

DETERMINANT OF HUMAN DEVELOPMENT WITH THE MAQASID SHARIA CONCEPT IN JAVA ISLAND

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ABSTRACT

This study aims to determine the effect of the level of education and health on human development using the Islamic Human Development Index based on Maqasid Syariah in Java Island in 2016-2021. This research is a quantitative study using a sample of 6 provinces on the island of Java with an observation period of 2016-2021. The type of data used is secondary data in the form of official statistical reports from government agencies. The analytical method used is multiple regression analysis assisted by Eviews9 software. The results showed that economic growth had a significant positive effect on IHDI, the education function had no significant negative effect on IHDI, the health function had no significant positive effect on IHDI and unemployment had a significant positive effect on IHDI.

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1. INTRODUCTION

The positive impact of the success of the development of a country is that people can experience a prosperous life, that is certainly the goal in several countries in the world. In this case, Indonesia as a developing country continues to strive to realize sustainable development from various sectors such as the economic, education and health sectors. According to Nugraeni et al, more attention must be paid to human development because it greatly influences the quality of life in the future [1].

So far, measurements made to see the level of human development have used the Human Development Index (HDI) which was introduced by the United Nations Development Index (HDI) by UNDP in 1990. The HDI value in Indonesia has increased from year to year but there are still significant gaps between provinces in Indonesia, the following is the official report from the Central Bureau of Statistics (BPS) in Indonesia:

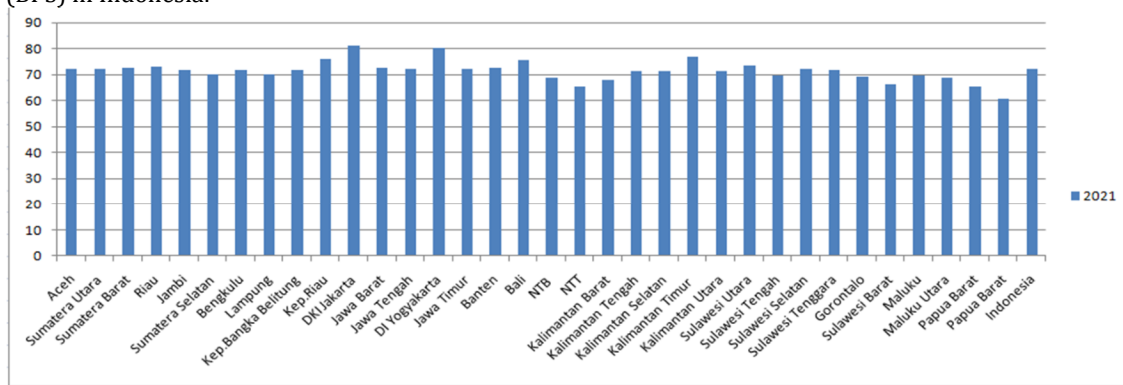


Figure 1. HDI per province in Indonesia in 2021

From the picture above it can be seen that the level of human development index in the high category is dominated by provinces in the western part of Indonesia, there are 21 provinces including 6 provinces on the island of Java, then the HDI is in the medium category, there are 11 provinces which are dominated by provinces in the eastern part of Indonesia, including: Lampung, NTB, NTT, West Kalimantan, Central Sulawesi, Gorontalo, West Sulawesi, Maluku, North Maluku, West Papua and Papua. So in this case the level

of HDI in Indonesia is not evenly distributed, it can even be seen that the provinces of DKI Jakarta and DI Yogyakarta show values above the national average.

The HDI level in the high category which is dominated by provinces in the western part of Indonesia can certainly have an impact on other provinces including the island of Java. Java Island is an island that is the center of the economy in Indonesia and has the most densely populated population among the major islands in Indonesia. The HDI level on the island of Java is as follows:

Table 1. HDI by province in Java Island in 2016-2021

Province	HDI by Province in Java Island					
	2016	2017	2018	2019	2020	2021
DKI Jakarta	79.60	80,06	80,47	80,76	80,77	81,11
Jawa Barat	70.05	70,69	71,30	72,03	72,09	72,45
Jawa Tengah	69.98	70,52	71,12	71,73	71,87	72,16
DI Yogyakarta	78.38	78,89	79,53	79,99	79,97	80,22
Jawa Timur	69.74	70,27	70,77	71,50	71,71	72,14
Banten	70.96	71,42	71,95	72,44	72,45	72,72

From the table above it can be seen that 6 provinces on the island of Java experience an increase in the HDI level every year, but DKI Jakarta has an HDI level above the national average, then DI Yogyakarta province is followed by 80.22% above the national average in 2021. This shows a difference significant among the provinces on the island of Java. So the government's role is important to be able to reduce inequality and equalize the level of human development by looking at several triggering factors to increase human development.

