# DETERMINANT OF THE POVERTY IN THE MOSLEM COUNTRIES: IBN KHALDUN DEVELOPMENT MODEL

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***Abstract.***
*This current paper examined the determinant of the poverty in the OIC countries. Our empirical model was based on IbnKhaldun development model that emphasizes several aspects, namely: the country's wealth (proxied by GDP per capita), the role of government (proxied by health and education expenditures), human resources (proxied by HDI), sharia (proxied by corruption perception index), development (proxied by investment), and justice (proxied by Gini index). We used panel data model consisting nine OIC countries over 2003-2012. This study verified that GDP per capita significantly contribute to the reduction of poverty in the OIC countries. We also found that unemployment (as a control variable) encountered a role in triggering poverty in OIC countries. Meanwhile, it found that education expenditure, Gini index, HDI, and Corruption Perception Index found no significant effect on poverty.*
***Keywords****: Poverty; IbnKhaldun Development Model; OIC Countries*

***Abstrak.***
*Tulisan ini bertujuan untuk menelaah faktor-faktor yang berpengaruh terhadap tingkat kemiskinan di negara-negaraOKI. Metode yang digunakan mengacu padamodel pembangunan Ibnu Khaldun yang menekankan pada aspek: kekayaan Negara (diproksi dengan PDB perkapita), peran pemerintah (diproksi dengan belanja pendidikan dan kesehatan), sumberdaya manusia (diproksi dengan IPM), syariah (diproksi dengan indeks persepsi korupsi), pembangunan (diproksi dengan investasi). dan keadilan (diproksi dengan indeks Gini). Struktur data yang digunakan adalah data panel dengan cross-section sembilan negara OKI yang dikumpulkan sepanjang 2003-2012. Hasil estimasi menemukan bahwa Variabel yang ditemui berperan signifikan terhadap penurunan kemiskinan di negara-negara OKI adalah PDB per kapita. Sementara anggaran pendidikan, indeks Gini, IPM, dan Indeks Persepsi Korupsi ditemui tidak berpengaruh signifikan terhadap kemiskinan.*
***Kata Kunci****: Kemiskinan; Model Pembangunan Ibn Khaldun; Negara-Negara OKI*

## INTRODUCTION

The development of a country is not only reflected in increasing of economic growth rate, but also social welfare realization for all citizens. Thus, the main goal of economic development is not only directed to create a high growth, but also focusing on the reduction of poverty, income inequalities and unemployment rate (Todaro and Smith, 2006). Poverty is a complex issue, not only as a manifestation of the low income leve and consumption, but also linked to low of education level, health, powerlessness to participate in development. Combating poverty has thus become the agenda and development priorities in many countries around the world.

World Bank (2014) identified the causes of poverty from individual access perpective to a number of assets that are important in supporting life i.e.underlying asset life (example: health and skills / knowledge), natural assets (example: agricultural land or arable land), physical assets (example: capital, production facilities and infrastructure), financial assets (example: bank loans and other loans) and social assets (example: social security and political rights). Lack of one or more assets access is cause of someone falling into poverty. While Todaro and Smith (2006) explained that poverty especially in developing countries caused by the interaction between some characteristics such as: (1) low of national income levels and slow of economic growth rate; (2) low of per capita income; (3) gap in income distribution; (4) absolute poverty; (5) limited facilities and health services; and (6) lack of educational facilities. In line with this, Chiller (2004) in Bellinger (2007) mentioned three things that cause poverty such as: (1) lack of motivation or skill; (2) social obstacle to access opportunity; and (3) the negative effects of government policy on incomes and employment participation.

Muslim countries have a wealth of natural resources which are potential to the social welfare. However, many Moslem countries (and mostly developing countries) are still considered to have relatively low of prosperity level. This is indicated that the percentage of poor people is still reltively high in these countries. While the countries which have poverty rates below 10% are Malaysia, Turkey, Kazkhstan, Azerbaijan and Morocco, the countries which have poverty rates between 10% and 30% are are Indonesia, Pakistan, Albania, Jordan, Tunisia, Uzbekistan, Iraq, Uganda, Egypt and Lebanon. Meanwhile, countries with poverty levels above 30% are Bangladesh, Gabon, Yemen, Syria, Afghanistan, Benin, Kyrgizstan, Cameroon, Mauritania, Ivory Coast, Mali,

Comoros, Nigeria, Sudan, Burkina Faso, Chad, Senegal, Tajikistan, Gambia, Sierra Leone, Mozambique, Guinea, Togo, Niger and Guinea Bissau (see Figure 1).

