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The Role of Institution and Macroeconomic Policy Mix on Economic Growth in Muslim Country

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Abstract

This study examines the role of the fiscal and monetary policy mix on economic growth with the St. model. Louis, which Andersen and Jordan developed in 1968, included the variable quality of institutions (governance) as a moderator. This research model uses the independent variable in the form of money supply (M) as a proxy for monetary policy and government expenditure (G) and government debt (D) as a proxy for fiscal policy. The governance index variable (INS) consists of 6 indicators, namely 1). Voice and Accountability; 2). Political Stability and Absence of Violence/Terrorism; 3). Government Effectiveness; 4). Regulatory Quality; 5). Rule of Law; 6). Control of Corruption. The objects of this research are all member countries of the Organization of the Islamic Conference (OIC), 57 countries. Due to the limited data that can be accessed, 46 countries were selected as research samples with a research period of 2005-2018. The analytical tool used in this study is a moderating panel data regression consisting of 28 equations. This study indicates that fiscal policy (government expenditure) and monetary policy (money supply) have a significant effect on economic growth. The government debt has a negative effect on economic growth in OIC countries. The quality of governance has a positive effect on economic growth in the OIC countries. This shows the important role of the quality of governance in the economy, as in the latest economic growth theory. The quality of governance cannot moderate the effect of the fiscal and monetary policy mix on economic growth in the OIC countries. The governance index plays a more direct role in economic growth, not as an effective moderator for government economic policies. The governance index is more effective in moderating various economic variables, which are private economic activities.

Keywords: governance index; fiscal and monetary policy; economic growth
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I. Introduction

1.1. Background

In order to influence the economy and accelerate good economic growth, the country carries out various economic policies; the two main ones are fiscal policy and monetary policy (Froyen, 2002; Mankiw, 2010). There is a long debate about what policy is more effective in influencing the economy between the two types of policies. The Keynesian group has the view that fiscal policy is more effective in influencing the economy, while the Monetarist has the opposite view (Belliveau, 2011; Gray et al., 2013; Vanegas, 2018). In order to prove this empirically, Andersen and Jordan in 1968 tested the effectiveness of the fiscal and monetary policies mix by forming an equation which was later called the St. Louis model (Andersen & Jordan, 1968). This model uses the money supply (M) as a proxy for monetary policy, and government expenditure (G) as a proxy for fiscal policy. Economic growth is measured by Gross Domestic Product, GDP or Y, so that the equation can be written as Y = f (M, G).

Many studies have applied the St. Louis model in various countries. Darrat applied it to Latin American countries and found that fiscal policy was more effective than monetary policy in promoting economic growth (Darrat, 1984). Halcon and Leon support this finding for cases in the Philippines (Halcon & Leon, 2004). However, it differs from the findings of Fatima and Iqbal for cases in selected Asian countries, which show that monetary policy is more effective in influencing economic growth than fiscal policy (Fatima & Iqbal, 2003), which was confirmed by Ajayi and Aluko (2017). In addition, many other studies examine the effectiveness of fiscal and monetary policies on economic performance as measured by economic growth based on the St. Louis model (Ali et al., 2008; Malawi, 2009; Jawaid et al., 2011; Chowdhury, L. S. & Afzal, 2015).

Most Muslim-majority countries are categorized as developing and even underdeveloped countries (Kuran, 2018). A study conducted by Kuran shows that Muslim countries (predominantly Muslim) lag behind in terms of their economic performance compared to non-Muslim countries. Meanwhile, according to Kahf, underdevelopment in the economy of Muslim countries originates from the budget deficit (government debt) caused by corruption, wasted spending, price subsidies, large inefficiencies in the public sector, and large defence spending (Kahf, 1997). Muslim countries in the Middle East, North Africa, South Asia and Southeast Asia are generally weak in education, security stability, and legal certainty. Moreover, institutionally, poor public services and high corruption have further aggravated the economic downturn of Muslim countries (Lackey, 2013). Meanwile, Chapra (2008) emphasized that development or decline in various Muslim countries is caused by many

factors such as social, political, economic, historical, and moral which have lasted for a very long time. In fact, in the teachings of Islam, there is already an Islamic Worldview of Development which, if applied, can bring prosperity to Muslims (Pramanik, 2002).

Muslim countries that are members of the Organization for Islamic Cooperation [(OIC) have tried to harmonize their activities with various other international organizations, especially the United Nations (UN). Current international issues such as human rights, gender equality, justice, terrorism are explicitly included in the amendments to the charter. This includes the joint efforts of OIC countries to create good governance in their respective countries to achieve a better life. Issues of democracy, law enforcement, eradicating corruption, and security conflicts are a common concern of all OIC countries (Organization of Islamic Cooperation [OIC], 2008). Muslim-majority countries normatively have religious values that should support good productivity and economic performance. But in fact, in general, Muslim countries lag behind in terms of welfare compared to other countries. Therefore, there is a big question regarding the effectiveness of fiscal and monetary policies on economic growth (base on the St. Louis model) in Muslim countries that have similar institutional framework.

1.2. Objective

This study aims to re-examine the effectiveness of fiscal (government spending) and monetary (money supply) policies from the St. Louis model by adding variables of government debt and governance quality in Muslim countries (members of OIC). This needs to be done considering the OIC countries face almost the same economic problems, such as economic backwardness, poverty, unemployment, and so on (Kuran, 2018). In addition, the character of formal (organization, constitution, and regulations) and informal (cultural customs, beliefs and religions) institutions also has similarities among OIC member countries. This happens because the religious teachings adopted will form beliefs, patterns of thought and actions that should be the same among adherents in various countries (North, 1994).

The rest of the paper is organized as follows: section 2 shortly review of the literature related to St. Louis Model and governance index, while chapter 3 describes the method applied. Chapter 4 discusses the findings of this research and finally, with chapter 5 which contains conclusions and suggestions.

II. Literature Review

2.1. Background Theory

Fiscal and monetary policy is a combination of the central economic policies of each country to achieve high economic growth (Dornbusch et al., 2011; Mankiw, 2010). Fiscal policy is government policy in managing the budget consisting of government spending and revenue, including the government's decision to get debt if the budget is in deficit (Mankiw, 2010; Perry, 2014).