If we look back at 2020, Indonesia experienced significant economic changes and even many people lost their jobs due to the corona virus outbreak. This certainly can affect the quality of human development, especially on the island of Java. So the health factor is important for the community to remain productive to become quality human resources. The government needs to prioritize improving the quality of human resources, one of the ways is by financing the public sector in the health and education sectors. However, it should be noted that each province has its own problems and has its own policies in each local government. So that in this case the coordination between the regional government and the central government is very important to maintain harmony in order to create equitable development in each region. However, according to Putri et al, one of the driving tools for improving the quality of human resources is economic growth [2].

In terms of measuring the level of human development, so far the HDI offered by UNDP is the most comprehensive measurement tool that has been recognized in the world. However, in its measurement, it uses indicators that are still material and social in nature, so that in measuring a country whose population is predominantly Muslim it is not enough to be able to represent human welfare. Whereas in Islamic economics itself, human welfare is not only seen in terms of material things in the world but also pays attention to the achievement of the hereafter.

According to Aydin, HDI measurement so far has only been based on the free market capitalism system and does not provide space for the afterlife, even though Islamic economics relies on the Qur'an with the monotheistic paradigm [3]. As for Rukiah et al argues that HDI measurement is still material and social as a welfare standard, even HDI leaves mental and spiritual aspects [4]. In Anto's research entitled Introduction to an Islamic Human Development Index (IHDI) to Measure Development in OIC Countries, he first introduced the concept of IHDI based on the dimensions of Maqasid Syariah [5].

As for Amir et al's research, he compared the use of the HDI measuring tool with IHDI, the results showed that the HDI level in Jambi province was in the medium category with the HDI measuring tool [6]. However, when using the IHDI measurement tool, the Jambi province HDI is in the low category. This shows that measurements using HDI in general have not been able to provide a real picture of the quality of human resources because it leaves out the spiritual aspect. IHDI includes the spiritual aspect as a measurement indicator so that it is clearer and can clearly describe the quality of human resources from both material and non-material aspects.

From the problems above, the authors are interested in examining the quality of human development as measured using IHDI indicators by using macroeconomic factors such as economic growth, human capital spending for education and health functions, unemployment considering that the majority of Indonesian people are Muslim so it would be more appropriate to use the IHDI measurement tool.

2. METHOD

This study uses quantitative research methods by collecting data using panel data regression. Quantitative method is a method that has fulfilled scientific principles concretely/empirically, objectively, measurably, rationally and systematically. As for this research, it uses research data in the form of numbers and statistical analysis [7].

The sampling technique in this study used a non-probability sampling technique with purposive sampling. The samples used in this study are economic growth data, education and health budget data, unemployment data and IHDI from 6 provinces in Java Island in 2016-2021. The data analysis method used in this study uses multiple linear regression analysis. The regression model in this study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \varepsilon$$

Information:

Y	= Islamic Human Development Index
a	= Constant
X1	= Economic Growth
X2	= Education
X3	= Health
X4	= Unemployment
b1, b2, b3, b4	= Coefficients
ε	= standard error (error)

3. RESULT AND DISCUSSION

Stationarity Test

Tests were carried out to determine the level of feasibility of the variables used in this study, so that further testing could be carried out. The stationarity test results are as follows:

Table 2. Stationarity Test

Variable	Probability Unit Root Test	Information
Economic Growth	0.0263	Stasioner tingkat level
Education	0.0000	Stasioner tingkat level
Health	0.0252	Stasioner tingkat level
Unemployment	0.0015	Stasioner tingkat level
Y- IHDI	0.0014	Stasioner tingkat level

From the results above it can be seen that the probability value of each variable has a value that is less than alpha (0.05), so this variable meets the stationary test requirements and is feasible for further testing.

Panel Data Regression Model

Table 3 Estimation Results of the Common Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	90.28006	24.36752	3.704934	0.0008
X1	-0.073917	1.328981	-0.055619	0.9560
X2	0.163813	0.443270	0.369556	0.7142
X3	-0.363065	0.252625	-1.437168	0.1607
X4	-1.036544	1.659765	-0.624512	0.5369

From table 3, the estimation results on the common effect model with a significance level of 5% show that there are no variables that have a significant effect on IHDI.

