawa Tengah Periode 2011-2015*. Universitas Pembangunan Nasional.
- GU, R., & NIE, F. Ying. (2021). Does empowering women benefit poverty reduction? Evidence from a multi-component program in the Inner Mongolia Autonomous Region of China. *Journal of Integrative Agriculture*, 20(4), 1092-1106. [https://doi.org/10.1016/S2095-3119\(20\)63436-0](https://doi.org/10.1016/S2095-3119(20)63436-0)

- Guo, Y., Zhou, Y., & Liu, Y. (2022). Targeted poverty alleviation and its practices in rural China: A case study of Fuping County, Hebei Province. *Journal of Rural Studies*, 93, 430–440. <https://doi.org/10.1016/j.jrurstud.2019.01.007>
- Hariadinata, I. (2019). Ketimpangan Gender dan Pengaruhnya Terhadap Pertumbuhan Ekonomi, Kesehatan, Pendidikan dan Ketenagakerjaan. In *Universitas Islam Negeri Syarif Hidayatullah* (Vol. 8, Issue 5). Universitas Islam Negeri Syarif Hidayatullah Jakarta.
- Horas, J., Purba, V., & Bimantara, D. (2020). *The Influence of Asset Management on Financial Performance, with Panel Data Analysis*.
- Janah, R., & Nuraini, I. (2021). Pengaruh Industri Sedang Dan Besar Terhadap Tingkat Kemiskinan Di Kabupaten Gresik Tahun 2002-2016. *Jurnal Ilmu Ekonomi JIE*, 4(1), 25–31. <https://doi.org/10.22219/jie.v4i1.9253>
- Kaewnern, H., Wangkumharn, S., Deeyaonarn, W., Yousaf, A. U., & Kongbuamai, N. (2023). Investigating the role of research development and renewable energy on human development: An insight from the top ten human development index countries. *Energy*, 262(PB), 125540. <https://doi.org/10.1016/j.energy.2022.125540>
- Khan, I., Xue, J., Zaman, S., & Mehmood, Z. (2023). Nexus Between FDI, Economic Growth, Industrialization, and Employment Opportunities: Empirical Evidence from Pakistan. *Journal of the Knowledge Economy*, 14(3), 3153–3175. <https://doi.org/10.1007/s13132-022-01006-w>
- Klasen, S. (2018). Courant Research Centre “Poverty, Equity and Growth in Developing and Transition Countries: Statistical Methods and Empirical Analysis” The impact of gender inequality on economic performance in developing Countries The impact of gender inequality on econ. *Annual Review of Resource Economics*, 10(244).
- Mansi, E., Hysa, E., & Panait, M. (2020). *Poverty — A Challenge for Economic Development? Evidence from Western Balkan Countries and the European Union*. 1–24.
- Mhlanga, D. (2021). Artificial Intelligence in the industry 4.0, and its impact on Poverty, innovation, infrastructure development, and the sustainable development goals: Lessons from emerging economies? *Sustainability (Switzerland)*, 13(11). <https://doi.org/10.3390/su13115788>
- Mongan, J. J. S. (2019). Pengaruh pengeluaran pemerintah bidang pendidikan dan kesehatan terhadap indeks pembangunan manusia di Indonesia. *Indonesian Treasury Review Jurnal Perbendaharaan Keuangan Negara Dan Kebijakan Publik*, 4(2), 163–176. <https://doi.org/10.33105/itrev.v4i2.122>
- Olopade, B. C., Okodua, H., Oladosun, M., & Asaley, A. J. (2019). Human capital and poverty reduction in OPEC member countries. *Heliyon*, 5(8), e02279. <https://doi.org/10.1016/j.heliyon.2019.e02279>
- Palaneven, T. O. M., Walengwangko, E. N., & Sumual, J. I. (2018). Pengaruh