Regarding the impact of government debt (a budget deficit) on the economy, there are three groups with different opinions. Neoclassical views that government debt has a negative impact on economic growth, Keynesians see the positive impact of debt on the economy, while Ricardians see it as something neutral (Arjomand et al., 2016). In practice, most countries in the world currently implement budget deficit policies, meaning that government spending is greater than state revenues. This deficit requires financing from various sources in government debt, both domestic and foreign, using various instruments.

Monetary policy is a state policy (usually by the central bank) to control or regulate the supply of money and interest rates to influence economic activity (Froyen, 2002; Mankiw, 2010). Through the banking system network, the central bank can influence the amount of money supply in society through several monetary policy instruments. The ultimate goal of monetary policy remains to achieve better economic performance, such as price stability (controlled inflation), economic growth, and increased employment opportunities. (Simorangkir, 2014).

Another aspect that has begun to receive considerable attention in the last few decades related to economic growth theory is the institution. According to Acemoglu, differences in economic progress between countries are partly due to differences in the choice of institutions in managing these countries. A country with a good institution will be better able to achieve better economic conditions than a country with less good institutions (Acemoglu, 2009). In the context of countries with Muslim majority populations, this phenomenon has also occurred massively and has been going on for a very long time (Kahf, 1997; Kuran, 2018).

North defines institutions as various rules that can limit humanly devised to build structures for political, economic, and social interactions. Institutions have 3 components, namely 1) formal rules (formal institutions), which include the constitution, statutes, law, and all government regulations; 2) informal rules (informal institutions), which include experience, traditional values, religion, and all the factors that influence the form of individual

subjective perspectives about the world in which they live; 3) the enforcement of various established rules and agreements (North, 1994).

The quality of already good institutions will result in lower transaction costs arising from economic activities (transactions). Therefore, in order to achieve low transaction costs, two paths can be taken. First, make rules (formal or informal) that guarantee certainty for economic actors to conduct transactions or exchanges. Second, strengthen the enforcement system in case of problems in the transaction process (Yustika, 2013).

The World Bank has developed a measure of the quality of institutions at the country level with the concept of governance. Through the World Governance Indicator (WGI) published by the World Bank, a governance index is developed. There are 6 dimensions in good governance covering (Kaufmann et al., 1999):

1. Voice and Accountability: the perceptions of citizens of a country regarding their involvement in government elections, freedom of expression, freedom of association and, media freedom.
2. Political Stability and Absence of Violence/Terrorism: public perceptions regarding the instability of the situation or efforts to overthrow the government through actions that cannot be justified, such as violence or terrorism motivated by political interests.
3. Government Effectiveness: perceptions of the quality of public services, the quality of civil services, and the level of freedom from political pressure, the quality of policy formulation and implementation, and the credibility of the government's commitment to the various policies it makes.
4. Regulatory quality: perceptions on the government's ability to formulate and then implement policies and regulations.
5. Rule of Law: perceptions of public trust and acceptance of various kinds of regulations, particularly law enforcement, property rights, police and courts.
6. Control of Corruption: public perceptions regarding the supervision and prosecution of corrupt practices, both small and large, carried out by political elites and the private sector.

In Islamic economics, good governance is a form of implementation of Islamic teachings (Hafeez, 2013; Hasan, 2009). The concept of governance, both within the company and in the government of a country, must be based on the value of Islamic monotheism that comes from the al-Qur'an (3: 191). This verse emphasizes the need for Muslims always to remember Allah wherever and under any circumstances. The value of monotheism underlies all human activities, both individually and communally, both in terms of worship and *muamalah* (Hasan, 2009). The value of tauhid or faith raises the value of *ihsan* or the value of goodness, as stated in the al-Qur'an (29: 69). Ihsan or good

deeds are the implementations of tauhid to Allah SWT, like the hadith of the Prophet SAW, which explains the meaning of "*ihsan*" behaviour (worship) to Allah as if seeing God or constantly feeling seen by God (Khan, 2019).

2.2. Previous Studies

Evaluation of the effectiveness of the fiscal and monetary policies mix on economic growth is a serious concern of researchers. The St. Louis model was developed by Andersen and Jordan (1968) is still being applied by many researchers. Darrat (1984) test the St. Louis model in Latin American countries (Brazil, Chile, Peru, Mexico, and Venezuela) in 1950-1981 and found that fiscal policy was relatively more effective in promoting economic growth. Similar results were obtained by Halcon and Leon (2004) for cases in the Philippines in 1986-2003.

Fatima and Iqbal found different results for cases in several Asian countries (Pakistan, India, Thailand, Indonesia, and Malaysia) in 1970-2000. In general, monetary policy is more effective in promoting economic growth than fiscal policy in these Asian countries (Fatima & Iqbal, 2003). Ajayi and Aluko's (2017) research findings also confirmed Fatima and Iqbal's research results, but for cases in Nigeria 1986-2014. According to them, money growth (monetary policy) has a positive and significant effect on economic growth. Meanwhile, government spending (fiscal policy) does not have a significant effect on economic growth.

Various other studies examining the effectiveness of fiscal and monetary policies on economic performance include Ali, Irum, and Ali (2008) researched in 4 South Asian countries; Malawi (2009) researched in Jordan and Tunisia; Jawaid, Arif, and Naeemullah (2011) researched in Pakistan; Chowdhury and Afzal (2015) researched in Bangladesh.

The vital role of institutions to improve people's welfare has started to get the attention of economists for a long time. However, different views on institutions cause the dimensions and sizes of institutions to vary. Several studies that generally link the role of institutions and economic growth differ in terminology, indicators and measurements. Scully (1988) initiated research linking institutional quality and economic performance (economic growth). Scully examined the political freedom index, the property freedom index, the economic freedom index on GDP per capita growth in 115 countries from 1960-1980. The results showed that institutional quality has a significant effect on efficiency and economic growth. Politically open societies, respect private property, abide by the rule of law, and have a well-allocated market for resources can grow economies three times and two and a half times more efficiently than countries with restricted freedoms.

They were followed in the 1990s by Knack and Keefer (1995), which relates the law enforcement index from the International Country Risk Guide (ICRG)

with investment and cross-border GDP for 1974-1989. The results showed that a country that can enforce the law in terms of property rights would have a greater investment, which then impacts economic growth. Knack and Keefer then developed their research with other institutional measures such as law enforcement, contract compliance, and corruption in 102 countries from 1960-1989. The results of this study indicate that the quality of the institution has a positive effect on income. The ability of poor countries to catch up is determined by the quality of the institutions (Keefer & Knack, 1997).