One indication that could explain the poverty phenomenon in Islamic countries above is uneven the distribution of wealth. Figure 2 shows that a comparison of Gini index in Islamic countries (OIC) by grouping the Gini index into three sections i.e. low (below 0.3), medium (0.3-0.5), and high (above 0.5). The countries who are in the lowest level are Kazakhstan and Afghanistan. While Pakistan, Tajikistan, Iraq, Azerbaijan, Egypt, Bangladesh, Mali, Kyrgizstan, Albania, Niger, Sudan, Sierra Leone, Jordan, Syria, Tunisia, Uzbekistan, Maldives, Yemen, Benin, Iran, Cameroon, Togo, Guinea, Chad funds Burkina Faso, Turkey, Senegal, Mauritania, Morocco, Indonesia, Qatar, Gabon, Ivory Coast, Malaysia, Uganda, Mozambique, Gambia and Nigeria are in the middle the country which the highest is Comoro. This inequality indicated that there are still many OIC countries need income redistribution effort.

These facts expalans that the poverty needs a major concern, particularly in countries with a Moslem majority population. This is important because the issues of poverty may be implicated to the social problems, economics, and politics in the societies. Many studies have been made in order to provide inputs for policy makers to reduce poverty in many countries, especially developing countries. In general, the studies carried out by using the modern economics approach. In the history of Islam, one of scholar that reviewed poverty issues was Ibn Khaldun. He argued that poverty is caused by degeneration of society by invalid political as a result of a lack of democratic principles that lead to a variety of wickedness.

Poverty is not only due to the economic dimension, but also it is influenced by non-economic factors such as moral, intellectual, social, demographic and political so the solution for elamitaing is not only in the economic field, but also it should be balance among other sectors (Ibn Khaldun in Chapra, 2001) . The explanation from Ibn Khaldun indicated that poverty is a classic problem and has a wide dimension, so that policy strategies in an effort to its eradicate cannot be a single role.
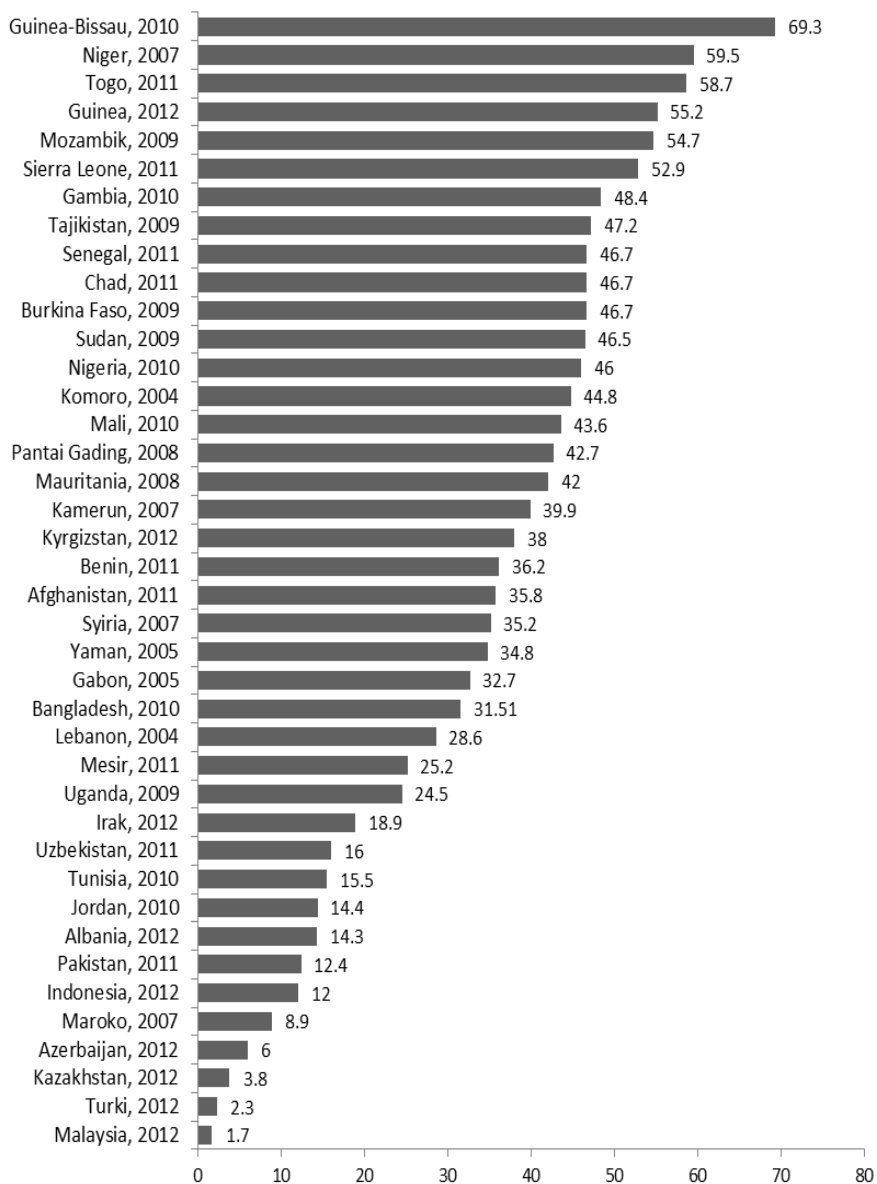
**Figure 1. The Percentage of Poverty in OIC Countries**

