

Analysis of Factors Influencing Economic Growth in Central Java Province in 2017-2021

Nirmala Sena Dipayani¹, Nur Hidayah²
b300190146@student.ums.ac.id¹, nh212@ums.ac.id²

Faculty of Economics and Business, Universitas Muhammadiyah Surakarta

Abstract

This study aims to analyze the effect of the regional minimum wage (UMR), human development index (IPM), labor force participation rate (TPAK) and poverty on economic growth in districts/cities in Central Java Province during the period 2017 - 2021. The analytical tool used in this study, namely panel data regression. The data used in this study are time series and cross section data obtained from the Central Bureau of Statistics (BPS) of Central Java. The model chosen in this study is REM. Based on the results of the analysis, it is known that the UMR has a positive and significant relationship, HDI has a positive and significant relationship, while TPAK has a negative and not significant relationship, meanwhile, poverty has a negative and significant relationship. Based on the research that has been done, the government can increase the UMR and liveability as well as guarantee public education to increase economic growth.

Keywords: Regional Minimum Wages, HDI, Poverty, Panel Method

1 Introduction

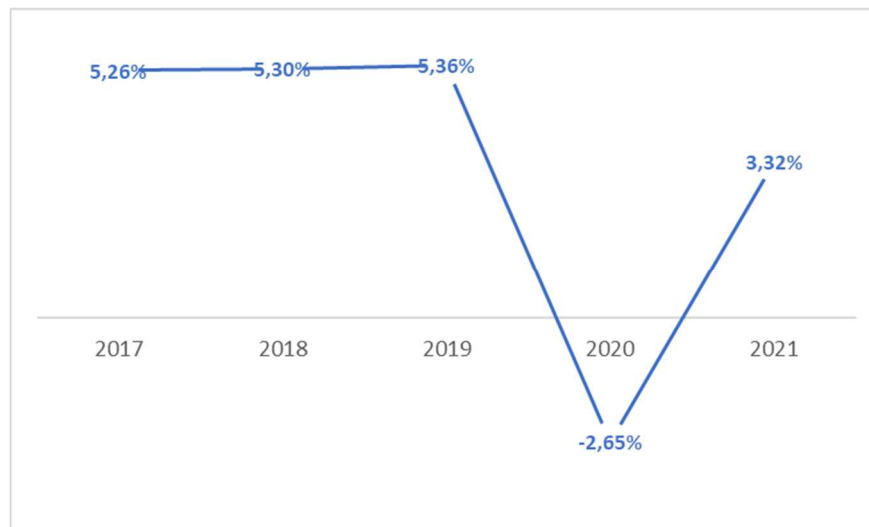
Economic development activities in a country aim to increase per capita income which boils down to improving people's welfare. The main objective of economic development is to produce a high growth rate of economic plants, followed by poverty alleviation, reduction of income inequality, decent employment opportunities, health standards, improvement of environmental conditions, equality of opportunity, equal distribution of individual freedom and refreshment of cultural life [1]. Meanwhile, economic growth is an increase in people's per capita income regardless of changes in economic structure.

A country's economic growth can be seen from the annual change in gross domestic product (GDP) at the level of the country. The development success of a region or country can be measured by the rate of economic growth. Each region always sets a higher growth rate than the previous year in its regional development plan. It aims to increase economic growth in the next period with the hope that the community can receive a positive impact from the increase in economic growth that occurs.

Economic growth is one of the very important indicators to assess the performance of an economy, especially to analyze the results of economic development carried out in a country or region. The economy is said to be growing as the production of goods and services increases from the previous year. Economic growth thus indicates the extent to which economic activity can generate additional income or wealth for people over a period of time. The increasing economic growth of a country or region indicates that the economy of the country or region is doing well [2].

An important indicator for assessing the condition of a country's economy over a period of time is gross domestic product (GDP) data. GDP is basically the sum of the added value generated by all business units in a country, or the sum of the final products and services produced by all business units. GDP on the basis of prevailing prices is the added value of goods and services calculated based on annual prices, and GDP on constant prices calculates the added value of these goods and services based on prices in a given year (BPS Central Java).