Norton found that economic institutions played an essential role in the welfare of the people in 112 countries in 1982-1995. An increase in the institutional quality index (property rights, law enforcement and economic freedom) can reduce human poverty and increase the human development index (Norton, 2003). These findings are supported by research conducted by Siddiquia and Ahmed (2013) for cases in developing countries, also studies from Flachaire et al. (2014) for cases in developed countries.

Another term for institutional quality is governance which was introduced and developed by Kaufman, Kraay, and Lobaton at the World Bank in the 1990s (Kaufmann et al., 1999). The concept of governance already has its measurement instrument, an extension of the various quality indexes of existing institutions. There are 6 indicators in the governance index, namely: 1). Voice and Accountability; 2). Political Stability and Absence of Violence/Terrorism; 3). Government Effectiveness; 4). Regulatory Quality; 5). Rule of Law; 6). Control of Corruption.

Empirically, the governance index has been tested by many researchers since the early 2000s. Olson, Sarna, and Swamy examined the effect of governance quality on GDP in 68 developing countries in 1960-1987. This study concludes that countries with good governance have a higher level of productivity to promote economic growth better. (Olson et al., 2000). The relationship between governance and economic growth in high and low-income countries is retested by Kaufman and Kraay (2002) in 120 countries 2000/2001. This study concludes that governance plays an important role in increasing economic growth in the long run. This positive relationship occurs in countries with higher income levels, in contrast to countries with lower income. Research findings with similar results were also carried out by Aidt et al. (2008), Rajkumar and Swaroop (2008), also Huang and Ho (2017).

The latest research conducted by Vianna and Mollick examines the critical role of institutions for economic growth in various countries, especially in Latin America, from 1996-2015. The results showed that the institutional index (governance index from the World Governance Indicator, WGI) had a significant positive effect on economic growth, particularly indicators of the rule of law and political stability. Vianna and Mollick also emphasized the

importance of an efficient fiscal and monetary policy mix in promoting economic growth (Vianna & Mollick, 2018).

Several studies have interacted the quality of institutions (as a moderator variable) with other independent variables in influencing economic growth. This variable interaction aims to determine the role of institutional in strengthening/weakening the influence of independent variables on the dependent variable. A study conducted by Williams in 81 developed and developing countries from 1970 to 2014 found that the quality of institutions can reduce the negative impact of too much credit on economic growth (Williams, 2019).

A slightly different result was found by Rachdi et al. when examining the impact of liberalization on economic growth with institutions (law enforcement) as a moderating variable in 15 MENA (the Middle East and North Africa) countries 2000-2013. Rachdi et al. found that financial sector liberalization positively impacted economic growth in MENA countries through increased savings and subsequently investment. This study found that good law enforcement will be able to increase economic activity drastically. Therefore, to achieve good economic growth and avoid crises, MENA countries need to strengthen the quality of institutions by implementing good governance (Rachdi et al., 2018).

The influence of government debt on economic growth associated with the quality of institutions is also a concern of researchers. Sani et al. (2019) analyzing the influence of government debt in Sub-Saharan African countries in 2000-2014 and linking it with 6 indicators of governance index. The results show that the quality of institutions can reduce the negative impact of government debt on economic growth. The research results support these findings by Fraj, Hamdaoui, and Maktouf, which examined 50 developed and developing countries (Hadj Fraj et al., 2018).

Therefore, this study intends to develop various aspects of previous studies. The aspects referred to are 1) broader and comprehensive indicators of governance quality using indexes from the World Governance Indicator, WGI; 2) interacting the governance index with a fiscal and monetary policies mix (the St. Louis model developed by Andersen and Jordan in 1968); 3) analyzing member countries of the Organization for Islamic Cooperation, OIC).

III. Methodology

3.1. Data

This research focuses on countries with large Muslim populations. Therefore, the population in this study is all member countries of the Organization of Islamic Cooperation (OIC), which represent the existence of a country with a large Muslim population. The data used in this research is quantitative data from various institutions that have credibility in their fields, such as the World Bank, the International Monetary Fund, and the Organization of Islamic Cooperation (OIC).

All OIC members are deemed capable of representing Muslim-populated countries in the world. All OIC countries (57 countries) were chosen to be research objects, but due to limited data that can be accessed, 46 countries were selected as research samples with the research period 2005-2018. The addition of data outside this observation period will reduce the number of countries studied due to incomplete data in some countries.

3.2. Model Development

This study examines the effectiveness of the fiscal and monetary policy mix in OIC countries by referring to the St. Louis model developed by Andersen and Jordan (1968). This model uses the money supply (M) as a proxy for monetary policy and government spending (G) as a proxy for fiscal policy. The dependent variable in this model is economic growth (Gross Domestic Product, GDP or Y). This study adds government debt (D) to the St. Louis model; therefore, the model in this study becomes Y = f (G, D, M).

In institutional economics, it is believed that social and economic institutions can influence economic performance. In several empirical models, the quality of institutions plays a direct role in economic performance and moderates the relationship between independent variables and economic performance. In this context, it is understood that the quality of institutions can increase the impact or influence of the various independent variables on economic performance (as a dependent variable).

Researchers used a governance index published by the World Governance Indicator (WGI), part of the World Bank. The governance index introduced and developed by Kaufmann et al. (1999) at the World Bank in the 1990s. There are 6 indicators in the governance index, namely 1). Voice and Accountability (VA); 2). Political Stability and Absence of Violence/Terrorism (PS); 3). Government Effectiveness (GE); 4). Regulatory Quality (RQ); 5). Rule of Law (RL); 6). Control of Corruption (CC).

In order to obtain a more complete and better empirical model, a control variable will be added to the model. The control variable is not the primary variable that will be researched and tested, but it functions to control the consistency of the estimation results (Jogiyanto, 2007; Sekaran & Bougie, 2016). In this study, the control variables used were population and investment (Khalfaoui, 2015; Vianna & Mollick, 2018). Therefore, the final model of this study is as follows:

GDP = f (G, D, M, POP, FDI, [INS, VA, PS, GE, RQ, RL, CC])

Where:

GDP = Real Gross Domestic Product
G = government expenditure
D = public debt
M = money supply
POP = population
FDI = investment (foreign direct investment)
INS = institutional quality (the average value of the 6 governance index)
VA = Voice and Accountability
PS = Political Stability and Absence of Violence/Terrorism
GE = Government Effectiveness
RQ = Regulatory Quality
RL = Rule of Law
CC = Control of Corruption

In this study, economic growth is measured through the logarithmic value of real GDP sourced from the World Bank database as in several previous studies (Ali et al., 2008; Knack & Keefer, 1995; Olson et al., 2000). Refers to the St. Louis model, developed by Andersen (1998), the independent variables are money supply, government spending, and government debt (M2, G, D in US $). The data for these three variables were obtained from the World Bank database.