Source: World Bank, ADB, AFDB (processed)

This study objective is to analyze the factors that influence poverty in OIC countries by by refering to Ibn Khaldun development model. The topic is interesting because the OIC countries have Moslem majority population which are supported by abundance of potential natural resources to overcome the poverty problem. on the other hand, the reason of using Ibn Khaldun model i.e. this model is more comprehensive perspective in viewing the various aspects of development such as the role of government, economic development, the country's wealth, human resources, justice and sharia while the development in modern economics perspective does not

include sharia aspects. With study, however, is expected to explain the factors that affect poverty in a broader dimension, so that it can provide the input to the policy makers (especially inthe OIC countries in an attempt to design policies that can reduce poverty in these countries.
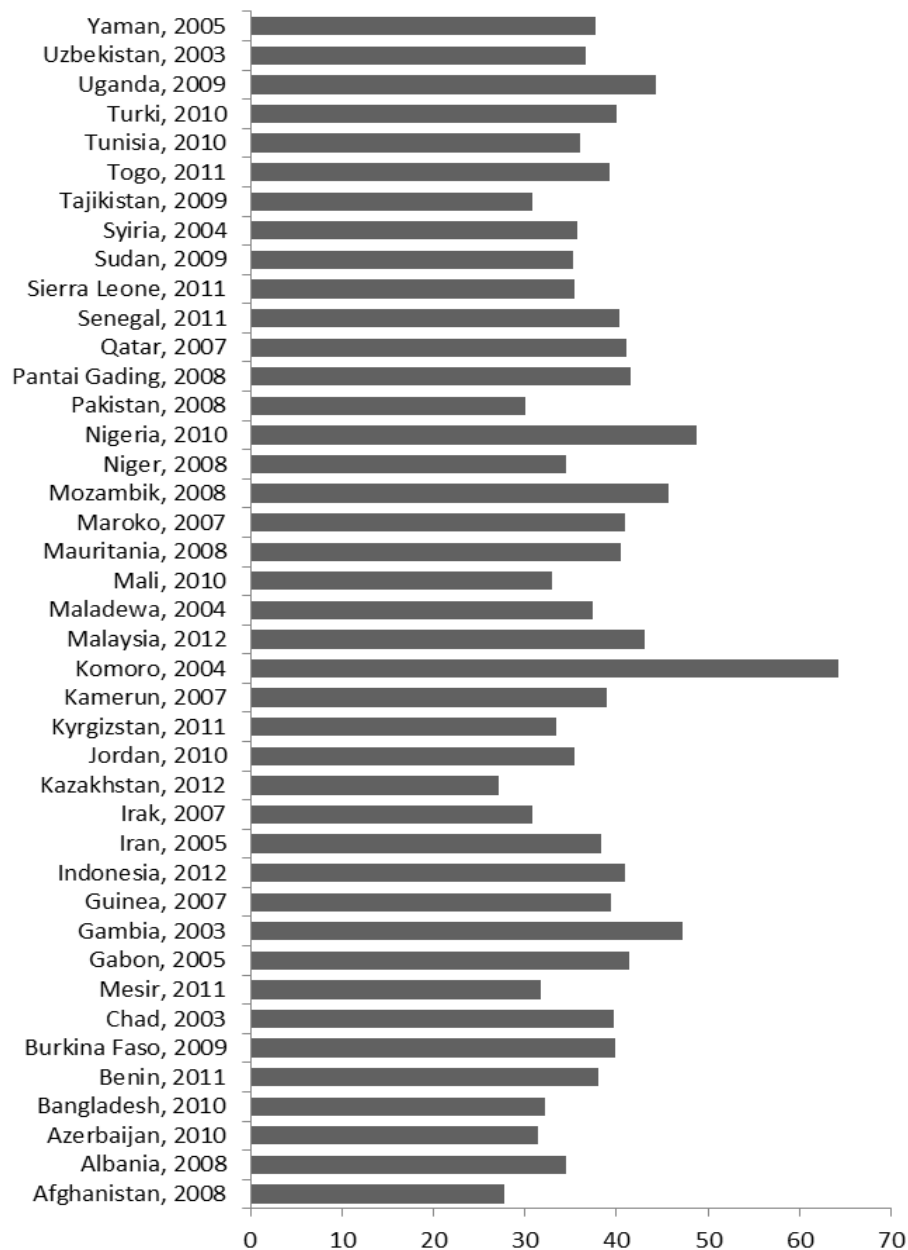