Table 1. Central Java Province's economic growth rate from 2017 to 2021



Source: Central Statistik Agency of Central Java

Based on the data above, economic growth in Central Java has increased for 3 consecutive years. However, in 2020 economic growth in Central Java contracted by -2.65% due to the Covid-19 pandemic which made the economy experience a decline. Economic growth in Central Java increased by 5.26% in 2018-2019. According to Bank Indonesia, the overall economic performance of Central Java in 2019 was better than in 2018. Then economic growth in Central Java began to improve in 2021 with a figure of 3.32%.

Economic growth and development have different definitions, namely, economic growth is a process by which per capita output continues to increase in the long term [3]. Economic growth is one of the indicators of successful development. Therefore, the higher the economic growth, the higher the welfare of the people, although there is another indicator, namely income distribution. Economic development is an effort to increase per capita income by processing the potential of economic power into a real economy through investment, the use of technology, increasing knowledge, improving skills, increasing organizational and administrative capacity. One of the indicators of the success of development implementation that can be used as a macro reference is economic growth, but even though it has been used as an indicator of development, economic growth is still general in nature and has not reflected the ability of the community. Individually. Regional development is also expected to have a positive impact on economic growth. Regional economic growth can be reflected in changes in the gross national product of the regions [3].

According to Kuznets, economic growth is the process of increasing a country's long-term productive capacity to provide its people with economic goods. There are several tools to measure economic growth, namely: Gross domestic product and gross domestic product per capita of a region. The neoclassical economic growth put forward by Solow assumes that the supply of capital and labor and the assumption that output has a constant return are things that affect the quantity of output. Solow's growth model is also designed to determine whether capital stock savings, population levels, and technological advances impact economic growth [3].

District/city minimum wage factors also affect economic growth. Economic growth is a means of enhancing the long-term ability of the country concerned to provide various economic goods for its people [4]. Raising the minimum wage of workers will increase their purchasing power, which will ultimately encourage morale and possibly increase labor productivity. However, for employers who see wages as a burden, this increase forces them to adjust the wages they pay to workers to the minimum wage set by the government. So, with this increase in the minimum wage, employers tend to reduce the amount of labor they use in the production process. This further narrows the labor market in terms of labor, but on the other hand, workers who earn higher wages can increase their productivity [5].

Human resources (HR) are one of the resources needed for the economy of a region or country. The stage of the Industrial Revolution 4.0 presents current and future challenges, including job opportunities. The level of labor force participation (TPAK) and education is one of the human resource

factors that contribute to the formation of a region's gross domestic product (GRDP) that can encourage regional economic growth.

One way to measure the success or performance of a country or region in human development is through the Human Development Index (HDI). Human development and economic growth are closely related and are prerequisites for the achievement of human development. Efforts to increase human development support increased productivity and productive efforts that ultimately increase income.

Poverty that occurs in a society is measured using indicators of ability to meet basic needs both food and non-food (basic needs approach), also called the poverty line [6]. The World Bank's poverty measurement uses income and wealth indicators (lack of income and wealth) to meet basic needs such as food, clothing, housing, acceptable health care and education.

Several previous studies have shown a positive and significant relationship between the regional minimum wage, human development index and economic growth [7] [8] [9]. Meanwhile, the labor force participation rate does not have a significant effect on economic growth [10]. And research that shows a negative relationship between poverty and economic growth is research [10].

The difference between this study and previous research is the modification of independent variables used in previous studies, the location of the study and the year used. This study aims to analyze the effect of the regional minimum wage, human development index, labor force participation, and poverty rate on economic growth in Central Java province from 2017 to 2021

2 Literature review

2.1 The Theory Economic Growth

According to Adam Smith, the classical theory argues that to increase economic growth by emphasizing existing factors of production. Adam Smith thinks that economic growth actually rests on population growth. With the increase in population, there will be an increase in output results. Adam Smith's theory is contained in his book entitled *An Inquiry Into the Nature and Causes of the Wealth of Nations* [11].