The governance index acts as a moderator variable for the fiscal and monetary policy mix. In this study, the variable INS (institutional quality) is added, which is the composite average value of the six governance indices. The use of the INS variable refers to the latest research conducted by Sani et al. (2019).

3.3. Method

This study applies a panel data regression model. In general, there are three approaches, namely Common Effect, Fixed Effect, and Random Effect (Baltagi, 2005). The Chow test, Hausman test, and Lagrange Multiplier (LM) test were performed to determine the best approach model. Hypothesis testing is carried out simultaneously and partially as stipulated in the panel data

regression model with a confidence level α = 1%, 5%, or 10% (Gujarati, 2004; Sekaran & Bougie, 2016).

This study developed the Moderated Regression Analysis (MRA) method. This regression model contains the interaction between the independent variable (IV) and the moderator variable (MV), which affects the dependent variable (DV). The moderator variable (MV) is a variable that has a contingency effect (possibility) from the relationship of the independent variable (IV) to the dependent variable (DV) (Jogiyanto, 2007; Sekaran & Bougie, 2016). The contingency effect in question can be in the form of direction and or strength of the relationship between the independent and dependent variables (Baron & Kenny, 1986).

3.4. Robustness Test

In order to produce a valid estimation, it is necessary to carry out a robust test in this study to determine the robustness or constancy of the regression coefficient when the model is modified in such away. If the coefficient results are plausible and robust, it can be concluded that the estimation model is valid (Lu & White, 2014). Vianna & Mollick (2018) and Sani et al. (2019) conduct a robust test by calculating the average of the six governance indexes from the World Bank and then making it an additional independent variable.

This study uses a composite index derived from the six governance indexes of the World Bank. In contrast to the two studies, this study combines or reduces the governance index using the factor analysis method.

Factor analysis is a technique of combining indicators or dimensions that allows capturing as much information as possible so that the reduction results become valid (Fernando et al., 2012). This technique is done by determining the structure through data summarization or data reduction (Ghozali, 2013). Several previous studies used this method to reduce dimensions (Revelle, 2017) and compile a composite index (Duan, 2007; Fernando et al., 2012; Nardo et al., 2005). This factor analysis will produce a new variable that is named AFGV.

A robust test is done by comparing the coefficient of the AFGV variable and the interaction of AFGV and other variables with the coefficient of the INS variable and the interaction of INS and other variables. If the AFGV variable coefficient and the AFGV interaction show the same direction and significance (consistent) with the INS variable coefficient and the INS interaction, it can be said that the model built is robust (firm or robust). Therefore, the estimation results it produces will also be valid.

IV. Results and Analysis

4.1. Results

Table 1 shows that out of a total of 46 OIC countries selected as research objects, it turns out that only 6 countries have achieved a positive average governance index (INS). The rest, 40 OIC countries, scored negative governance index, with Afghanistan scoring the lowest at -1,611. This shows that OIC countries have not achieved good governance in general, considering that most countries are still below the median index value (-2.5–2.5). The poor quality of governance in OIC countries can also be seen from the low average value of the governance index in all countries, which is only -0.580.

Table 1. Descriptive statistics

Variable	Mean	Median	Maximum	Minimum	Std. Dev
GDP*	125,276,058	27,212.163	1,240,474.471	720,131	211,590.325
G*	16,313.769	3,801.938	177,002.638	67,965	28835.030
D*	40,675.800	8.728,133	355,421.800	38,017	69,064.469
M*	72,904.401	11,505.521	665,411.012	112,451	120,979.375
INS	-0.580	-0.619	0.740	-1.771	0.550
VA	-0.733	-0.759	0.416	-1.907	0.525
PS	-0.680	-0.609	1.388	-2.827	0.918
GE	-0.494	-0.585	1.510	-1.776	0.688
RQ	-0.436	-0.446	1.154	-1.720	0.626
RL	-0.551	-0.646	0.959	-1.897	0.635
CC	-0.587	-0.699	1.567	-1.638	0.619
Pop*	32,626,106	12,726,832	267,663,435	365,114	52,226,484
FDI*	2,982.315	920.222	42,725.211	0.181	5,259.785

*) in a million USD

Turkey is an OIC country with the largest economic variables, among others, such as GDP, government spending, government debt, and the amount of money supply. Indonesia is the most populous Muslim country, while Saudi Arabia is the largest investment destination (FDI) country. On the other hand, Guinea-Bissau is an OIC country with the smallest economic sizes, such as GDP, expenditure, and foreign direct investment. However, Guinea-Bissau is one of the countries with the largest government debt. One that is unique is Brunei Darussalam (one of the richest countries) which has the least population but also has the smallest government debt.

In general, the average of the 6 governance indexes in OIC countries is still low (<0). Some countries that can achieve the highest governance index, such as Saudi Arabia, Brunei Darussalam, and Qatar, are Muslim countries that are

relatively safe socially and politically and have a prosperous life (high per capita income). On the other hand, countries with a low governance index (Sudan, Afghanistan, and Iraq) are still ravaged by war conflicts and are poor.

This study's panel data regression model consisted of 28 equations divided into 4 (four) analysis groups. Gradually, the best model selection test is carried out and then the research hypothesis is tested. Table 2, Table 3, Table 4, and Table 5. shows the Chow Test and Hausman Test results from the 28 equations, and the selected model is the Fixed Effect model (FEM), because the probability cross-section F value in both tests shows a value less than α = 5% (<0.05).

Referring to the Prob (F-Stat.) value in equations (1) to (28) Table 2, Table 3, Table 4, and Table 5, the value is 0.0000 <α = 5%. Therefore, the entire panel data regression equation model built has passed the significance test of the model and can be used in the analysis of this research (Gujarati, 2004). Average Adj. R2 in equations (1) to (28) Table 2, Table 3, Table 4, and Table 5, amounting to 0.859, which means that the variation in the dependent variable can be explained by the variation of the independent variable by 85.9%, while other variables outside the model explain the remaining 14.1%.

