



Determinants of Islamic Human Development Index in OIC Countries With Good Governance as Moderating Variables

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Abstract

This study seeks to determine the effect of government spending, level of concern, and economic growth on I-HDI in the OIC countries with good governance as moderation in 2010-2019. This study uses explanatory quantitative research methods. The sampling technique in this research is non-probability sampling, with a sample of 10 countries of the Organization of Islamic Cooperation. The data analysis techniques used were descriptive analysis, Generalized Least Squares (GLS) model, hypothesis testing, and Moderated Regression Analysis (MRA) model. The results of statistical testing show that the variable government expenditure and unemployment rate do not affect the Islamic Human Development Index, while the variable economic growth has a negative effect. In addition, good governance cannot moderate the effect of government spending on the Islamic Human Development Index, while the unemployment rate and economic growth can be moderated in their influence on the Islamic Human Development Index. Thus, it can be concluded that to increase the human development index in the Islamic perspective, and there is a need for good governance so that human development in the OIC country is increasing.

Keywords: *I-HDI; government spending; unemployment rate; economic growth; and good governance.*

INTRODUCTION

Development is an effort or process to make changes for the better. Development is a tool used to achieve the nation's goals, and economic growth is

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one indicator to assess the success of a country's development. The main goal of development is not only based on economic growth. Therefore, income inequality, poverty problems, and job creation also need to be considered in the position of a developing economy. One of the factors underlying the delay in developing a country is the high level of poverty.

Human development or improving the quality of human resources is very important in the national development strategy. The importance of human resource development in development plans has become a must because the population's capacity in an area plays an important role in determining the success of regional development management. *Islamic Human Development Index (I-HDI)* is a new concept whose basic concept originated from the *Human Development Index (HDI)* and was then developed with the concept of *maqashid sharia*. I-HDI is one of the measuring tools used to know and measure human development from an Islamic perspective. I-HDI will measure how the level of human welfare is achieved by fulfilling these basic human needs so that humans can live happily in the world and the hereafter (achieve *Falah*).

Based on research by Anto (2009), I-HDI is measured using comprehensive data that reflects the *maqashid sharia indicators*. For the religious index (*ad-dien*), the index used is the crime rate. Soul index (*an-nafs*), the index used, is life expectancy data. As for the intellect index (*al'-aql*), the index used is data on school participation and literacy rates. Two indicators are used for the hereditary index (*an-nasl*), namely data on birth rates and infant mortality. Meanwhile, the wealth index (*al-maal*) uses three indicators: real per capita expenditure, the Gini index, and the poverty depth index. Furthermore, Ali & Hasan (2014), developed the *Maqashid Sharia index* as a more comprehensive. The condition of the index is based on the five main dimensions of the *Maqashid sharia* (religion, soul, intellect, lineage, and wealth), which are further reduced to 28 indicators. The difference between the studies of Ali & Hasan (2014) and Anto (2009) lies in the indicators used to represent each dimension of human development based on the *Maqashid Sharia*.

In the development of a country, the role of the government is very important. It can be seen in the extent to which the government (state) budget is allocated to increase human resource development. The greater the government



spending allocated for increasing human development factors, the greater the increase in human development in a country, so it can be concluded that government spending relates to the increase in a country's HDI. That investment in the education and health sectors is very necessary, so the government must build facilities and infrastructure that support the education and health system (Wahid *et al.*, 2012).

One factor that hinders human development is the high unemployment rate in each country. The problem of unemployment is not only felt by developing countries but also by developed countries. A high unemployment rate in a country can have a negative impact on human development and the economy of a country. It follows the study of Yunus (2019), which found that unemployment had an insignificant negative effect on HDI in Indonesia. This situation may be caused by the fact that the household labor force that is not poor but unemployed is also included in the unemployment category, so the calculation results are insignificant.

Another factor that affects the human development of a country is economic growth. According to UNDP, economic growth impacts a country's ability to implement sustainable human development. The relationship between the two does not have a direct relationship, but economic growth can be a driver for improving the quality of human resources and vice versa. It confirms the research of Smith (2016), which found that economic growth has a positive effect on the human development index.

In addition, human development is also closely related to good governance. Governance is the main key to the direction of a country's development in terms of human development. Most OIC countries are still developing countries with large populations, continuing to make many efforts to improve each government by evaluating the rules or policies issued to improve the quality of human development.