**Figure 2. GINI Index of OIC Countries**

Source: World Bank, ADB, AFDB (processed)

## METHOD

This study used a secondary data using panel data structure from 2003 to 2012 and covering nine OIC country members i.e. Indonesia, Turkey, Azerbaijan, Kazakhstan, Kyrgizstan, Tajikistan, Benin, Egypt and Malaysia. Selection of countries is based on three reasons i.e. (i) representing countries are with different income levels; (ii) geographically, these countries represented the different of continent; and (iii) due to the availability of data. These data came from a variety of sources, including: World Bank, the United Nations Development Programme, Transparency International, the Asian Development Bank, African Development Bank, the Central Bureau of Statistics, and various other official literatures. A variety of variables used in this study are summarized in Table 1.

**Table1.Data and Data Sources**

| No. | Variable | Definition | Unit | Source |
|---|---|---|---|---|
| 1 | Pov | National poverty line (% of population) | Percent | World Bank, ADB, AFDB |
| 2 | Inv | Foreign direct investment (%of GDP) | Percent | World Bank |
| 3 | GDP | GDP/capita(based on prevailing international prices constant $ 2005) | US $ | World Bank |
| 4 | Gini | Gini index | Value | World Bank, ADB, AFDB, Statistic Bureau |
| 5 | Hlth | Government expenditure on health (%PDB) | Percent | World Bank |
| 6 | Educ | Government expenditure on education (%PDB) | Percent | World Bank |
| 7 | IPM | Human Development Index | Value | UNDP |
| 8 | IPK | Corruption Perception Index | Value | Transparency International |
| 9 | UNP | Total unemployment (% of total work force) (control variable) | Percent | World Bank |

An empirical specification model in this paper refers to Ibn Khaldun development model. According to Ibn Khaldun that people are the centre of civilization which view of the changes of culture or civilization depends on welfare and difficulty of human life. In his analysis, the phenomenon of the ups and downs of a civilization not only depends on economic variables, but also it relies on a number of other factors determining the quality of individual, societies, authorities and

institutions. Therefore, the Muqaddimah book triesto determine the factors that affect quality by analysing the factors that interconnected such as the role of moral, psychological, political, economic, social, demographic and historical (Chapra, 2001).

Poverty alleviation is not only just limited to the economic dimension, but also non-economic dimension, the moral, intellectual, social, demographic and political. In summary, the determinant of poverty on Ibn Khaldun perspective model can be expressed as:

$$P = f \,(W, G, N, S, g \text{ and } j) \tag{1}$$

Equation (1) explains that poverty (P) is a function of the country's wealth (W), the role of government (G), human resources (N), sharia (S), development (g) and justice (j). The Indicators that presented in equation (1) is still fairly common. Therefore, this paper uses numerous variables that more operational as a proxy of the indicators. Referring to the equation (1), in summary of poverty determinant model on this paper is

$$Pov_{it} = \alpha_0 + \alpha_1 GDP_{it} + \alpha_2 Inv_{it} + \alpha_3 Gini_{it} + \alpha_4 Hlth_{it} + \alpha_5 Educ_{it} + \alpha_6 IPM_{it} + \alpha_7 IPK_{it}$$
$$+ \alpha_8 UNP_{it} + \mu_{it} \tag{2}$$