The results of equation (1) in Table 2 show that government spending (G) and the money supply (M) have a significant positive effect on economic growth (GDP) at α = 1% (***). Because the three variables (PDB, M and G) are logarithmic, it is often called the log-log model; therefore, the coefficient value shows the elasticity value. The coefficient value of 0.11104 indicates that when government spending increases by 1 %, it will cause economic growth (GDP) to increase by 0.11104 %. The coefficient value of 0.30152 shows that when the money supply increases by 1 %, it will cause economic growth (GDP) to increase by 0.30152 %. The government debt variable (D) does not significantly affect economic growth (GDP). This shows that the government's debt policy cannot increase or decrease economic growth in OIC member countries.

Table 2 equations 1-7 also show that the governance index has a positive effect on economic growth in Muslim countries. The governance index consists of 6 indicators: VA, PS, GE, RQ, RL, and CC. The six indicators are combined into one average value, which forms the INS variable. The average value of governance (INS) is proven to have a positive and significant effect on economic growth (GDP). Likewise, the three indicators of governance index, namely Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC), significantly affect economic growth (GDP) at α = 1%. However, there are three indicators of governance index, namely Voice and Accountability (VA), Political Stability and Absence of Violence/Terrorism (PS) and Government Effectiveness (GE), which have no significant effect on economic growth.

Table 2. The Results of Panel Data Regression, Equation 1-7 (without interaction)

Dependent:	Equation						
LPDB	(1)	(2)	(3)	(4)	(5)	(6)	(7)
LG	0.11104***	0.11337***	0.11366***	0.11412***	0.10556***	0.11305***	0.10978***
	[0.01705]	[0.01719]	[0.01715]	[0.01713]	[0.01699]	[0.01696]	[0.01698]
LD	-0.00301	-0.00315	-0.00243	-0.00403	-0.00143	-0.00447	-0.00619
	[0.00703]	[0.00708]	[0.00712]	[0.00710]	[0.00698]	[0.00701]	[0.00704]
LM	0.30152***	0.31130***	0.31032***	0.30832***	0.30010***	0.30058***	0.30396***
	[0.00068]	[0.00069]	[0.00069]	[0.00070]	[0.00067]	[0.00068]	[0.00068]
LPOP	0.40870***	0.37877***	0.38260***	0.38299***	0.41656***	0.39443***	0.40775***
	[0.04520]	[0.04488]	[0.04500]	[0.04447]	[0.04456]	[0.04405]	[0.04454]
LFDI	-0.00071	-0.00087	-0.00078	-0.00092	-0.00185	-0.00047	-0.00101
	[0.00332]	[0.00335]	[0.00335]	[0.00334]	[0.00330]	[0.00331]	[0.00331]
INS	0.07292**						
	[0.02348]						
VA		0.00629					
		[0.01586]					
PS			0.00749				
			[0.00897]				
GE				0.02951			
				[0.01952]			
RQ					0.08782***		
					[0.01985]		
RL						0.07979***	
						[0.02090]	
CC							0.07545***
							[0.01957]
Constant	8.18392***	8.36112***	8.29681***	8.37617***	8.19297***	8.42460***	8.25179***
	[0.45587]	[0.45666]	[0.46465]	[0.45448]	[0.44990]	[0.45004]	[0.45088]
F-Statistics	660.09327	648.12447	648.80593	650.80782	672.60336	666.30159	666.66304
Prob (F-Stat.)	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000
Adj. R^2	0.85876	0.85650	0.85663	0.85701	0.86105	0.85991	0.85997
CEM	No	No	No	No	No	No	No
FEM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
REM	No	No	No	No	No	No	No

(* p<0.1, ** p<0.05, *** p<0.01)

Table 3. The Results of Panel Data Moderated Regression, Equation 8-14 (Interaction of Government Expenditure & Governance)

Dependent:	Equation						
LPDB	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LG	0.09828***	0.13157***	0.10169***	0.09683***	0.09186***	0.10319***	0.09686***
	[0.02112]	[0.02094]	[0.01855]	[0.01947]	[0.01939]	[0.02034]	[0.01963]
LD	-0.00161	-0.00440	-0.00092	-0.00341	0.00151	-0.00330	-0.00557
	[0.00716]	[0.00712]	[0.00717]	[0.00709]	[0.00726]	[0.00713]	[0.00705]
LM	0.30051***	0.30827***	0.30813***	0.30839***	0.29711***	0.29880***	0.30173***
	[0.01839]	[0.01838]	[0.01832]	[0.01829]	[0.01820]	[0.01834]	[0.01816]
LPOP	0.42075***	0.38054***	0.39438***	0.40512***	0.43241***	0.40700***	0.42557***
	[0.04671]	[0.04485]	[0.04548]	[0.04596]	[0.04582]	[0.04632]	[0.04654]
LFDI	-0.00049	-0.00115	0.00018	-0.00121	-0.00189	-0.00041	-0.00111
	[0.00333]	[0.00335]	[0.00340]	[0.00334]	[0.00330]	[0.00331]	[0.00331]
INS	0.32516						
	[0.24765]						
LG*INS	-0.01136						
	[0.01111]						
VA		-0.32214					
		[0.21676]					
LG*VA		0.01473					
		[0.00970]					
PS			0.20298*				
			[0.11674]				
LG*PS			-0.00896*				
			[0.00533]				
GE				0.38530**			
				[0.19285]			
LG*GE				-0.01576*			
				[0.00850]			
RQ					0.39499*		
					[0.21122]		
LG*RQ					-0.01352		
					[0.00926]		
RL						0.27918	
						[0.22800]	
LG*RL						-0.00895	
						[0.01019]	
CC							0.36231*
							[0.21960]
LG*CC							-0.01271
							[0.00969]
Constant	8.26023***	8.03525***	8.36371***	8.40213***	8.24964***	8.45600***	8.29581***
	[0.46191]	[0.50407]	[0.46564]	[0.45376]	[0.45114]	[0.45154]	[0.45186]
F-Statistics	565.98852	557.09259	558.23279	560.62454	577.92597	571.00517	572.36624
Prob (F-Stat.)	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000
Adj. R^2	0.85877	0.85681	0.85707	0.85760	0.86132	0.85985	0.86014
CEM	No	No	No	No	No	No	No
FEM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
REM	No	No	No	No	No	No	No

(* p<0.1, ** p<0.05, *** p<0.01)

In equation (8) table 3, the results show that the LG*INS variable has no significant effect on economic growth (GDP) at various values of α (no * sign). This means that the INS index cannot moderate the influence of the government expenditure variable (G) on economic growth. The results of the interaction regression between the government expenditure variable (G) and the six indicators of governance index show similar results. The four interaction variables have no significant effect on economic growth. There are only two interaction variables that negatively affect economic growth, namely LG*PS (equation 10) and LG*GE (equation 9). The interpretation of the results of data processing in table 3 shows that the variable quality of governance cannot strengthen the effect of the fiscal policy mix (government spending) on economic growth in Muslim countries.