The implementation of the principles of good governance will influence government performance to be effective and efficient so that it will encourage increased human development. It follows the study of Resnick (2005), who found good governance as one of the important factors in reducing poverty levels and increasing HDI. Likewise, a study by Sebudu (2010) and Radite (2018) found that

good governance and human development in Botswana and Southeast Asia have a positive relationship. Research from Ottervik (2011) also found a powerful influence between good governance and human development, especially aspects of the effectiveness of the public sector (government).

Studies on the factors that affect HDI/I-HDI have been carried out by several previous studies. However, the addition of the *good governance variable as a moderating variable and sample using OIC countries with a majority Muslim population will have a new value and differ from the previous research*. Therefore, this study is interesting because it will explain the calculation of the I-HDI value and the increase in human development driven by *good governance* as a supporting factor for human development in the OIC country.

LITERATURE REVIEW

Islamic Human Development Index (I-HDI)

Using the Human Development Index (HDI) is considered inadequate to measure the development index of people in Muslim-majority countries, including those who are members of the OIC. Therefore, this becomes the basis for creating a new model to measure human development from the point of view of sharia, namely the Islamic Human Development Index. The purpose of I-HDI is to measure human development, including material and immaterial welfare, with the five dimensions of *maqashid sharia*. I-HDI is a composite index of *maqashid sharia* that fundamentally encourages human happiness by maintaining the soul, mind, property, family, and religion.

Table. 1
Maqashid Sharia Index

Purpose	Dimension	Dimension Index
Maslahah	<i>Hifdzu ad-dien</i>	Religion Index
	<i>Hifdzu an-nafs</i>	Soul Index
	<i>Hifdzu al-'Aql</i>	Intellect Index
	<i>Hifdzu an-nasl</i>	Hereditary Index
	<i>Hifdzu al-mal</i>	Treasure Index

Source: Anto, 2009.



Government Expenditure

Public spending on education is the basic public expenditure for human development. Education is an important element in achieving one's knowledge of human life. Education plays an important role in improving a country's ability to understand science and technology, especially in developing countries. In addition, education is the initial capital for sustainable growth and development. The government must provide budget allocations for the education sector in developing educational facilities and infrastructure and investing in human capital *management*. In their research, Gupta & Clements (1998) explain that an increase in government spending on education and health has a social impact and will increase human resource development. Yazid, et al (2016), found that public spending in the health and education sectors affects human capital. Increased public spending, especially in the fields of education and health, has had an impact on human development.

Unemployment Rate

Unemployment is a macroeconomic problem in every country that directly impacts society. According to some people, losing a job or quitting work means lowering psychological pressure and living standards (Mankiw, 2018). According to Sukirno (2013), unemployment is a condition of a person in the labor force category who wants to get a job but has not gotten a job. The imbalance in the labor market causes many people to be unemployed.

Economic Growth

Economic growth is one of the important factors in analyzing a country's economic development (Agus, 2015). Economic growth will show people's additional income over a certain period. According to Sukirno (2006), economic growth will also increase people's income as owners of production factors, and economic growth is also often measured according to Gross Domestic Product (GDP). Meanwhile, According to Kuznet, in research conducted by Lestari (2016), economic growth is an increase in the ability of the state to provide various goods and services to the community in the long term.



Good Governance

Mardiasmo (2002), explains that “governance” can be understood as a means of managing government. Good governance is the management of government in various public services so that its functions can be carried out efficiently, effectively, and following the community’s needs. Good governance is used as a guide for the administration of government whose purpose is to oversee the running of the wheels of government so that there is no deviation from the direction of the predetermined goals.

According to Kaufmann et al. (1999) in Huynh and Jacho (2009), *the World Governance Indicators* (WGI) presented by the World Bank in measuring good governance are as follows: 1) Government Effectiveness; 2) Political Stability and Absence of Violence; 3) Regulatory Quality; 4) Voice and Accountability; 5) Rule of Law; 6) Control of Corruption.

Islamic Human Development Index (I-HDI) is a new measure of human development. The indicators used to measure the index are still in the development stage. MB Hendrie Anto was the first to propose the I-HDI which was presented in 2009 at the *Langkawi International Conference on Islamic Finance and Economics* (LIFE 1). In his research, Anto presented the results of the I-HDI steps in member countries of the Organization of Islamic Cooperation (OIC). The following are the results of several studies that serve as guidelines for authors in conducting research.

Mintaroem (2019), analyzes the factors that influence I-HDI in East Java province for the period 2001-2016. The results show that of the four independent variables, only three have positive and significant values on the I-HDI, namely economic growth, government spending on education, and government spending on health. Meanwhile, zakat, infaq, and sadaqah variables have no significant effect on I-HDI.