Where:

| | | |
|---|---|---|
| Pov | = | Poverty level |
| Inv | = | GDP per capita |
| GDP | = | Investment |
| Gini | = | Gini Index |
| Hlth | = | Government expenditure on health |
| Educ | = | Government expenditure on education |
| IPM | = | Human Development Index |
| IPK | = | Corruption Perception Index |
| UNP | = | Unemployment level |
| $\alpha_0$ | = | Intercept |
| $\alpha_1, \alpha_2, \alpha_{3,...,} \alpha_8$ | = | Coefficient of independent variable |

The relationship between human resource and poverty

According to Ibn Khaldun that human is the centre of country development because the development level of civilization and governance is closely linked to

welfare or human misery or society. From these statements, it can be concluded that between there is a negative relationship between human resource and poverty. It also refers to the previous results which confirm that human development index has significantly affects to poverty (Setyaningsih, 2012; Affandi & Astuti, 2013).

The relationship between government role and poverty

According to Ibn Khaldun, the country is represented by the government that has an important role in public life. The government role through state spending (education and health) can play a role in poverty alleviation. In this case, the government role has a negative correlation with poverty. It also confirms the previous results that government spending on health and education sectors significantly affect to poverty (Setyaningsih, 2012; Affandi & Astuti, 2013).

The relationship between justice and poverty

According to Ibn Khaldun, the justice ensures the community welfare through the fulfilment of their respective obligations and equally in savouring the development equitably. In this context, justice and poverty are closely related. If the justice in a country already is enforced, there is no inequality between rich and poor and it will reduce poverty. It also refers to the results of previous research which confirmed that the Gini index significantly affects poverty (Setyaningsih, 2012; Affandi & Astuti, 2013; Chemli & Smida, 2013; Agrawal, 2008).

The relationship between wealth of country and poverty

According to Ibn Khaldun wealth of country is needed for the societies welfare, therefore he emphasized that the role of investment in more depth. From these statements can be said that there is a relationship between the country's wealth and poverty. In many literatures, the wealth of country variable is approximated by GDP per capita. It also refers to the previous results which confirmed that GDP per capita significantly affect to poverty (Affandi & Astuti, 2013).

The relationship between development and poverty

According to Ibn Khaldun, an increase in revenue will contribute to the tax revenue improvement and allow the government to spend more on welfare. This argument indicated that there is a negative correlation between development and poverty. In this study, development variable is proxied by foreign direct investment. It

also refers to the previous results which confirmed that foreign direct investment significantly influences poverty (Setyaningsih, 2012; Affandi & Astuti, 2013).

The relationship between sharia and poverty

According to Ibn Khaldun, application of sharia is needed in helping people to embed social values that are desirable. This statement implied that there is a negative relationship between sharia and poverty. In general, if the Islamic principles in a country are already confirmed, it will reduce the level of poverty. In this study, sharia variableis approached by corruption perception index. If the value is high then the corruption perception index in general will reduce poverty. It also refers to the previous results which confirmed that the corruption perception index significantly affects poverty (Affandi & Astuti, 2013).

## DISCUSSION

The estimation result of poverty determinant model is showed in table 1. The coefficient estimation which is presented is the result of four data panel estimation methods i.e. Pooled Least Square (PLS), Fixed Effects Model (FEM), Random Effects Model (REM), and Generalized Least Square (GLS). Using various methods of estimation is expected to show the variations in results among different estimation used. In general, the four estimation methods showed good results, except the FEM models. It can be seen that from the level of significance and sign of coefficient estimation is generated from the model. In the four estimation methods used, it appears that the FEM preferred over two other estimation methods i.e. PLS and REM. This is reflected in the test statistic value from Chow and Hausman test. Each value was significant on the level of 1%. The Chow test result indicated that the FEM is more prefer than PLS while Hausman test result indicated that FEM is preferable than REM. However, the estimation results that produced by FEM approach still experiencing symptoms of autocorrelation. It is shown by the value of Wooldridge test statistic for auto correlation in panel data which had a significant on the level of 1%. Meanwhile, the data panel model is estimated using FEM approach still experiencing symptoms heteroscedasticity. This can be seen from the value of the Wald statistic test for group wise heteroscedasticity had a significant on the level of 1%. In addition, if we look at

the results of FEM estimation model, an independent's variable that significant was only 2 of 8 variables.