In equation (15) Table 4, the results show that the LD*INS variable has a significant negative effect on economic growth (GDP) at α = 1% (***sign). This means that the INS index can moderate the influence of the government debt variable (D) on economic growth (GDP) but in a negative (weakening) direction. This is in line with the results of the interaction variables for the other five governance indexes. Only the interaction of the LD*VA variable showed different results. The interpretation of data processing results in table 4 shows that the quality of governance weakens the effect of fiscal policy (government debt) on economic growth (GDP) in Muslim OIC member countries.

Table 4. The Results of Panel Data Moderated Regression, Equation 15-21 (Interaction of Government Debt & Governance)

Dependent	Equation						
: LPDB	(15)	(16)	(17)	(18)	(19)	(20)	(21)
LG	0.10814***	0.11486***	0.11268***	0.10909***	0.10240***	0.11054***	0.10824***
	[0.01691]	[0.01715]	[0.01707]	[0.01690]	[0.01675]	[0.01681]	[0.01688]
LD	-0.01892**	0.01304	-0.00760	-0.0210***	-0.01041	-0.01702**	-0.01909**
	[0.00831]	[0.01028]	[0.00735]	[0.00793]	[0.00718]	[0.00778]	[0.00824]
LM	0.29719***	0.30961***	0.30793***	0.30745***	0.29317***	0.29682***	0.29793***
	[0.01823]	[0.01825]	[0.01823]	[0.01803]	[0.01791]	[0.01808]	[0.01809]
LPOP	0.44914***	0.37590***	0.39980***	0.43046***	0.45536***	0.43434***	0.44994***
	[0.04625]	[0.04476]	[0.04524]	[0.04502]	[0.04480]	[0.04504]	[0.04649]
LFDI	-0.00092	-0.00096	0.00004	-0.00213	-0.00277	-0.00154	-0.00153
	[0.00329]	[0.00334]	[0.00335]	[0.00330]	[0.00326]	[0.00329]	[0.00329]
INS	0.73246***						
	[0.18988]						
LD*INS	-0.0282***						
	[0.00806]						
VA		-0.38166**					
		[0.17965]					
LD*VA		0.01665**					
		[0.00768]					
PS			0.25630***				
			[0.09399]				
LD*PS			-0.0108***				
			[0.00409]				
GE				0.77416***			
				[0.16638]			
LD*GE				-0.0314***			
				[0.00699]			
RQ					0.75775***		
					[0.15546]		
LD*RQ					-0.0283***		
RL						0.65761***	
						[0.16379]	
LD*RL						-0.0250***	
						[0.00704]	
CC							0.56175***
							[0.16539]
LD*CC							-0.0208***
							[0.00702]
Constant	8.06751***	8.04151***	8.18945***	8.17094***	8.03001***	8.23355***	8.05379***
	[0.45282]	[0.47852]	[0.46404]	[0.44956]	[0.44484]	[0.44890]	[0.45292]
F-Statistics	578.29537	559.67847	562.83255	578.92412	596.61530	584.15946	580.17407
Prob (F-Stat.)	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000
Adj. R^2	0.86139	0.85739	0.85808	0.86153	0.86512	0.86261	0.86179
CEM	No	No	No	No	No	No	No
FEM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
REM	No	No	No	No	No	No	No

(* p<0.1, ** p<0.05, *** p<0.01)

Table 5. The Results of Panel Data Moderated Regression, Equation 22-28 (Interaction of Money Supply & Governance)

Dependent:	Equation						
LPDB	(22)	(23)	(24)	(25)	(26)	(27)	(28)
LG	0.10916***	0.11915***	0.11029***	0.11151***	0.10366***	0.11141***	0.10929***
	[0.01715]	[0.01731]	[0.01725]	[0.01708]	[0.01704]	[0.01696]	[0.01699]
LD	-0.00127	-0.00455	-0.00083	-0.00161	0.00146	-0.00145	-0.00537
	[0.00724]	[0.00708]	[0.00718]	[0.00713]	[0.00731]	[0.00723]	[0.00710]
LM	0.29247***	0.32413***	0.30264***	0.29112***	0.28994***	0.28486***	0.29523***
	[0.02044]	[0.01906]	[0.01885]	[0.01943]	[0.01966]	[0.02051]	[0.02033]
LPOP	0.30208***	0.29509***	0.30429***	0.26999***	0.29783***	0.24218***	0.29580***
	[0.04142]	[0.04269]	[0.04309]	[0.04159]	[0.04104]	[0.04068]	[0.04153]
LFDI	0.00032	-0.00026	0.00072	-0.00022	-0.00063	0.00015	-0.00006
	[0.00105]	[0.00109]	[0.00108]	[0.00106]	[0.00105]	[0.00102]	[0.00105]
INS	0.29057						
	[0.21731]						
LM*INS	-0.00938						
	[0.00931]						
VA		-0.42878**					
		[0.18967]					
LM*VA		0.01857**					
		[0.00807]					
PS			0.17112*				
			[0.09867]				
LM*PS			-0.00720*				
			[0.00433]				
GE				0.47518***			
				[0.17492]			
LM*GE				-0.01870**			
				[0.00729]			
RQ					0.32428*		
					[0.18024]		
LM*RQ					-0.00990		
					[0.00750]		
RL						0.40372**	
						[0.19598]	
LM*RL						-0.01388*	
						[0.00835]	
CC							0.26121
							[0.19815]
LM*CC							-0.00782
							[0.00830]
Constant	8.23880***	7.94134***	8.33535***	8.40531***	8.22813***	8.45508***	8.26950***
	[0.45910]	[0.49020]	[0.46453]	[0.45250]	[0.45041]	[0.44975]	[0.45132]
F-Statistics	565.95357	560.32564	558.18097	564.02571	577.48904	573.21157	571.44364
Prob (F-Stat.)	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000	0,00000
Adj. R^2	0.85876	0.85753	0.85706	0.85834	0.86123	0.86032	0.85995
CEM	No	No	No	No	No	No	No
FEM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
REM	No	No	No	No	No	No	No