Another research conducted by Suharno (2019), regarding the analysis of the I-HDI in Indonesia. The results show that in the GRDP equation, foreign investment positively affects GRDP, and direct personnel expenditure, capital, and labor negatively affect GRDP. Meanwhile, indirect personnel expenditures and domestic investment do not affect GRDP. In the I-HDI



equation, personnel expenditure does not directly have a positive effect on I-HDI, while capital expenditure, goods and services expenditure, direct personnel expenditure, and GDPGR do not affect I-HDI. Therefore, GRDP simultaneously does not affect I-HDI.

Siti and Raditya (2019), examine the influence of macroeconomic factors on the I-HDI in Indonesia for the period 2013-2017. The results showed that unemployment and poverty levels had a significant effect on the I-HDI, while GRDP did not affect the I-HDI. In addition, the results showed that there was a difference in ranking between HDI and I-HDI. Several provinces received I-HDI scores that were quite low, below 50%, as seen in the provinces of NTT, NTB, and Papua. Meanwhile, other provinces get good I-HDI scores, so Indonesia still has many prosperous provinces.

Rukiah and Saparuddin (2019), examine the interactions and contributions between I-HDI, economic growth, fiscal policy, and demography in Indonesia. The results show that long-term economic growth estimates have a positive and insignificant effect on I-HDI in Indonesia. It is in line with research by Agarwal (2015), and Das et al. (2019), which found that economic growth affects HDI. Meanwhile, fiscal, education, health, and population policies positively and significantly impact I-HDI.

Research conducted by Dedi (2016), examines the effect of good governance and local government spending on education and health on HDI in 29 provinces in Indonesia from the period 2010-2014. The results show that HDI is positively and significantly affected by local government spending in the education and health sectors and good governance. It suggests that good governance strengthens the relationship between local government spending on education and HDI. However, it does not strengthen the relationship between local government spending on health and HDI.

Based on the descriptions of several previous studies, it can be seen that some variables and methods are the same between studies. Meanwhile, the difference between this study and previous research can be seen in the use of the moderating variable, namely good governance, while the previous research only examined the direct effect of several independent variables on the dependent variable.

Relationship of Government Expenditure to I-HDI

Theoretically, it is explained that to improve the quality of human development, the government's role is needed in allocating development budgets to education, health, and the economy. Brata (2005), argues that public expenditure, investment, and income distribution are determinants of human development. According to Stephen (2011), in the long run, a country's economic growth depends on human development capital, and it is necessary to adjust the country's capital expenditures in education and health to increase human development capital and ultimately increase a country's economic growth.

It follows the theory of Adolf Wagner, who stated that government spending would increase as the welfare function increases and community development. The concept of the relationship between government spending in education and the quality of human development has been shown by several previous researchers that government spending in the field of social services and education has proven to have an important role as a link that determines the magnitude of the relationship between economic growth and human development (Lestari, 2016).

H_1 : *Government spending has a significant positive effect on I-HDI in OIC Country*

The Relationship between the Unemployment Rate and I-HDI

The unemployment rate is the percentage of unemployed people in the total workforce. This unemployment rate can affect HDI. The higher the unemployment rate of a country, the lower the HDI value, and vice versa; if the unemployment rate decreases, the HDI value will be high. According to Hasyim (2016), unemployment will impact the decrease in people's income, so the level of welfare will decrease. It follows research conducted by Siti (2018), Hamzah et al. (2012), in Indonesia, and Baeti (2013), in Central Java province, which finds that unemployment has a negative and significant effect on HDI. The high unemployment rate will cause a decrease in people's welfare and cause a decrease in individual income. Income, in this case, is the dominant factor in increasing the HDI value.

H_2 : *The unemployment rate has a negative effect on I-HDI in the OIC Country*



Relationship between Economic Growth and I-HDI

According to Ranis (2004), economic growth provides a direct benefit to human development through increased income. Along with economic growth, the income per capita of the community will increase, so the HDI in an area will also increase. Therefore, the better the economic growth, the greater the hope of not being unemployed and encouraging the equal distribution of income per capita in supporting the increase in the human development index.

Research conducted by Lestari (2016) shows a positive influence between economic growth and the human development index as a measure of community welfare. Decta (2013), found that the Human Development Index (HDI) has a two-way relationship, although it is not directly related, but can be strengthened by the right policies from the government. Economic development refers to economic growth that ignores human development will not last long. High economic growth will increase people's incomes and thereby improve living standards, which in turn ensures people's welfare, and improves long-term health, harmony, and prosperity that can support economic growth.