Simon Kuznets, one of the great economists who won the Nobel Prize in Economics in 1971, defines economic growth as a long-term increase in a country's ability to provide its citizens with a variety of economic goods. Capacity building itself is determined or made possible by technical, institutional and ideological progress or adaptation to existing needs [12].

2.2 Economic Growth

Economic growth generally describes economic activity in an area that generates additional income for a society over a period of time. According to [3], economic growth is defined as the development of economic activity that leads to an increase in the number of goods and services produced by a society and increase the community's wealth.

Economic growth is the process of continuously changing the state of a country's economy for the better over a period of time. Economic growth can also be interpreted as the process of increasing the production capacity of an economy which is manifested in the form of increasing national income. Their economic growth is a sign of successful economic development [13].

Economic growth is one of the very important indicators in assessing the progress or not of an economy, the economy is said to experience growth if the production of goods and services increases from the previous year. Thus, economic growth shows the extent to which economic activity can generate additional income or increase the level of public welfare at a certain period. Because basically economic activity is a process of using production factors to produce output, the process will in turn produce a flow of reciprocity to the production factors owned by society. With economic growth, people's income as owners of production factors is also expected to increase. Economic growth can usually be measured using Bruto Domestic Product (GDP) data of final goods and services generated from an economy over a period of time (usually one year).

2.3 Regional Minimum Wage

The minimum wage is a wage set at a regional, regional and sub-sectoral minimum. The purpose of providing a minimum wage is to meet the minimum standard of living in order to increase the number of low-income residents. In general, wages occupy a strategic position for both workers and their families, the business world and the national interest. Wages, on the other hand, are a means for the government to level incomes and improve people's welfare [5].

2.4 Human Development Index

One of the main objectives of HDI is to show that countries can do much better with lower income levels. On the contrary, high income is not necessarily followed by high performance in human resource development. HDI shows that income inequality is greater than different income indicators, at least in health and education. Furthermore, the Human Development Index reminds us that development actually means not only increased income, but human development in a broader sense. Health and education, in their role as components of human capital, are inputs to the production function of the state. Improving health and education is an important individual goal of development efforts [14].

Human development is defined as the process of expanding the choice of the population. The main goal of development is to create an environment where people can live healthy, long and productive lives (United Nations Development Plan). The Human Development Index, on the other hand, measures the development outcomes of people based on many basic components of quality of life. As a measure of quality of life, HDI is built with a fundamentally three-dimensional approach. These aspects include longevity and health, knowledge, and a decent life. These three dimensions are very broad because they relate to many factors. Life expectancy at birth is used to measure aspects of health. In addition, for the dimension of knowledge, a combination of averages and indicators of the expected length of service for school is used. To measure the dimensions of decent living, purchasing power indices are used for various staple commodities, not per capita as an income approach that represents development services for a decent life [15].

2.5 Labor Force Participation Rate

The Labor Force Participation Rate (LFPR) is the ratio of the number of workers to the working-age population of the same group [16]. The higher the labor force participation rate, the higher the number of workers in the same group. On the contrary, the more people who go to school and maintain their household income, the more people are inactive, the less the labor force, and the lower the labor force participation rate.

2.6 Poverty

According to BPS, it defines the poor as residents who have an average per capita expenditure per month below the poverty line. Poverty is one of the economic diseases that is very difficult to treat. Many factors cause people to fall into poverty. Poverty is no longer understood only as economic incompetence, but also as non-fulfillment of basic rights and differences in the treatment of a person or group of people in a decent life. Generally recognized basic rights are to meet the needs of food, health, education, employment, housing, clean water, land, natural resources, the environment, feel safe from the treatment or threat of violence, and the right to participate in sociopolitical life.

3 Research Method

The analysis method used in this study is to use the Panel Least Square (PLS) regression analysis method using the Chow Test and Hausman Test to determine the selected model.