According to Pindyck and Rubinfeld (1998), actually, heteroscedasticity and autocorrelation symptoms do not affect the validity of model, which means that the model still is not biased and consistent, only the estimators that had been resulting were inefficient. To resolve these symptoms, GLS approach is used to accommodate the autocorrelation and heteroscedasticity in the panel data model. The estimation result of the model with GLS approach gives a good result. This can be seen from the value of the high of F statistic, amounting to 395.82 which significant on the level of 1%. This value explained that the independent variables used in the model affect to poverty. Individually, health budget, GDP per capita, investment and unemployment variable hada real impact on poverty while education budget, Gini index, HDI, and the corruption perception index variable did not significantly affect poverty. However, Gini index variable at the FEM models is significant only, so we can use the estimation because it is consistence to economic theory.

Role of government variablesthat is proxied by government spending on health sector found a positive and significant impact on poverty. This result is contrary to Todaro and Smith (2006), which stated that one of the causes of poverty is health services and facilities that are poor and very limited. This opinion is in line with Ibn Khaldun where the government's role in poverty alleviation program through health budget policy can address the problem of poverty. The most probable reason to explain these findings is the budget allocation for health in the OIC countries is still lack a proper target. In this case, the increase of health budget is further reducing the government budget in other sectors that can reduce poverty. The other reason is possible that weak implementation of health institutions which makes health programs vulnerable to misappropriation. This is supported by the corruption perception index score in 9 OIC countries categorized still low, which means that the countries must solve the institution problems.

Role of government variable, which is proxied by issuing education sectorhas no significant effect on poverty. This result is contrary to existing theories where government spending on the education sector should have a significant effect on poverty. According to Todaro and Smith (2006), one of poverty causes is education

facilities in some developing countries as well as curriculum content that are relatively less relevant and less than adequate. If it refers to the theory clearly stated that the government's effort in poverty alleviation in particular through adequate education budget is a good formula to solve poverty. However, sometimes the cost of education makes poor people cannot afford a higher education that ultimately affect the low-level of job with a low salary even does not have a job anyway. Therefore, equitable education for the people, especially providing funds education for poor people is very essential. This is in line with Ibn Khaldun thought which the government's role in ensuring education for its people is important because it can overcome poverty themselves. Differences econometric results with the theory that there might be due to an increase in the education budget should be supported by the provision of jobs that would allow them to reduce unemployment and will ultimately reduce poverty. Although contrary to the theory, it turns out the study (Setyaningsih, 2012) also stated that the same thing which the government budget for education sector does not have a significant effect in both of Moslem and non-Moslem. On other research, (Affandi & Astuti, 2013) also have the same outcome where Pakistan, Malaysia and India, education budget variables are not significant influence to the level of poverty.

The wealth of the country variable through a proxy of GDP per capita has a significant negative effect on poverty. This resultis in line with the notion of Kuncoro (2000) that explains that poverty is caused by income per capita low problem. This finding indicated that the high of income per capita can overcome poverty because people's needs are met well. This finding is consistent with Ibn Khaldun in which the wealth of country role is needed because it can be beneficial for the people. This is reflected by a high per capita income. These findings also support Guiga findings and Rejeb (2012), Setyaningsih (2012), Affandi & Astuti, 2013) which confirms that the income per capita has a significant effect on poverty with a negative relationship.

Justice variable that is proxied through the Gini index has a significant effect on poverty in OIC countries with a positive relationship. The findingis in line with the opinion of Todaro and Smith (2006) that stated that poverty triggered by the revenue distribution gap. In this context, a fair distribution of income to prevent poverty due to the economic results is not only enjoyed by rich people, but also it can be enjoyed by the whole society. This finding is also in line with Ibn Khaldun that explained the

fundamental importance of the justicerole in the country. These findings support Guiga and Rejeb (2012), Affandi and Astuti (2013), Chemli and Smida (2013) that confirms that the Gini index has a significant effect on poverty with a positive relationship.