(* p<0.1, ** p<0.05, *** p<0.01)

Equation (22) in Table 5 shows that the M*INS variable has no significant effect on economic growth (GDP) at various values of α. This means that the INS index cannot moderate the effect of the variable amount of money in circulation (M) on economic growth. The interaction results of the six indexes show mixed results. However, the interpretation of the results of data processing in Table 5 shows that, in general, the variable quality of governance cannot strengthen the effect of monetary policy (the amount of money in circulation) on economic growth in Muslim countries.

Based on the interpretation of the results in Table 3, Table 4, and Table 5, it is known that the majority of interactions between the quality of governance and economic policy variables have no significant effect on economic growth. This indicates that the governance index cannot moderate the effect of economic policy (fiscal and monetary) on economic growth.

4.2. Robustness Test

Table 6. The Results Robustness Test with the AFGV

	Equation			
Dependent: LPDB	(29)	(30)	(31)	(32)
LG	0.11051***	0.10169***	0.10693***	0.10799***
	[0.01699]	[0.01799]	[0.01677]	[0.01704]
LD	-0.00352	-0.00153	-0.00246	-0.00066
	[0.00700]	[0.00712]	[0.00691]	[0.00722]
LM	0.29948***	0.29713***	0.29284***	0.29238***
	[0.01830]	[0.01835]	[0.01811]	[0.01880]
LPOP	0.41301***	0.43356***	0.46659***	0.43129***
	[0.04493]	[0.04698]	[0.04608]	[0.04627]
LFDI	-0.00082	-0.00063	-0.00137	-0.00051
	[0.00331]	[0.00331]	[0.00327]	[0.00331]
AFGV	0.05286***	0.26657*	0.50707***	0.25668**
	[0.01422]	[0.14495]	[0.10841]	[0.12714]
LG*AFGV		-0.00954		
		[0.00644]		
LD*AFGV			-0.01928***	
			[0.00456]	
LM*AFGV				-0.00868
				[0.00538]
Constant	8.14463***	8.01576***	7.49549***	8.00319***
	[0.45439]	[0.46219]	[0.47366]	[0.46217]
F-Statistics	665.34266	571.75834	589.07957	572.20912
Adjusted R-Squared	0.85973	0.86001	0.86361	0.86011

(*p<0.1, **p<0.05, ***p<0.01)

This study performs a robust test by replacing INS in equations (1), (8), (15), and (22) with AFGV (governance factor analysis), which is the result of factor analysis of the six governance indexes. The results of data processing with AFGV show in the Table 6.

The AFGV coefficient values and the AFGV interaction in equations 29, 30, 31, and 32 in Table 6 show the same direction and significance (consistent) with the INS coefficient and INS interactions in equations 1, 8, 15, and 22. Therefore, it can be said that the model built is robust. Therefore, the estimation results generated in equations 1, 8, 15, and 22 are valid (Sani et al., 2019).

4.3. Analysis

4.3.1. The Impact of The Fiscal (G and D) and Monetary (M) Policies Mix on Economic Growth

Table 2 equation (1) shows the results that the government expenditure variable (G) has a significant positive effect on economic growth (GDP) in OIC member countries. This means that an increase in government spending will increase economic growth, which is proxied by GDP.

This finding is in line with the theoretical basis of Keynes, which holds that the main key to economic growth is the existence of effective aggregate demand. During times of recession and increasing unemployment, a decrease in income will cause a decrease in consumption, saving and investment. Therefore, to boost the economy again, the government must intervene in the economy through fiscal policies to cut taxes or increase government spending (Mankiw, 2010).

This finding also supports the findings of previous studies in various countries. Research conducted by Grossman in 48 countries from 1970 to 1983 showed that government spending variables had a significant positive effect on economic growth (Grossman, 1990). Several other studies with the same findings were conducted by Halcon & Leon (2004) in Filipina (1986-2003); Ogar et al. (2014) in Nigeria (1986-2010); Al Mamun et al. (2017) in the 50 oil-exporting countries (1980-2012); and Hussain & Siddiqi (2012) in Pakistan (1976-2008).

The second fiscal policy in this study is government debt (D). This debt accumulates government debt at a certain time, which comes from various sources (domestic and foreign) and various possible debt instruments. The results of panel data regression in table 2 of equation (1) show that the government debt variable (D) has a negative but insignificant effect on GDP. This means an increase in government debt will not increase or decrease economic growth as proxied by GDP.

Empirically, the impact of government debt on economic performance also shows inconsistent results. Several studies have shown the positive effect of debt on economic growth, as has been done by Siddiqui & Malik in South Asian countries (2001) also Manzocchi (1997) in Central and Eastern Europe. Meanwhile, in several other studies, it was found that government debt had a negative impact on economic performance, such as Misztal (2010), Woo & Kumar (2015), and Azzam et al. (2013).

The findings of this study indicate conformity to Ricardian thinking about the relationship between government debt and economic growth (Arjomand et al., 2016). In general, there is no significant (positive or negative) relationship between government debt and economic growth in OIC member countries. Some of the rich countries in 2018 had fairly high debt to GDP ratios, such as Bahrain (94.7%), Oman (53.3%), and Qatar (48.6%). Therefore, if the government cannot stop the withdrawal of new debt, the government in OIC countries should use the debt appropriately and efficiently.

Monetary policy in this study is reflected in the money supply. The results of panel data regression in table 2 of equation (1) show that the money supply (M) has a significant positive effect on economic growth (GDP). An expansionary central bank policy by increasing the money supply will be able to promote economic growth effectively.

Most of the previous studies showed a positive impact of money supply (M) on economic growth (GDP). Application of the St. Louis model in Latin America (Darrat, 1984), 5 selected Asian countries (Fatima & Iqbal, 2003), 4 South Asian countries (Ali et al., 2008), and also Nigeria (Ajayi & Aluko, 2017) shows a positive and significant effect of the money supply on economic growth.