H₃: Economic growth has a significant positive effect on I-HDI in the OIC Country

The Relationship of Good Governance in Moderating Government Expenditures on I-HDI in OIC country

Government spending is a fiscal policy instrument used by the government to stimulate the economy. In this case, the government can use its budget to subsidize, for example, the education and health sectors. Targeted government spending is expected to increase income, and over time HDI will also increase (WIBOWO, 2019). Government spending on education and health is a long-term investment by the government to improve and increase the community's quality of life so that the impact of this policy does not have a direct effect or the results are only felt in a short period (Meydiasari & Soejoto, 2017).

The government can increase resources for human development by increasing spending on health and education either physically (infrastructure)



or non-physically (subsidies, health insurance) through economic growth. To reduce market failures *that* tend to hinder investment, government intervention through its policies is very necessary.

H₄: Good Governance is able to moderate the influence of government spending on I-HDI in OIC country

The Relationship of Good Governance in Moderating the Unemployment Level to I-HDI in OIC Country

According to Sukirno (2006), the unemployment rate impacts a decrease in people's income and will reduce a person's level of welfare and happiness. The lower the level of a person's welfare, the greater the risk of being trapped in a low human development index. In addition, the unemployment problem will not only cause social problems but will also cause political chaos. If this happens, it will be difficult to realize an increase in the human development index both in the short and long term. It causes the unemployment rate to have a negative effect on increasing human development.

Each country needs to take policies to overcome the unemployment rate by creating the widest possible employment opportunities, improving the workforce quality, and developing the informal sector so that people's incomes increase and human development will also increase. It is the government's commitment to good governance in reducing the unemployment rate, so it will accelerate economic growth and increase the human development index.

H₅: Good Governance is able to moderate the influence of the unemployment rate on I-HDI in OIC country

The Relationship of Good Governance in Moderating Economic Growth to I-HDI in OIC Country

Economic growth expands and fulfills the material satisfaction of human needs. This need will be met depending on the economic distribution, the



allocation of resources, and employment opportunities in the economy. Economic growth and human development index have a two-way relationship, although not directly related, but can be strengthened by appropriate government policies. When economic growth and HDI are in a strong relationship, they will contribute to each other, but when the relationship is weak, it will damage each other.

Good governance encourages economic growth, where government institutions work to create a conducive regulatory and policy environment, the private sector creates jobs and income, while the community has an active and positive role in social interaction through non-governmental organizations, professional organizations, etcetera. It is in line with Marrugo's (2013) research, which found that the level of economic growth had a positive effect on HDI.

H_6 : *Good Governance is able to moderate the effect of economic growth on I-HDI in OIC country*

Based on the background, theoretical basis, and hypotheses that have been prepared, the following will describe the theoretical framework of this research:

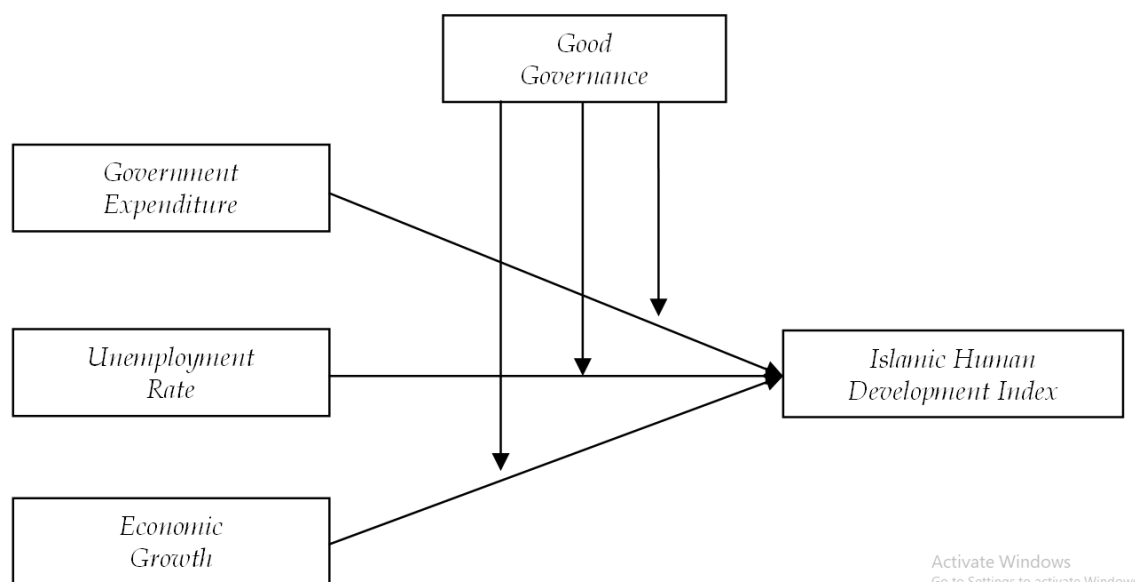


Figure 1. Research Framework

RESEARCH METHOD

This study uses an explanatory with a quantitative approach. In this study, the data used is panel data, a combination of cross-sectional data from 10 OIC countries, namely Indonesia, Pakistan, Nigeria, Bangladesh, Egypt, Turkey, Iran, Sudan, Algeria, and Iraq, and time-series data from 2010-2019. The data sources were obtained from the World Bank and the United Nations Development Program (UNDP). The data collection technique in this study uses a documentation technique, namely, the researcher collects evidence regarding direct reporting data by visiting the websites needed during the 2010-2019 period on the World Bank website, and for the good governance variable, the data is taken at the World Bank which is collected by Worldwide Governance Indicators (WGI).

Analysis Technique

Static panel data using the *generalized least squares* (GLS) model, in general, there are three approaches in selecting the estimation model: the *common effect model*, *fixed effect*, and *random effect*. Then, to select the right model, this study uses two tests, namely the Chow test and the Hausman test. Furthermore, hypothesis testing is carried out, including the coefficient of determination test, t-test, and F test.

Moderated Regression Analysis (MRA) is a subset of linear multiple regression analysis. MRA analysis can be used to analyze the effect of the moderating variable on the relationship between the independent and dependent variables (Ghozali, 2018).

The *Moderated Regression Analysis model* can be expressed in the form of the equation below:

$$I-HDI_{it} = a + \beta_1 PP_{it} + \beta_2 TP_{it} + \beta_3 PE_{it} + \beta_4 GG_{it} + \varepsilon \quad (1)$$

$$I-HDI_{it} = a + \beta_1 PP_{it} + \beta_2 TP_{it} + \beta_3 PE_{it} + \beta_4 GG_{it} + \beta_5 PP*GG_{it} + \beta_6 TP*GG_{it} + \beta_7 PE*GG_{it} + \varepsilon \quad (2)$$



Where:

I-HDI = Islamic Human Development Index

0 = Constant

PP = Government Expenditure

TP = Unemployment Rate

PE = Economic Growth

GG = Good Governance

e = Error or regression error

i = Country

t = Year

RESULT AND DISCUSSION

Descriptive Statistical Analysis

The descriptive statistical analysis aims to see each variable's phenomena and characteristics of the sample data. The next step is to measure each variable against the research data's mean, median, minimum, and maximum values. As a combination of *cross-section* data with *time-series* data, the phenomenon of the data generated in the descriptive statistical analysis describes all the characteristics of the combination. The following are the results of the description of descriptive statistical data processed using the *evIEWS* 12.0 application:

Table. 2
Descriptive Statistics

	I-HDI	PP	TP	PE	GG
Mean	33.214	10.153	8.893	8.847	-0.911
Median	35.025	10.498	9.820	8.697	-0.911
Maximum	56.780	11.481	17.470	11.500	-0.043
Minimum	8.980	2.438	0.650	6.090	-1.660
Std. Dev.	10.954	1.323	4.464	1.164	0.424
Probability	0.427	0.000	0.143	0.568	0.334
Observations	100	100	100	100	100

Source: processed data, 2021.

Based on the results of the descriptive statistical test above, it can be seen several characteristics that appear in each research variable. First, the data in this study are assumed to meet the normality requirements because the total data used is > 30 (large or more than 30) with the specifications of 10 OIC countries being used as research samples, with an estimated time of 10 years (2010-2019), then the total number of observations 100 observations were used.

Static Panel Data Regression Estimation Analysis with GLS Model

Based on the estimation results of static panel data regression using the *generalized least squares* (GLS) model, the statistical results are obtained as described in table 3 below:

Table. 3
Static Panel Data Regression Test Results

Variable	Common	Fixed	Random
C	0.0002 (224,2103)	0.0039 (217,8338)	0.0000 (239.1975)
PP	0.60115 (-1.482657)	0.8053 (0.733610)	0.6033 (-1.377119)
TP	0.0056 (-3.5687000)	0.0972 (-3.125299)	0.0027 (-3775247)
PE	0.0006 (-15.95181)	0.0024 (-18.60923)	0.0002 (-17.42127)
GG	0.0020 (197.0499)	0.0409 (159.0044)	0.0009 (205.4321)
PP*GG	0.9626 (0.117382)	0.4009 (2.163100)	0.9206 (0.231343)
TP*GG	0.0098 (-3.524474)	0.0044 (-4.682547)	0.0041 (-3.747172)
PE*GG	0.0004 (-18.68190)	0.0186 (-15,79023)	0.0002 (-19.38321)
R-squared	0.265559	0.454114	0.217117
Prob (F-Stats)	0.000136	0.00005	0.001629
Number of Observations	100	100	100
Number of Instruments	10	10	10
Chow test		0.0005	
Hausman test			0.0027

Source: processed data, 2021.