- Pengeluaran Pemerintah Sektor Pendidikan Dan Sektor Kesehatan Terhadap Ipm Dan Dampaknya Terhadap Kemiskinan Di Sulawesi Utara. *Jurnal Berkala Ilmiah Efisiensi*, 18(4), 56.
- Prabowo, S., & Florentine. (2014). Hubungan Antara Skill Mismatch Dengan Stress Kerja Pada Karyawan PT X. *Psikodimensia Kajian Ilmiah Psikologi*, 13(2), 4-5.
- Prajanto, A. (2019). Pengaruh Investasi Publik dan Investasi Swasta Terhadap Pertumbuhan Ekonomi Kabupaten/Kota di Provinsi Jawa Tengah Tahun 2011-2015. *Direktori Mini Tesis-Disertasi Ekonomi Pembangunan*, 402098.
- Primadi, Y. (2019). Analisis Dampak Industrialisasi Terhadap Kemiskinan di Jawa Timur. *Jurnal Ilmiah*.
- Purwono, R., Wardana, W. W., Haryanto, T., & Khoerul Mubin, M. (2021). Poverty dynamics in Indonesia: empirical evidence from three main approaches. *World Development Perspectives*, 23, 100346. <https://doi.org/10.1016/j.wdp.2021.100346>
- Rahman, I. F. (2019). Analisis Pengaruh Industri Besar Dan Sedang, Pendidikan, Dan Migrasi Terhadap Pengentasan Kemiskinan Di Kabupaten Gresik 2013-2017. *Jurnal Ilmiah*.
- Rahmattullah. (2015). Pengaruh Penduduk Umur Produktif Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal ISEI*, 5(1), 151-160. <https://repository.unej.ac.id/handle/123456789/62936>
- Ritonga, M., & Wulantika, T. (2020). Pengaruh PDRB dan Jumlah Penduduk Terhadap Tingkat Kemiskinan di Kabupaten Batu Bara Sumatera Utara (2010-2018). *Jurnal Diversita*, 6(1), 95-102. <https://doi.org/10.31289/diversita.v6i1.3135>
- Rochmani, T. S., Purwaningsih, Y., & Suryantoro, A. (2016). Analisis Penyerapan Tenaga Kerja Sektor Pariwisata. *Jiep*, 16(2), 50-61. <http://eprints.umm.ac.id/26824/>
- Saidu, A. M., Mustapa, A., & Inuwa, N. (2023). IMPACT OF POPULATION GROWTH ON POVERTY IN NIGERIA. *GUSAU Journal of Economics and Development Studies (GUJEDS)*, 3(1), 21-28.
- Sohrab Hossen, M. (2020). Patriarchy Practice and Women's Subordination in the Society of Bangladesh: An Analytical Review. *Electronic Research Journal of Social Sciences and Humanities*, 2(3), 51-60. [www.eresearchjournal.com](http://www.eresearchjournal.com)
- Sompolska-Rzechuła, A., & Kurdyś-Kujawska, A. (2022). Assessment of the Development of Poverty in EU Countries. *International Journal of Environmental Research and Public Health*, 19(7). <https://doi.org/10.3390/ijerph19073950>
- Triatmoko, W., & Esariti, L. (2019). Pengentasan Kemiskinan Berbasis Gender pada Program Kampung Tematik ( Studi Kasus: Kampung Jajanan Tradisional , Pudukapayung ). *Jurnal Riptek*, 13(1), 23-28.
- Wang, Y., Wu, D., Wang, M., Zhou, L., & Ding, J. (2018). Density, Distance, and Division: Rural Poverty in a Developing-Country Context. *Growth and Change*, 49(3), 473-489. <https://doi.org/10.1111/grow.12250>
- Wijyanti, N. N. S. A., & Karmini, N. L. (2014).

Pengaruh Tingkat Inflasi, Laju Pertumbuhan Ekonomi dan Upah Minimum Terhadap Tingkat Pengangguran Terbuka Di Provinsi Bali. *E-Jurnal Ekonomi Pembangunan*, 3(10), 460-466.  
<http://ojs.unud.ac.id/index.php/eep/article/view/9393>

Wulan, Y. C., Ati, N. U., & Widodo, R. P. (2019). Implementasi Kebijakan Penanggulangan Kemiskinan Melalui Program Pemberdayaan Ekonomi Kelompok Usaha Bersama (KUBE) (Studi Tentang Program Pemberdayaan Ekonomi Kelompok Usaha Bersama (KUBE) di Kelurahan Pakistaji Kecamatan Wonoasih Kota Probolinggo, Jawa . *Jurnal Respon Publik*, 13(4), 104-109.

Zameer, H., Shahbaz, M., & Vo, X. V. (2020). Reinforcing poverty alleviation efficiency through technological innovation, globalization, and financial development. *Technological Forecasting and Social Change*, 161(September), 120326.  
<https://doi.org/10.1016/j.techfore.2020.120326>