Table 4 Fixed Effect Model Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	38.83271	4.834521	8.032380	0.0000
X1	0.634913	0.124177	5.112960	0.0000
X2	-0.071193	0.042342	-1.681369	0.1047
X3	0.018126	0.044613	0.406297	0.6878
X4	2.520376	0.579496	4.349252	0.0002

From table 3, the estimation results on the fixed effect model with a significance level of 5% show that there are two variables that have a significant effect on IHDI, namely the variables of economic growth and unemployment.

Table 5. Estimation Results of the Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	62.00723	11.34939	5.463484	0.0000
X1	-0.055331	0.423181	-0.130750	0.8968
X2	-0.024042	0.125432	-0.191672	0.8492
X3	-0.033757	0.069112	-0.488441	0.6287
X4	-0.134494	1.160488	-0.115895	0.9085

From table 5, the estimation results for the random effect model. The estimation results for the common effect model with a significance level of 5% show that there are no variables that have a significant effect on IHDI.

Panel Data Regression Model Selection

Table 6. Chow test results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	90.637751	(5,26)	0.0000
Cross-section Chi-square	104.903929	5	0.0000

From table 6, the Chi-square Cross-section probability value is 0.0000. the value of $p < \alpha$ (0.0000 < 0.05) can be seen. At a significance level of 5%, it can be concluded that the selected model in this test is the fixed effect model.

Table 7. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	39.943223	4	0.0000

From table 7, it is obtained that the probability value of the chi-square cross-section is 0.0000, that is, the p-value $< \alpha$ (0.0000 < 0.05). at a significance level of 5%, it can be concluded that the selected model in this test is the fixed effect.

From several estimation tests of the panel data model, it can be concluded that the correct multiple linear regression test to be used in this study is the fixed effect regression model. As for the fixed effect regression model, the regression model is obtained as follows:

$$(Y-IHDI) = 38.83271 + 0.634913 - 0.071193 + 0.018126 + 2.520376$$

Parameter Significance Test

The F test shows the effect of the independent variables on the dependent variable simultaneously. The significance level used in this study is 5% or 0.05. based on the regression test shows that the F test value has a coefficient of 255.2113 with a Prob (F-statistic) value of 0.000000 < 0.05, among the independent variables namely economic growth, education, health and unemployment have a simultaneous influence on the Islamic Human Development Index (IHDI).

The t-test shows the effect of each independent variable on the dependent variable. In this study the significance level used was 5% or 0.05. based on the regression test can be explained as follows:

1. The effect of economic growth on IHDI. From the test results obtained a positive coefficient of 0.634913 with a Prob value of 0.0000 < 0.05 (α) so that partially economic growth has a significant positive effect on the Islamic Human Development Index (IHDI).
2. The influence of education on IHDI. From the test results obtained a negative coefficient of 0.071193 with a Prob value of 0.1047 > 0.05 (α) so that partially education has no significant negative effect on the Islamic Human Development Index (IHDI).
3. Health effects on IHDI. From the test results obtained a positive coefficient of 0.018126 with a Prob value of 0.6878 > 0.05 (α) so that partially health has no significant positive effect on the Islamic Human Development Index (IHDI).

- Effect of unemployment on IHDI. From the test results obtained a positive coefficient of 2.520376 with a Prob value of 0.0002 < 0.05 (α) so that partially economic growth has a significant positive effect on the Islamic Human Development Index (IHDI).

Determination Coefficient Test (R2)

The coefficient of determination (R2) is used to measure the model's ability to explain the dependent variable. The coefficient of determination ranges from 1 to 0. The closer to number one, the more precise the regression model used. From the results of the regression test, the adjusted R-Squared value was 0.988807 or 98.88%. That is, the magnitude of the contribution of the independent variable variance can explain the dependent variable variance of 98.88% and the remaining 1.12% is explained by other variables.

Classic assumption test

The normality test in the regression model is used to test whether the residual values are normally distributed or not. A good regression model has normally distributed residual values. The normality test method used in this study uses the eviews9 tool.