The data that has been found in this study is secondary data sourced from the Central Statistics Agency (BPS) of Central Java from 2017 to 2021. This study uses data panel analysis which includes a combination of time-series data and cross-section data. The data used in the time-series for the last 5 years, namely 2017 to 2021 and cross-section data as many as 35 data that mention regencies / cities in Central Java. The processing tool use Software reviews 10.

The equation of the panel data regression model can be formulated in the model as follows :

$$LOG PE_{it} = \beta_0 + \beta_1 LOG UMR_{it} + \beta_2 LOG IPM_{it} - \beta_3 TPAK_{it} - \beta_4 POVERTY_{it} + \varepsilon_{it}$$

Information:

<i>PE</i>	: Economic growth
<i>UMR</i>	: Regional Minimum Wage (million rupiah's)
<i>IPM</i>	: Human Development Index (index)
<i>TPAK</i>	: Labor Force Participation Rate (percent)
<i>POVERTY</i>	: Percentage of the Poor (percent)
ε	: Error term
β_0	: Constanta

β_1, β_4	: Independent variable regression
i	: Cross Section (35 Regency/City entire Central Java)
t	: Time Series (Periods of 2017-2021)
LOG	: Log

4 Results of Research and Discussion

To determine the magnitude of the influence of the Regional Minimum Wage, Human Development Index, Labor Force Participation Rate, and Poverty on economic growth in Central Java Province, it can be seen from the results of a regression analysis whose processing is assisted by using the *eviews 10* application with the following results.

4.1 Eliminated model selection test

The chow test along with the Hausman test used serves as a better estimated model selection than PLS (pooled least square), then for the FEM (fixed effect model) it is done if you are going to test the chow. Then a Hausman test will be carried out for the selection of REM (random effect model), so that additional tests must be carried out, namely the LM test (lagrange multiplier) used in choosing a model with a good estimation, namely using PLS (pooled least square) or can be done using REM (random effect model).

Table 2. Results of Econometric Model Estimation of Panel Data Regression

Variable	Regression Coefficiency		
	PLS	FEM	REM
C	6,382555	5,904032	6,141605
LOG (UMR)	0,413821	0,185413	0,191191
LOG(IPM)	1,074417	1,977455	1,902482
TPAK	-2,4E-05	-2,42E-06	-2,40E-06
POVERTY	-0,004166	-0,012752	-0,012764
R^2	0,030981	0,999093	0,794868
Adjusted. R^2	0,008180	0,998840	0,790041
Statistics F	1,358773	3942,516	164,6838
Prob. Statistics F	0,250361	0,000000	0,000000
Model Selection Test			
(1) Chow			
Cross- Section $F(34,136) = 4269,705763$;			
Prob. $F(34) = 0,0000$			
(2) Hausman			
Cross-Section random $\chi^2(4) = 0,523062$;			
Prob. $\chi^2 = 0,9712$			

Source : Attachments

• The Chow Test

The chow test is done to determine the best match between common effect model (CEM) or fixed effect model (FEM) when estimating panel data. The Chow test is a comparative test model common-effect and fixed-effect. The Chow test aims to determine the most suitable model between the approaches common effect or fixed effect which is used to perform panel data regression. The decision criteria for the Chow test are given by the value probability cross section F .

From Table 2, you can see the p-value, probability or empirical significance of the F statistic of 0,0000 ($< 0,01$), Thus, H_0 is rejected. So that the estimated model is *FEM*.

• The Hausman Test

The Hausman tests are usually performed to allow for a choice between FEM or REM models. The hypothesis of hausman test is H_0 : The Estimation Model is a form of REM and its H_A : Estimation Model i.e. REM. H_0 is acceptable if p-value, probability or statistics significant $\chi^2 \leq \alpha$. The Hausman test results are shown in the Table 3. From Table 3 can be seen the *p-value*, probability or statistical

significance χ^2 as much as 0.0010 ($< 0,01$), jadi H_0 rejected. So, the model is estimated that is *REM*.