Development variableis proxied through investing has a significant positive impact on poverty in OIC countries. This result is contrary to existing theories. According to the World Bank, one of the poverty causes from the perspective of people lack access to physical assets (e.g. capital, means of production facilities and infrastructure). That theory is accordance with Ibn Khaldun that the capital development will increasingly provide the higher level of benefit when it is used to investment, compared to the stored alone. Given the importance of investing in poverty alleviation, an investment should negatively affect to poverty. The difference in the results of econometric theory that there may be caused by using a variable approach to foreign direct investment, so the bigger of foreign direct investment coming into the OIC countries that actually has a less benefit which can be obtained by the public, in other words, investment gains only felt by foreigners investor. So the greater the value of foreign direct investment was even more increased poverty in OIC countries. So, between investment and poverty should have a negative relationship.

Human resource variable that is proxied through human development index (HDI) has a significant effect on poverty in OIC countries. Econometric result is opposite with Chiller (2004), which stated that one of poverty causes is lack of motivation or both of these skills will affect to the human resources. If lack of motivation and skills, it will cause less competent of human resources. Ibn Khaldun also confirmed that the human is the centre of country's development, because the development level of civilization and governance is closely linked to welfare or misery of humanity in the countries. The difference of econometric result that there might be due to HDI indicators are measured from three main indicators is still not enough representing human development. Chapra (2008) described that there are other indicators that are equally important in supporting HDI among them i.e. justice, family, job security, harmonious society and safety environment as well as many more other aspects that could represent so that a more comprehensive HDI. Nevertheless, theresult of this study has also supported (Affandi & Astuti, 2013) where in Malaysia

and India dynamic model variable of Ibn Khaldun did not affect significantly to the level of poverty.

Sharia variable is proxied by the corruption perception index (CPI)has no significant effect on poverty. This result does not reinforce Ibn Khaldun explained that nothingness of sharia would lead to inequality, imbalance and frustration which in turn will lead to economic decline and disintegration of society that will ultimately affect the poverty itself. Differences of econometric result with the theory that there might be due to a CPI proxy are still considered far in representing sharia approach. Additionally, CPI approach cannot be seen simply as an indicator of the state assessment corrupt or not because it does not measure the efforts that have been made to eradicate corruption. The index is supposed to be juxtaposed with other surveys related to corruption to make it look integrally. The use of respondents confined among experts and business people could cause the resulting assessment to be biased. Nevertheless, the result of this study has also supported (Affandi & Astuti, 2013) where in Pakistan, Malaysia and India dynamic model variable of Ibn Khaldun did not affect significantly the level of poverty.

Last, control unemployment variable has a positive influenced significantly to poverty. This finding is consistent with Sukirno (2004) that stated that the adverse impact of unemployment is reducing public revenue and reducing the level of prosperity that they have achieved. In this context, unemployment triggers poverty, because poverty is closely related to the low income. This finding strengthens Prastyo (2010), Purnamasari (2013), Hakim (2013), which asserted that unemployment significantly influences poverty with a positive relationship.

## CONCLUSION

This study discusses the determinants of poverty in 9 OIC countries during the period of 2003 – 2012 using an Ibn Khaldun development model perspective. In implementation, Ibn Khaldun development indicators are proxied for more operational variables. The estimation result found that the variables that significantly influence poverty are the health budget, GDP per capita, investment, and unemployment while the education budget, the Gini index, HDI, and CPI found no significant effect. From these findings can be underlined that the partial is not all Ibn Khaldun development

model variables have a significant effect on poverty in the OIC countries. The variables encountered contribute significantly to poverty reduction is GDP per capita while unemployment seen as contributing factors in triggering poverty in OIC countries. Health budget and investments variables may contribute to reduce poverty, it is encountered a driving factor of poverty. The result indicated that the implementation of the health budget and investment are still not effectively reducing poverty in the OIC countries.

The fact that the health sector and education budget have not been able to reduce poverty significantly, it advise the government in the OIC countries should optimize the budget implementation in the program. One effort that can be done for example is by improving the performance of institution providers in the country. Thus the allocation of health and education sectors funds that have been budgeted can contribute significantly to the development of public health and education, especially the poor. OIC countries government also need to make efforts to increase economic growth by relying on the potential of its resources. This is important because the study finds that the increase in GDP per capita has an important role for poverty alleviation in the OIC countries. Lastly, the OIC countries should also pay more attention to the unemployment rate that occurred. This is important because the study also found rising unemployment impacting significantly to the increase in poverty in the OIC countries. In this case, the effort that should be done by the government is to ensure the availability of new jobs, considering the number of workforce in the OIC countries increasingly growing every year.

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