Referring to the determinants of the Islamic Human Development Index, OIC countries are government spending, unemployment rate, and economic growth. In static panel regression, three models consist of a combined method, namely Fixed Effect Model (FEM), Common Effect Model (CEM), and Random Effect Model (REM).

Best Model Selection

The selection of the best model using the Chow test and Hausman test, the statistical results obtained are described in the table. 4 below:

Table. 4
Best Model Test Results

Test	Effect Test	Statistics	Prob.
Chow test	Cross-section F	3.185461	0.0023
	Cross-section Chi-square	29.669988	0.0005
Hausman test	Random cross-section	21.884364	0.0027

Source: processed data, 2021.

Based on the Chow and Hausman tests, the Fixed Effect Model (FEM) is the best model in this static panel regression because the probability values are 0.0005 and 0.0027 or less than 5%. In addition, the value of the coefficient of determination also shows a fairly large value compared to other models, which is 0.454114. In addition, supported by the coefficient of the Islamic Human Development Index shows a significant positive value which implies that the greater the determinants of the I-HDI, the better the impact on human development.

Hypothesis test

Based on the results of panel data estimation using the Fixed Effect Model (FEM), the statistical results are as follows:

Table. 5
Panel Data Estimation

Variable	Coefficient	Std. Error	Prob.	Results
C	217.8338	73.40883	0.0039	Significant
PP	0.733610	2.966934	0.8053	Not significant
TP	-3.125299	1.863222	0.0972	Not significant
PE	-18.60923	5.948881	0.0024	Significant
GG	159,0044	76.56327	0.0409	Significant
PP*GG	2.163100	2.571914	0.4027	Not significant
TP*GG	-4.682547	1.598913	0.0044	Significant
PE*GG	-15.79023	6.577256	0.0186	Significant
R-squared	0.454114			
Prob(F-statistics)	0.00005			

Source: processed data, 2021.

T-statistic test

The results of the t-statistical test are in the table. 5above can be seen based on the criteria previously described, namely, if the probability value is less than 5% (<0.05), then the independent and moderating variables are assumed to affect the dependent variable.

Referring to the t-statistic value above, it can be partially seen that the government expenditure variable and the unemployment rate with a probability of more than 5% (>0.05), which means that the government expenditure variable and the unemployment rate do not affect the I-HDI, while the economic growth variable has no negative effect to I-HDI with a probability value of less than 5% (<0.05).

F test

The results of the F test can be seen in Table 3 above. It is known that the probability value in the F test is 0.000005 or less than 5% (<0.05). It can be concluded that the variables of government expenditure, unemployment rate, and economic growth simultaneously affect the Islamic Human Development Index.



Coefficient of Determination Test (R²)

The results of the coefficient of determination test can be seen in Table 5 above. The R-squared value is 0.454114. This value shows the effect of the independent variable on the dependent variable by 45.4%, while the rest is influenced by other factors not examined in this study.

Model Moderated Regression Analysis (MRA)

The results of testing the MRA model are as described in the table. 8 are as follows:

Table. 6
Moderation Test Results

Variable	Coefficient	Std. Error	Prob.
GG	205.4321	59.66126	0.0009
PP*GG	0.231343	2.315695	0.9206
TP*GG	-3.747172	1.271807	0.0041
PE*GG	-19.38321	4.968302	0.0002

Source: processed data, 2021.

Moderation Function of Good Governance (GG) Variable on Government Expenditure Variables (X₁) and I-HDI (Y)

Referring to the probability value of the good governance variable and variation of the 'good governance*government expenditure' model, which each has a probability value of 0.0409, as well as the positive t-statistic direction for good governance (159.0044) and 0.4027, and the positive t-statistic direction for 'government spending*good governance' (2.163100), then the moderation type in this variation of this model is a *quasi moderator* or quasi-moderation. It means that the variation of the good governance (GG) model that is included in the equation model has the potential to be a moderating variable.

Moderation Function of Good Governance (GG) Variable on Unemployment Rate Variable (X_2) and I-HDI (Y)

Referring to the probability value of the good governance variable and variation of the 'good governance*unemployment rate' model, which each has a probability value of 0.0409, as well as the positive t-statistic direction for the good governance variable (159.0044) and 0.0044, as well as the t-statistic direction. Negative for 'unemployment rate* good governance' (-4.682547), then the type of moderation in this variation is a *pure moderator* or full moderation, where the good governance variable fully interacts with the unemployment rate variable.

Moderation Function of Good Governance (GG) Variable on Economic Growth Variable (X_3) and I-HDI (Y)

Referring to the probability value of the good governance variable and variation of the good governance*economic growth' model, each of which has a probability value of 0.0409, as well as the positive t-statistic direction for the good governance variable ((159.0044) and 0.0186, the negative t-statistic direction. For 'economic growth* good governance' (-15.79023), the moderation type in this model variation is a *pure moderator*. This result explains that the country's good governance variable can moderate the variable of economic growth in its influence on the I-HDI.

After formulating the problem and developing hypotheses based on the theory and previous studies, this section will discuss in detail the data testing results and the relevance of the test results to the theory and previous research. In this section, various arguments will also be presented if the results do not align with the developed hypothesis.

The Effect of Government Spending on the I-HDI

Based on the statistical test results above, the probability value for the coefficient of the government expenditure variable shows a positive but not significant number with a probability value of 0.8053 (> 0.05). That is, the results of this study do not follow the hypothesis developed by the researcher. The



hypothesis states that government expenditure variables have no significant effect on I-HDI.

Referring to the results of testing the hypothesis above, this result is not relevant to Wagner's theory which states that if per capita income increases in an economy, so will public expenditures relatively increase. Similarly, Musgrave and Rostow's theory considers economic development as a proportion of public spending. In addition, this study's results were unable to confirm previous studies, such as research by Annisa et al. (2018), which showed that public expenditure variables had a significant positive effect on HDI.

Although the research above shows that it does not significantly affect the human development index, Hakim (2017) found that the variable government spending in the education and health sectors has a negative effect on the human development index. It can be related to various problems such as the management of the education sector and budget systems that have not been optimal or even bad due to the high corruption level that occurs, the lack of well-targeted and comprehensive health programs, and the large gap in the allocation of government funds to the public. In addition, spending on the health sector is not well-targeted.

The Effect of Unemployment Rate on the I-HDI

Tests on the effect of the unemployment rate on the I-HDI show a negative direction that is not significant for the I-HDI in the OIC countries, with a probability value of 0.0972 or greater than 0.05 (>5%). That is, the results of this study do not follow the hypothesis developed by the researcher. The hypothesis states that the unemployment rate variable has no significant effect on the I-HDI.

Referring to the results of testing the hypothesis above, this result proves that unemployment does not have an impact, such as decreasing people's income or even not being able to earn income at all, this does not cause the level of community prosperity to decrease. Unemployment does not cause various economic and social problems so that people do not have to reduce their consumption expenditures and will not impact HDI (Sukirno, 2014). Following research by Ghafur (2019), the unemployment rate does not affect the HDI.



The Effect of Economic Growth on the I-HDI

The next test is the effect of economic growth on I-HDI. After performing statistical tests, a probability value of 0.0024 or less than 0.05 was obtained, indicating that economic growth significantly negatively affected I-HDI in the OIC countries. This finding is not under the hypothesis developed by the researcher that the economic growth variable has a positive effect on the I-HDI.

The results of this test are not relevant to Kuznet's theory which states that economic growth is one of the characteristics of per capita production growth (Todaro, 2011). Increased economic growth will change people's consumption patterns, so the 3 HDI composites will experience an increase. In addition, this study's results were unable to confirm previous studies, such as research by Friska & Nina (2020), which found economic growth to have a positive and significant effect on HDI.

The Effect of Government Spending on the I-HDI with Good Governance as Moderating Variable

Testing the MRA model on the effect of government spending on I-HDI in this study was not able to show a significant relationship. As a reconstruction model, the good governance variable is involved in this research model to be used as a moderating variable. After conducting the test, the results show that the good governance variable shows a positive interaction with the government expenditure variable in influencing the I-HDI variable in the OIC country. It is based on the coefficient value, which shows a positive value of 2.163100.

The public spending in OIC member countries, it is suspected that inefficiency and inappropriate targeting have occurred. Many public budget allocations have been corrupted, worsening the situation, as shown by (Kahf, 1997) and (Kuran, 2018). Most of the budget is spent on less productive activities, such as too much defense and state security.