Table 3. Estimation Random Effect Model (REM)

$LOG PE_{it} = 6,141605 + 0,191191 LOGUMR_{it} + 1,902482 LOGIPM_{it} - 2,40E -$			
$06TPAK_{it} - 0,012764 POVERTY_{it}$			
(0,0000)*	(0,0002)*	(0,4871)	(0,0000)*
$R^2 = 0,794868; DW = 1,617615; F = 164,6838; Prob. F = 0,000000$			

information: *Significant on $\alpha = 0,01$; **Significant on $\alpha = 0,05$; ***Significant on $\alpha = 0,10$.
Numbers in parentheses are statistical empirical probabilities t

• The Existence of an Estimated Text Model REM

The model is present when at least one independent variable affects the dependent variable (not all regression coefficients are zero). The F test is if the model is real. Given that there are 5 independent variables in the best estimation of REM (Fixed Effect Model), the hypothetical wording is: $H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ (the fourth regression coefficient of zero variables or non-existent models); $H_A: \beta_1 \neq 0 \vee \beta_2 \neq 0 \vee \beta_3 \neq 0 \vee \beta_4 \neq 0 \vee \beta_5 \neq 0$ (there is at least one regression coefficient not equal to zero or the model exists). H_0 will be accepted if p value, probability, or statistical empirical significance $F > \alpha$; H_0 will be rejected if p value, probability, or statistical empirical significance $F \leq \alpha$.

From Table 3, it can be seen that the p value, probability, or statistical empirical significance F worth of 0,0000 ($< 0,01$); So, the H_0 conclusions of the model used against the existing research.

• Interpretation of Coefficient Determination(R^2)

Coefficient determination (R^2) determine the forecasting power of the estimated model. From the Table 3 it appears that the value of R^2 against the model *Random Effect Model* (REM) of 0,794868 means 79,48% variation of economic growth variables are clarified by the variables of regional minimum wage, human development index, labor force participation rate and poverty. The remaining 20.52% was influenced by variables or other factors that were not included in the model.

• The Test Validity of the Effect from Independent Variables of Estimated Models REM

The effect of validity test evaluates the significance of the individual or partial effects from independent variables. Test the validity of the usability using t test. H_0 test is $\beta_i = 0$, the variable independent to i to the estimated model has no significant effect; the H_A of $\beta_i \neq 0$: independent variable to i of estimated model has significant influence. H_0 will be accepted if the p value, probability, ataupun kesignifikansi empirik statistik $t > \alpha$; H_0 akan ditolak apabila nilai p (p value), probability, or statistical empirical significance of $t \leq \alpha$. The results of the validity test can be found at Tabel 4.

Table 4. Independent Variable Influence Validity Test Results

Variable	Sig.t	Criteria	Conclusion
LOG (UMR)	0,0000	$< 0,10$	Significant on $\alpha = 0,10$
LOG (IPM)	0,0002	$< 0,10$	Significant on $\alpha = 0,10$
TPAK	0,4871	$> 0,10$	Not Significance
POVERTY	0,0000	$< 0,10$	Significant on $\alpha = 0,10$

5 Discussion

5.1 Effect of regional minimum wage on economic growth

The results of the study determined that minimum wages had a positive influence on economic growth when the regression coefficient was 0,191191 along with empirical qualification t of 0,0000 ($< 0,01$). This means that if the minimum wage increases, then economic growth also experiences a significant increase. The acquisition of this research is in accordance with the results of research conducted [7] which found that the minimum wage had a significant influence on economic growth in Central Java Province in 2011-2019. Increasing the minimum wage can increase the economic growth in an area because increasing wages for workers will improve their purchasing power which will eventually encourage the desire to work and can increase work productivity. With an increase in work productivity, in the long run, it will affect regional economic growth.

5.2 Effect of human development index on economic growth

The results of the study determined that the human development index had a positive influence on economic growth when the regression coefficient was 1,902482 along with empirical significance t of 0,0002 ($< 0,01$). This means that if the HDI increases, thus economic growth will also increase. HDI is more interpreted as the ultimate goal on improving well-being. What corresponds to the study [9] which states that the human development index has a positive effect on short-term economic growth in Indonesia for the period 1995-2017.