Based on the description of the discussion above, it can be concluded that the model St. Louis, who analyzed the mix of fiscal policy (G) and monetary policy (M) in OIC countries, proved to be effective in influencing economic performance (GDP). The government expenditure (G) and the money supply (M) have a significant positive effect on economic growth. This is in line with the findings of Andersen and Jordan in 1968 when developing the St. Louis model. This means, in general, the direction of fiscal and monetary policy in OIC countries is already on the right track; it is just a matter of trying to further increase its effectiveness. Unfortunately, the government's debt policy has not had a positive impact on growth in OIC countries.

4.3.2. The Influence of The Governance Index on Economic Growth

Equations 1-7 in Table 2 show the results of panel data regression equation data processing which illustrates the effect of the governance index on economic growth as proxied by real GDP. All six indicators of governance index and average governance value (INS) are proven to affect economic growth positively. However, governance indexes that significantly affect economic

growth are RQ, RL, CC, and INS, while VA, PS, and GE have no significant effect. In general, the quality of governance has a significant positive effect on economic growth in OIC member countries.

The findings of this study are in line with and support the institutional theory on which this research is based. The role of institutions in economic growth can be analyzed using the transaction cost theory resulting from market failures (Yustika, 2013). The lower the transaction costs that arise from economic activities (transactions), the institution is already efficient, and vice versa. Therefore, the various rules (formal or informal) that ensure economic actors conduct transactions or exchange are very important.

The findings of this study are in line with and support some of the results of previous studies, which state that the quality of governance has a positive and significant effect on economic growth. This study is in line with Olson et al. (2000), which examines the influence of the quality of governance on GDP in 68 developing countries in 1960-1987. This study concludes that countries with good governance have a higher level of productivity to encourage economic growth better. Research findings that are in line with the results of this study include Kaufmann & Kraay (2002), Aidt et al. (2008), Asian Development Bank (2013), and Sani et al. (2019). The better a country's governance index, the higher the GDP that the country will achieve.

The 2008 amendments to the OIC Charter were a step forward for this organization. The OIC is fully aware that good governance is one of the important factors to encourage the improvement of the welfare of Muslims (OIC, 2008). In Article 2 Paragraph 6, it is explicitly stated that all OIC members must participate in upholding and advancing the issues of good governance, democracy, human rights, basic freedoms, and law enforcement at various levels of state life.

In order to achieve these goals, specifically and in detail, it is revealed in the document The OIC-2025: Programme of Action (OIC, 2016b). Several work programs and implementation plans are designed closely with the governance index developed by the World Bank (OIC, 2016a). However, the governance index did not change significantly in the period after the amendment. There is no significant change in the value of the governance index before and after 2008.

The number of conflicts within and between OIC countries, especially in the Middle East and Central Asia, has seriously disturbed political stability and security. OIC member countries are facing an ongoing domestic crisis. Various militant movements and acts of terrorism have occurred in OIC countries (Estes & Sirgy, 2014). Several organizations labelled as perpetrators of acts of terrorism spread in various Muslim countries, such as ISIS in Iraq and Syria;

Taliban in Afghanistan and Pakistan; and Boko Haram in Nigeria (Dawoody-Al, 2015).

When developing the St. Louis model, Andersen and Jordan mentioned that institutions are slowly changing factor for the economy (Andersen & Jordan, 1968). Therefore, improving the quality of institutions is a non-negotiable long-term project for each OIC member country.

4.3.3. The Role of The Governance Index in Moderating The Influence of The Fiscal and Monetary Policy Mix on Economic Growth

The results showed that the governance index was not able to moderate the influence of government spending policies (G), government debt (D), and money supply regulation policies (M) on economic growth (GDP) in OIC countries. This means that the governance index plays a more role as an independent variable that directly influences, and not as a moderating variable (Sekaran & Bougie, 2016; Sharma et al., 1981; Sugiono, 2004).

A study conducted by Catrinescu shows that the quality of governance can moderate the variable remittances of society towards economic growth (Catrinescu et al., 2009). Rachdi et al. (2018) also found a similar finding for the case of financial liberalization variables and Williams for bank credit (Williams, 2019). Therefore, it can be understood that the quality of governance will be more able to strengthen the influence of the private sector on economic growth than government economic policies, both fiscal and monetary. This indicates that the role of institutions in economic growth is more dominant through the transaction cost theory in the private sector. Muslim countries must continue to improve the quality of institutions that cover various aspects such as political stability (Arayssi et al., 2019), democracy and political freedom (Sarieddine, 2018), to the eradication of corruption (Satar, 2019) to catch up with development.

V. Conclusion and Recommendation

5.1. Conclusion

The fiscal (government spending) and monetary (money supply) policy mix has a significant positive effect on economic growth in OIC member countries. Meanwhile, government debt has no significant effect on economic growth. Fiscal and monetary policies implemented by OIC countries (46 countries) can promote effective economic growth, even though in some countries or regions, there are social, political, and security unrest that disrupts the development process.

The quality of governance, in general, has a positive effect on economic growth in OIC countries. Several governance indexes from the World Bank,

which cover economic, social, political, and bureaucratic aspects, have a strong influence on the economic growth of OIC countries. Even though the governance index in OIC member countries is relatively low compared to other country groups, good governance will encourage even better economic growth.

The quality of governance cannot moderate the effect of the fiscal and monetary policy mix on economic growth in OIC countries. Economic growth institutions indicate that the governance index will be more effective in moderating the private sector than government economic policy. Therefore, in this research model, the governance index is more appropriately referred to as an independent variable than a moderator variable.

5.2. Recommendation

All OIC countries must have the awareness and willingness to create good governance in their respective countries to achieve a better life as agreed. However, the agreement in the OIC Charter must be ensured to be a serious concern by all OIC member countries. There needs to be a clear mechanism so that all OIC countries do their best to create these conditions. Studies on the role of institutions in promoting economic growth and welfare in various countries need to be carried out by interacting with various socioeconomic variables. OIC through International Institutions Islamic Fiqh Academy (IIFA) can cooperate with forum of muslim scholars in each member country to explore and formulate the concept of good Islamic governance that can implemented by all OIC member countries at once provide advice on its implementation. For further research, the quality of the institution can be represented by various other governance indices in order to obtain more robust results.

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