This phenomenon proves that good governance cannot moderate the relationship between government spending on I-HDI. It is because governance in Muslim countries needs to be improved. Based on the six indicators of good



governance reported by the world bank, governance in Muslim countries must improve all aspects to support economic development in each country.

The Effect of Unemployment Rate on the I-HDI with Good Governance as Moderating Variable

Furthermore, testing the MRA model to see the effect of the good governance variable in moderating the relationship between the unemployment rate variable and the I-HDI variable. The test results show that there is a significant interaction between the good governance variable and the unemployment rate variable in influencing the I-HDI variable in the country. It is based on a probability value of 0.0041 or less than 0.05, meaning that the results of this study are in line with the hypothesis proposed in this study, namely that good governance can moderate the effect of the unemployment rate variable on I-HDI.

This research is in line with research by Radite (2018), which found that alternative policies that can be applied to encourage an increase in HDI are life expectancy and literacy rates that can improve the quality and implementation of governance. The better the quality of governance, the more effective and efficient the implementation of human development will be.

This phenomenon provides evidence that good governance can moderate the unemployment rate for I-HDI in the OIC countries. Good governance will greatly impact improving human quality, which will increase the human development index, and the unemployment rate will decrease.

The Effect of Economic Growth on the I-HDI with Good Governance as a Moderating Variable

The final test of the MRA model is to see the effect of the good governance variable in moderating the relationship between economic growth and I-HDI. Statistical results show a probability value of 0.0186 or less than 0.05, so the results of this study prove that there is a significant positive interaction between good governance and government expenditure variables in influencing I-HDI.



This finding is in line with the hypothesis developed by the researcher, namely that good governance can moderate the effect of economic growth on I-HDI in the OIC countries. These findings are in line with the research of Tri (2016), who found that the application of good governance will encourage equitable distribution of implementation and development outcomes.

Therefore, economic growth can be felt by all levels of society so that the welfare of society and the human development index, the goal of national economic development, can be realized. With good governance, the bureaucracy can become a liaison between the interests of the people and the authorities so that the policies formulated have a real siding commitment to the people's economy.

The concept of *maqashid sharia* is very appropriate if used as a human development goal, it can even become a more holistic and comprehensive concept of human development. However, the concept of human development according to UNDP and *maqashid sharia* is not contradictory because the two concepts do not contradict each other. It can be seen from the three human development factors developed by UNDP (income, education, and health) using the *maqashid sharia considerations*, which include human development in different dimensions, namely religion, soul, mind, lineage, and property.

CONCLUSION

Based on the results of research and discussion, it can be concluded that government spending has no significant effect on I-HDI. This result is not relevant to Wagner's theory which states that if per capita income increases in an economy, so will the relative increase in public spending. The unemployment rate does not have a significant effect on the I-HDI. These results indicate that unemployment does not have an impact, such as reducing people's income or even being able to earn income at all, this does not cause the level of community prosperity to decrease. Meanwhile, economic growth has a negative but significant effect on I-HDI in the OIC countries. This finding proves that this research is not in line with the hypothesis developed, namely that the variable economic growth has a positive effect on I-HDI. This result is not relevant to Kutznet's theory which suggests that economic growth is one of the characteristics of per capita output growth. The good governance variable is not able to moderate the effect of government



spending on I-HDI. Likewise, the direct effect results (before including the good governance variable) did not have a significant effect on the I-HDI. Good governance shows a positive interaction with government expenditure variables in influencing the I-HDI variable but is not significant, so it is unable to moderate the relationship. Meanwhile, good governance can moderate the unemployment rate's influence on I-HDI. This research is in line with research by Radite (2018), which found that alternative policies that can be applied to encourage an increase in HDI are life expectancy and literacy rates that can improve the quality and implementation of good governance. Good governance is able to moderate the effect of economic growth on I-HDI. These findings align with the research of Tri Handayani (2016), who found that the good governance application will encourage equitable distribution of development outcomes.

This research has several implications, both scientifically and practically. In the scientific field, this research provides an overview of the I-HDI indicators in the OIC countries (government spending, unemployment rate, and economic growth) as well as good governance as a moderating variable. Findings with different results from previous research will provide additional knowledge with different models and approaches. Furthermore, practically, this research is able to provide a clear picture of the extent to which good governance is involved in moderating the variables of government spending in the education, health, and infrastructure sectors, unemployment rates, and economic growth in their influence on I-HDI in the OIC countries. With good governance, human development will be relatively easy to achieve.

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