5.3 The effect of labor force participation rates on economic growth

The results of the study determined that the labor force participation rate had a negative influence on regression economic growth of -2.40E06 and was not significant with empirical t of 0,4871 ($> 0,01$). TPAK has no effect on economic growth because population growth is closely related to the number of workers employed and is one of the factors that will affect economic growth. In addition to production factors, the number of workers working will also increase from year to year so that if utilized optimally, it will increase economic growth. This research is in line with the research conducted by [16] that the labor force participation rate has no significant effect on economic growth in Jambi Province.

5.4 The effect of poverty on economic growth

The results showed that poverty has a negative influence on economic growth with a regression of -0,012764 along with empirical signification t of 0,0000 ($< 0,01$). Which means that if the poverty rate falls, economic growth will go up. It can be concluded that economic growth is closely proportional and directly proportional to the income of people per capita, and if the poverty rate is high, society's income will decrease and it causes the rate of economic growth to also decrease. Also a country is said to experience economic development if economic growth is through increasing per capita income and can reduce the poverty rate. This research is in line with the research conducted by [10] that poverty has a significant effect on economic growth in East Java.

6. Conclusion

Based on the research that has been carried out, it can be concluded that the best Chow test and Hausman test models are *Random Effect Model* (REM). The F test shows if the model used exists with a level of statistical empirical significance F is worth 0,0000 ($< 0,01$). The value of the coefficient determination (R^2) of 0,794868 means valuable 79,48% variable variations of the regional minimum wage, human development index, labor force participation rate and poverty. The remaining 20.52% is influenced by variables or other factors that are not included in the model. The results of the influence validity test show that the regional minimum wage and human development index have a positive impact on economic growth, while the variables of labor force participation rate and poverty have a negative impact on economic growth in Central Java Province during the period of 2017-2021.

7. Suggestion

The government can prepare other excellent programs to prepare the readiness of the workforce in entering the world of work as well as entrepreneurship training and others in order to open new jobs in order to be able to innovate and contribute to economic growth in Central Java Province

so that the cost of daily necessities can be fulfilled, health and welfare can be guaranteed which in the end will make the level of human development index increase accompanied by Economic growth will also increase due to the maximum support power from several sources that support economic growth. These three things cannot be separated from the elements of economic growth so that the government can carefully take into account programs that can improve the ability of the workforce to work with the aim of reducing poverty and end up with an increase in the human development index and autopilot economic growth can grow automatically.

Acknowledgments

The author expresses his gratitude to International Economics and Business Conference (IECON) which has provided a forum for authors to publish scientific articles from this research, Muhammadiyah University of Surakarta as well as individuals who have provided support during the implementation of the research.