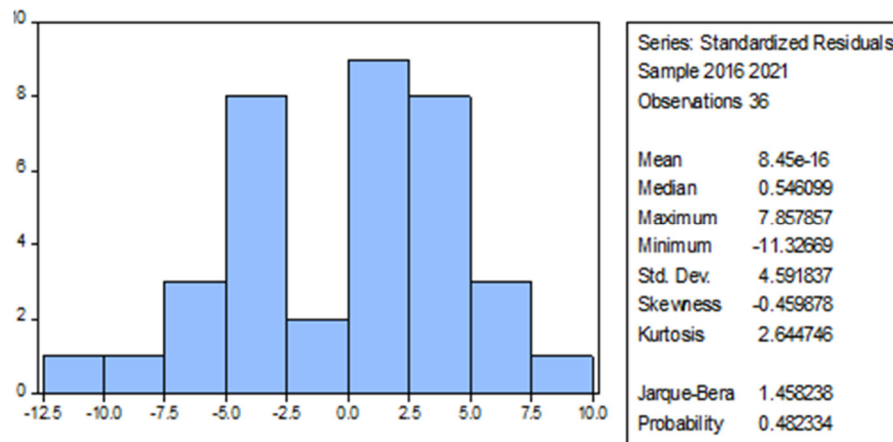


Figure 1. Normality test

From Figure 1 it is known that the probability value of 0.482334 is greater than 0.05 (α), it can be concluded that the data is normally distributed.

In this study, additional regression was used to detect multicollinearity. The criterion is if the R2 auxiliary regression for each variable is greater than the R2 for the main regression, then multicollinearity will occur in the model between the independent variables and vice versa. The results of the auxiliary test can be seen in table 7 below.

Table 8 Multicollinearity Test Results

R-Squared	R-Squared utama = 0.988807	Multikolinearitas
Pertumbuhan Ekonomi = 0.718166	lebih kecil	tidak ada
Education = 0.382860	lebih kecil	tidak ada
Health = 0.462235	lebih kecil	tidak ada
Unemployment = 0.979112	lebih kecil	tidak ada

Based on table 8, it can be seen that of all the independent variables, the R-Squared value is smaller than the main R-Squared value, so multicollinearity does not occur.

Effect of Economic Growth on IHDI

In this study, the results showed that economic growth had a significant positive effect on IHDI. Economic growth is a prerequisite for development itself. Improving the quality of human development or IHDI can be supported by economic growth if it is accompanied by equity so that it will be more effective in increasing development. Economic growth also contributes to increasing government revenue which can then be invested in human development [8]. The results of this study are supported by research by Putri et al that economic growth has a significant positive effect on human development from an Islamic

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perspective [2]. Because in this case economic growth is closely related to meeting the needs of human life in accordance with one of the IHDI dimension indexes, namely the wealth index.

Effect of Human Capital Expenditure on Education Function on IHDI

This study found that education had no significant negative effect on IHDI. Based on Rukiah's research revealed that government spending on education was not the dominant factor in increasing IHDI on the island of Java [4]. Under these conditions, it means that there are still many strategies that have not been on target in increasing human development so that they have not been able to increase IHDI. The results of this study are supported by the research of Samputra that the allocation of special autonomy funds in the field of education has no significant negative effect on the human development index [9]. However, the results of this study are not in line with Putri et al's research that government spending on education has a significant positive effect on IHDI [2].

The Effect of Human Capital Expenditure on the Health Function on IHDI

The results of the study found that health had no significant positive effect on IHDI. Based on the report of the ministry of health in the publication of the 2021 Indonesia Health Profile that out of the total allocation of the health budget of IDR 214.4 trillion, 21.18% of the funds were allocated to participants receiving contribution assistance, then 74.4% for goods expenditure, personnel expenditure and capital each 2.0%. The government has not yet focused on preventive-promotive spending. This is what underlies human capital expenditure for the health function to have an influence but not significant on IHDI.

Effect of Unemployment on IHDI

The results of the study found that unemployment had a significant positive effect on IHDI. The results of this study indicate that an increase in unemployment is also accompanied by an increase in IHDI. Based on BPS data, the open unemployment rate has increased from year to year, but in 2020 the number of unemployed people on the island of Java has decreased. This research is supported by Bangun's research that partially open unemployment has no significant effect on HDI [10]. Even though unemployment has no effect, it still plays a role in the achievement of human development because it is closely related to income which is one of the determining factors for the quality of human development [11].

4. CONCLUSION

Based on the test results, the following results are obtained: (1) economic growth has a significant positive effect on IHDI; (2) education has no significant negative effect on IHDI; (3) health has no significant positive effect on IHDI; (4) unemployment has a significant positive effect on IHDI. The limitation in this study is that the amount of data is limited because the authors only focus on researching 6 provinces on the island of Java in 2016-2021. Suggestions that researchers can give for further research related to problems that are almost the same as this research are to expand the object under study, so that the data used for research is unlimited and more numerous so as to produce better conclusions.

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