

THE IMPACT OF LABOUR, WAGE, AND HUMAN DEVELOPMENT INDEX ON ECONOMIC GROWTH

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ABSTRACT

Introduction: This study aims to estimate the impact of Labor Level, Wage Level, and Human Development Index on economic growth in DKI Jakarta Province between 2012 and 2021.

Methods: This study employed quantitative research methodologies utilizing secondary data as its data source. Central Statistical Agency data on GRDP, Human Development Index, Manpower, and Provincial Minimum Wages were gathered (www.bps.go.id). This study used a multivariate linear regression model to determine the impact of variables using the Least Squares Equation.

Results: The results of this study reveal that the macroeconomic variables HDI, Labors, and Wages have no substantial influence on GRDP.

Conclusion and suggestion: To influence the increase or reduction in the level of economic growth, however, the rate of economic growth (GRDP) is not only affected by macroeconomic variables but also by religiosity-related factors.

INTRODUCTION

Economic development has an important role and is a benchmark for accelerating a country's economic growth. Economic development is an indicator and prerequisite for a country to develop (Fitria, 2016). Economic development also aims to reduce poverty levels, overcome income asymmetry, and provide employment (Gryshova et al., 2020). Economic growth is one of the pillars of economic development (Pradhan et al., 2021). Economic growth can be created if the production capacity of an economy, which is realized in the form of an increase in national income, can increase.

The measurement of economic development can be viewed from the aspect of human resources through the measurement of the Human Development Index or HDI (Asongu & Odhiambo, 2020; Beyene, 2022; Mat et al., 2015). In '90, the United Nations Development Programme (UNDP) developed this index to emphasize the importance of resources in development. HDI describes the population level that can be facilitated from the results of development by obtaining income, health, education, and so on (Saroj et al., 2023). HDI is formed based on three indicators: longevity, knowledge, and decent living standards (Bagianto et al., 2020). A country's success is seen not only from its growth but also in terms of national development in the context of success in developing its human resources (Beyene, 2022).

In BPS (2020) data, it is said that the Human Development Index can determine the level of development of a region or country and is an important indicator in measuring success in efforts to build the community's quality of life. Huda, (2017) explains that human welfare lies in faith, soul, reason, offspring, and wealth. Islam guides its people so as not to leave their children and grandchildren in a state of deprivation regarding religious knowledge, economics, and so on, as written in QS An-Nisa verse 9. Islam views economic development when economic growth is not only experienced by production factors but must also be able to affect people's lives positively (Fitria, 2016).

Data from Badan Pusat Statistik (2020) states that the HDI Index value for Indonesia is 72.29, with the DKI Jakarta province ranked the highest of all provinces in Indonesia, namely 81.11. Likewise, the variable provincial minimum wage level based on data from BPS also states that DKI Jakarta Province is the province with the highest UMP level in Indonesia, with a nominal IDR of 4,276,350 for 2020 and 2021, which has increased by 4,416,186. Based on this data, the research wants to know the effect of the Labor, Wage Level, and Human Development Index on economic growth in the DKI Jakarta province from 2012 to 2021.

According to Ariza (2016), HDI is influenced by economic growth and capital expenditure. Good economic growth will be followed by income distribution so that a few groups are prosperous and all those who need it. In addition, the capital budget should be used for areas important to society, such as education and health, and to create jobs to improve people's welfare (Amelia et al., 2021). Researchers found several previous studies that have relevance to this research. Virginanda (2015) examined the effect of MSEs on the number of workers, welfare, and economic growth in Central Java. Meanwhile, Julianto & Suparno (2016) identified the influence of minimum wage on economic growth in Surabaya City. Researchers still need to find research that tries to measure the influence between labor variables, wages, and the Human Development Index on economic growth in DKI Jakarta province as the capital of Indonesia. This study will fill the gap by taking data from DKI Jakarta Province, namely the level of labor, salary, and the value of the Human

Development Index, which will be measured for its effect on economic growth in DKI Jakarta Province.

LITERATURE REVIEW

Economic Growth

Countries aim to build their economies to alleviate unemployment and poverty by creating jobs and raising incomes (Putri et al., 2023; Rahman et al., 2022). Human capital like knowledge and skills boosts output, innovation, and technology, boosting economic growth. Human capital may promote resource efficiency, innovation, and technological advancement to facilitate economic growth (Asongu & Odhiambo, 2020; Lutfi et al., 2023; Saroj et al., 2023). Also, changes in the labour market, occupations, and worker characteristics might cause wage inequality (Timur & Herianingrum, 2022). The rapid rise in highly educated workers, which surpasses skilled labour demand, will lead to economic transformation and lower wage disparity (Doan et al., 2023).

Islamic economics, especially Islamic social finance, affects economic development (Kassim, 2016). Zakat and waqf increase consumption, investment, and government spending, hence zakat boosts economic growth (Ben Jedidia & Guerbouj, 2021; Nurillah et al., 2021; Ratnasari et al., 2023; Timur et al., 2023). There is a positive relationship between labour supply in the halal industry and economic growth due to the accelerated growth of the global halal industry (Nurillah et al., 2022; Timur et al., 2022).

Human Development Index

The Human Development Index or HDI provides a different approach to health and education indicators that complement gross domestic product in measuring a country's economic development (Wang et al., 2023). Indicators such as gross domestic income per capita are more likely to focus on quantitative aspects, while health and education indicators focus on qualitative aspects (Ladi et al., 2021). The Human Development Index is an index that serves to measure the average success of human development in society by combining statistical indices of life expectancy, schooling opportunities, and per capita income indicators (Martínez-Guido et al., 2019). The Human Development Index considers that a country must be able to ensure that its citizens have a long life, guaranteed health, a good level of education, and a decent standard of living (Huerta Yero et al., 2021). The existence of the Human Development Index, which provides a new view of economic development that includes socio-economic well-being, also inspired the creation of the Millennium Development Goals in 2000 and the Sustainable Development Goals (SDGs) in 2015 (Araminta et al., 2022; Assa, 2021).

Labors

According to the Law of the Republic of Indonesia Number 13 of 2003, the definition of Labor is that Labor is everyone who can do work to produce goods and services to meet their own needs and for the community. Labor mobility is very important in improving a country's economic and social conditions (Alsamara, 2022). Demand and supply in the labor market in developed and developing countries require rapid mobility to fill the gap (Khan et al., 2019). Human Labor is important in endogenous growth models and influences other external factors of a country's economic growth (Rahman et al., 2022).

Wages

Labor and wages are an inseparable unity and are one of the concerns in realizing the welfare of human resources (Fallick et al., 2022). Labor welfare is seen from how much he gets the right to his salary. An increase in wages or a decrease in wages will affect the labor supply (Doerrenberg et al., 2023; Murakami, 2015; Timur et al., 2023). The Law of the Republic of Indonesia concerning Manpower Number 13 of 2003 has explained the rights of employees, such as getting a decent wage, getting the same treatment opportunity from the company, and so on. Salary or wages are also explained by Islam, where the rewards that a person receives for his work are in the form of material rewards in the world (fair and decent) and the form of rewards in the hereafter (better rewards).

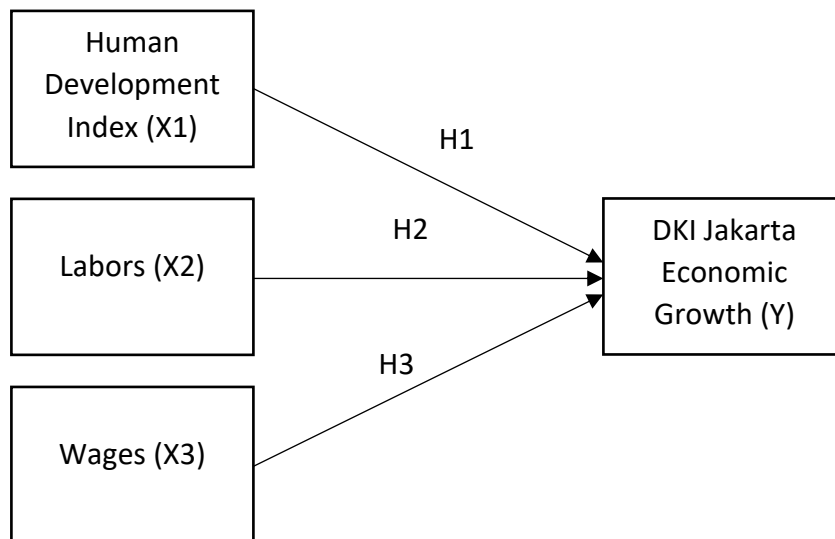


Figure 1. Model Hypotheses

Source: Processed by Authors

RESEARCH METHODS

This research uses quantitative research methods using secondary data. The research uses Multiple Regression Analysis to determine the relationship between two or more variables. In this study, the human development index, labor, and provincial minimum wage levels are exogenous variables, while the gross regional domestic product, or GRDP, is endogenous. The data is processed with the help of Eviews 12 tools. This research uses the documentation data collection technique, which is to find secondary data from reliable and relevant sources to be used as material for analysis and discussion. Data on GRDP, Human Development Index, Labor, and Provincial Minimum Wage were obtained from the Badan Pusat Statistik. The data sample used in this research is annual data from 2012-2021 for the DKI Jakarta Province area. The reason for taking this data is supported by the DKI Jakarta Province at the provincial wage level and the Human Development Index, which is ranked the highest in Indonesia. Then many Human Resources make designations to find work in DKI Jakarta. This also affects the economic growth in the DKI Jakarta area. This study uses multiple linear regression analysis techniques to see the effect of variables with the Ordinary Least Square equation. The multiple regression model parameters used in this study are as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e_i$$

Notes :

Y	= Economic Growth (PDRB)	X_1	= Human Development Index
α	= Constanta	X_2	= Labor
β	= Regression Coefficient Value	X_3	= Provincial Minimum Wages
e_i	= error		

RESULT AND ANALYSIS

Normality Test

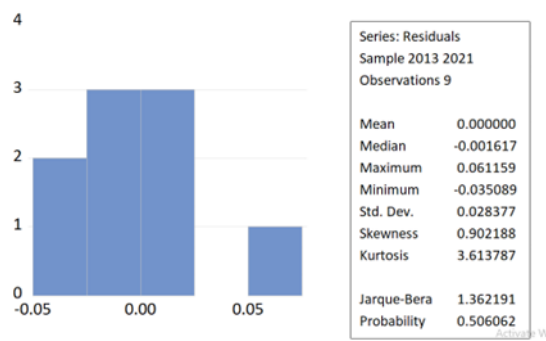


Figure 2. Normality Test Result

Source: Data Processed with Eview 12

The normality test determines whether the error term approaches a normal distribution. In this study, the test was carried out based on the probability value against α , which is 0.05. If the probability value is greater than the α value, then the data used has a normal distribution. The data processing results show that this study's probability value is 0.506062 or greater than 0.05. This means that the data used in this study has a normal distribution and can be said to pass the normality test.

Multicollinearity Test

The multicollinearity test aims to test whether the regression model forms a high or perfect correlation between independent variables. The assessment of the multicollinearity relationship is reviewed through the correlation coefficient value between the variables used in this study. This study shows multicollinearity from the tolerance value and its opposite and the Variance inflation factor (VIF) value. Both of these measures show the independent variables explained by other independent variables. The tolerance value measures the variability of selected independent variables that are not explained by other independent variables. The cutoff value used to indicate the presence of multicollinearity in this study is Tolerance <0.10 or equal to VIF>10.

Table 1.
Multicollinearity Test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0,000882	6,159398	NA
DIPM	0,005470	7,260557	1,214857
DTK	4,17E-05	1,487637	1,273428
DUMP	0,026737	4,104635	1,513933

Source: Data Processed by Eviews

The results showed that all VIF coefficient values were below the value of 10, so there is no multicollinearity in the data used in this study.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is an inequality of variance in the regression model from the residuals of one observation to another. In this study, the Heteroscedasticity test can be seen in the probability value of R-squared.

Table 2
Heteroscedasticity Test

White Heteroskedasticity			
F-Statistics	0,443099	Prob. F (3,5)	0,7326
Obs*R-Squared	1,8900170	Prob. Chi-Square (3)	0,5955

Source: Data Processed by Eviews

If the probability value of R Squared is greater than the α value of 0.05, then there is no heteroscedasticity in the data used, and vice versa. The heteroscedasticity test results show the Prob. Obs. R-squared value of 0.5955. This value is greater than the α value of 0.05, so it can be concluded that no heteroscedasticity is used in this study.

Autocorrelation Test

The autocorrelation test aims to show the correlation of members of observations sorted by time or space. The autocorrelation test aims to test whether there is a correlation between confounding errors in period t and errors in period $t-1$ in a linear regression model. Breusch-Godfrey Serial Correlation LM Test. The basis for making this test decision is based on the p-value. If the Breusch-Godfrey Serial Correlation LM test with significance > 0.05 , then the regression model has no autocorrelation problem. If the Breusch-Godfrey Serial Correlation LM Test results with significance < 0.05 , the regression model still has an autocorrelation problem.

Table 3.
Autocorrelation Test

F-Statistic	0,466073	Prob. F(2)	0,6664
Obs*R-Squared	2,133519	Prob. Chi-Square (2)	0,3441

Source: Data Processed by Eviews

The results obtained the Obs * R-squared value of 2.133519 or greater than 0.5. So the research data used in this study does not have autocorrelation problems.

Result of Multiple Linear Regression Analysis

The data processing results using the EViews tool get the results of the F test output, which can be seen at point 1, namely the F-statistic and Prob (F-statistic). F-statistic is also called F-count, while Prob(F-statistic) is called the p-value. In this study, researchers used the Prob(F-Statistic) or p-value to measure the relationship between variables. The p-value will be compared with the significance level or α ($\alpha = 5\%$).

Table 4.
Autocorrelation Test

Variable	t-Statistic	Prob.
C	0,331691	0,7536
DIPM	2,365555	0,0643
DTK	0,034162	0,9741
DUMP	0,249903	0,8126
F-Statistic	2,530218	
Prob (F-Statistic)	0,171065	

Source: Data Processed by Eviews

The results in Table 4 show that the Multiple Linear Regression analysis results' probability value is more than 0.05. The Human Development Index variable has a probability value of 0.0643 or > 0.05 . Likewise, the Labor variable has a probability value of 0.9741 or > 0.05 , and the Provincial Minimum Wage with a value of 0.8126 > 0.05 . The probability value of all variables in this study indicates that each variable has no significant effect on economic growth. On the other hand, the adjusted R-squared value has a value of 0.364608. This value means that the Human Development Index, Labor, and Minimum Wage variables can only explain economic growth by 36.46%.

DISCUSSION

This study aims to determine the effect of the Labor, Wage Level, and Human Development Index on economic growth in the DKI Jakarta province from 2012 to 2021. The multiple linear regression test results show that hypothesis 1 is rejected. Researchers found that the Human Development Index does not significantly affect economic growth. This contradicts the results of [Ariza \(2012\)](#) research which states that economic growth and capital expenditure positively and significantly affect HDI. Economic growth should be accompanied by equity so that not only some groups are prosperous. Also, the capital budget should be earmarked for areas that are important to society, such as education and health, as well as for the creation of jobs to improve people's welfare. A country's success is seen not only from its growth but also in terms of national development in the context of success in developing its Human Resources ([BPS, 2020](#)). In this study, an increase in HDI value does not necessarily affect economic growth (GRDP).

Then in the second hypothesis statement, where labor has no significant effect on economic growth. Labor is a very important factor in production. Even natural wealth will not be useful if humans do not utilize it ([Chaudry, 2012](#)). One way to increase production is to improve the quality of labor so that the quality of economic growth will also increase. Furthermore, against statement H3, the Provincial Minimum Wage (UMP) has no significant effect on economic growth. The results of this study are supported by research by [Virginanda \(2015\)](#) conducted in Central Java Province, but this is different from research conducted by [Julianto & Suparno \(2016\)](#) where the Minimum Wage (X2) together has a significant effect on Economic Growth in the city of Surabaya. Labor and Wages are inseparable units and are one of the concerns in realizing the welfare of Human Resources. Labor welfare is seen from how much he gets the right to his salary, which affects the economic growth level. However, in this study, although UMP has increased and is the highest in Indonesia, it does not necessarily affect economic growth (GRDP).

From the above statement, it is explained that to influence the increase or decrease in the level of economic growth, the economic growth rate (GRDP) cannot only look at macroeconomic variables but there are also things from the religious side that influence this. In [Huda \(2017\)](#) it is explained that Islam teaches that we should keep

offspring in a strong state regarding religious knowledge, economics, and so on. Economic development in the Islamic perspective places humans at the center of development, which acts not only as the subject but also as the object itself. This is based on placing humans as the main actors in human life. Then using these human resources must be balanced and fair by providing the rights that labor should receive, namely in the form of wages. Regarding salary or wages, this is also explained by Islam, where the rewards that a person receives for his work are in the form of material rewards in the world (fair and decent) and the form of rewards in the hereafter (better rewards) (Amir, 2015).

Of all the hypotheses in this study, the results do not have a significant effect, but this can be a reference and reasonably increase public understanding of the use of balanced human resources. Also, the welfare of the workforce will fulfill the needs of their rights to wages, as explained by Amir (2015), which will increase economic growth (GRDP). Moreover, an increase in the number of labourers cannot directly stimulate economic expansion. According to Korkmaz & Korkmaz (2017) increasing labour productivity must be followed by efficient utilization of natural resources and the provision of acceptable wages in order to have a significant impact on the economic growth of a country.

CONCLUSION

This study shows that macroeconomic variables of the Human Development Index, Labor, and Provincial Minimum Wage do not significantly affect economic growth (GRDP). The independent variables of the Human Development Index, Labor, and Provincial Minimum Wage can only explain their influence on economic growth (GRDP) by 36.46%. Other variables also explain the remaining 63.54%. Although there is no significant influence between the variables used in this study, this can be a reference in increasing public understanding of the utilization of human resources, which must be done in a balanced and fair manner. In addition, labor welfare and fulfilling labor needs and rights such as wages can increase economic growth (GRDP)

This study has limitations in terms of the data used. First, the data is taken from 2012-2021, whereas the data is taken from the past ten years with a more extended period. Second, the research object was conducted in DKI Jakarta Province, with Indonesia's highest HDI and UMP positions. Thus, further research can use research objects in other provinces and add several other macroeconomic variables.

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