References

- [1] A. Lia, "No Title," in *Ekonomi Pembangunan*, 2007. [Online]. Available: Lia Amalia. (2007.). *Ekonomi pembangunan / Lia Amalia*. Yogyakarta :: Graha Ilmu.,
- [2] A. Mustika, "Analisis Tingkat Pengangguran Faktor-Faktor yang Mempengaruhinya di Semarang," *Skrispi*, pp. 1–80, 2010.
- [3] S. Sukirno, *No Title*. Rajagrafindo persada, 2007.
- [4] S. C. S. Michael P. Todaro, *Ekonomi Pembangunan edisi 9*. Erlangga, 2011. [Online]. Available: https://books.google.co.id/books?id=m8kMk_KbSX4C&hl=id
- [5] D. Pratama Atiyatna, N. T. Muhyiddin, D. Bambang, and B. Soebyakto, "Pengaruh upah minimum, pertumbuhan ekonomi dan pendidikan terhadap penyerapan tenaga kerja di Provinsi Sumatera Selatan," *J. Ekon. Pembang.*, vol. 14, no. 1, pp. 1829– 5843, 2016, [Online]. Available: <https://ejournal.unsri.ac.id/index.php/jep/indexDOI:https://doi.org/10.29259/jep.v14i1.8771>
- [6] "Badan Pusat Statistik." <https://www.bps.go.id/subject/23/kemiskinan-dan-ketimpangan.html>
- [7] H. Winarto, Z. Zumaeroh, and D. Retnowati, "Pengaruh Human Capital, Upah Minimum dan Angkatan Kerja terhadap Pertumbuhan Ekonomi Sektor Industri Pengolahan di Provinsi Jawa Tengah," *Ekon. J. Econ. Bus.*, vol. 6, no. 1, p. 190, 2022, doi: 10.33087/ekonomis.v6i1.500.
- [8] F. T. Julianto and Suparno, "Analisis Pengaruh Jumlah Industri Besar Dan Upah Minimum Terhadap Pertumbuhan Ekonomi Di Kota Surabaya," *J. Ekon. Dan Bisnis*, vol. 1, no. 2, pp. 229–256, 2016.
- [9] Y. O. Rahmawati, "Analisis Pengaruh Indeks Pembangunan Manusia (IPM), Tingkat Partisipasi Angkatan Kerja (TPAK), dan Pengeluaran Pemerintah di Sektor Kesehatan dan Pendidikan Terhadap Pertumbuhan Ekonomi di Indonesia Periode 1995-2017," *J. Ilm.*, pp. 1–12, 2019.
- [10] A. Prameswari, S. Muljaningsih, and K. Asmara, "Analisis Pengaruh Kemiskinan, Indeks Pembangunan Manusia (Ipm) Dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi Di Jawa Timur," *J. Ekon. Pembang. STIE Muhammadiyah Palopo*, vol. 7, no. 2, p. 75, 2021, doi: 10.35906/jep.v7i2.909.
- [11] W. Easterly, "The Elusive Quest for Growth : MELACAK PEMBUKTIAN TEORI-TEORI PERTUMBUHAN EKONOMI," *Ekon. J. Pembang.*, vol. 7, no. 2, pp. 181– 186, 2002.
- [12] D. Saputra, "Analisis Pertumbuhan Ekonomi Dan Tingkat Ketimpangan Antar Kabupaten/Kota Di Provinsi Jawa Barat Analysis of Economic Growth and Disparities Between the Cities in West Java Province," *CR J.*, no. 25, pp. 1–18, 2004.
- [13] R. R. Nurlaeni, "Analisis Pertumbuhan Ekonomi Asean Periode Tahun 2005-2019," 2021.
- [14] S. C. S. Michael P. Todaro, *Economic Development*.
- [15] S. D. Sari and Eni Setyowati, "Analisis Pengangguran , Pendapatan Perkapita , Dan IPM Terhadap Pertumbuhan Ekonomi di Indonesia Tahun 2017- Analysis of Unemployment , Capita Income , and HDI on Economic Growth in Indonesia , 2017- 2020 . Proceed," *Procedia Soc. Sci. Humanit.*, vol. 0672, no. c, pp. 8–18, 2022, [Online]. Available: <https://scholar.archive.org/work/wk3dxxc7hfeutd6eou7bwpdnoe/access/wayback/https://pssh.umsida.ac.id/index.php/pssh/article/download/195/91>
- [16] E. M. Rozmar, J. Junaidi, and A. Bhakti, "Pengaruh Pertumbuhan Penduduk, Tingkat

- Partisipasi Angkatan Kerja, dan Rasio Beban Ketergantungan Terhadap Pertumbuhan Ekonomi Provinsi Jambi,” *e-Jurnal Ekon. Sumberd. dan Lingkung.*, vol. 6, no. 2, pp. 97–106, 2017, doi: 10.22437/jels.v6i2.11918.
- [18] Todaro, M. P. & Smith, S. C. 2011. *Pembangunan Ekonomi*, Edisi Kesembilan, Jakarta: Erlangga
- [19] Simanjuntak, Payaman J. 1985. *Pengantar Ekonomi Sumber Daya Manusia*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia