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The effect of islamic education on economic growth (Indonesian and Malaysian studies)

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Abstract

This study aims to determine the relationship between the level of Islamic education towards economic growth in Indonesia and Malaysia. The study was conducted by using test Autoregressive Distributed Lag (ARDL) and Granger Causality Test. The results of the study showed that the highest independent variables of education that were completed at the primary, secondary and tertiary levels in the long term did not affect economic growth, but in causalities relations were related to one another. In conclusion, there is a one-way causality relationship between Islamic education variables on economic growth in Malaysia.

Keywords: GDP, Education, Economic Growth.

El efecto de la educación islámica en el crecimiento económico (estudios de Indonesia y Malasia)

Resumen

Este estudio tiene como objetivo determinar la relación entre el nivel de educación islámica hacia el crecimiento económico en Indonesia y Malasia. El estudio se realizó mediante el uso de la prueba Autoregressive Distributed Lag (ARDL) y Granger Causality Test. Los resultados del estudio mostraron que las variables independientes más altas de educación que se completaron en los niveles primario, secundario y terciario a largo plazo no afectaron el crecimiento económico, pero en las relaciones de causalidad se relacionaron entre sí. En conclusión, existe una relación de causalidad unidireccional entre las variables de educación islámica sobre el crecimiento económico en Malasia.

Palabras clave: PIB, Educación, Crecimiento Económico.

1. INTRODUCTION

Education in an Islamic perspective is seen as very important. Education in an Islamic perspective is interpreted as seeking knowledge, not only to help humans obtain a decent life but more than that. Afzal (2010) explains that human science is able to recognize his god, refine his morals, and always try to seek pleasure. The virtues of knowledgeable people in Islam are found in the words of the Prophet: The superiority of the expert ('alim) to the worshipers ('abid) is my excess towards the lowest among you, then the Prophet continued: Verily, the angels Him and the inhabitants of heaven and earth until

the ants in their nest and fish always ask for mercy on those who teach goodness to humans (Narrated by Tirmidhi). Chapra (2012) explains that the primacy of the person im alim as referred to in the Tirmidhi history Al-Hadith above is the scientific existence and reward he receives.

Education can influence the development of human resources so that it can make the workforce more productive and qualified. On this basis, the last level of education completed by labor is used as a proxy for human resources. The last level of education that is completed by labor is a proxy that is most often used as an indicator of the progress of a country's growth. There is potential to develop an education which is the main way to improve the quality of human capital. Indonesia and Malaysia have considerable human resources, especially for Indonesia. This shows that the need for cooperation in the field of education among the two countries has a good role in advancing the human capital of its member countries. The link between education and economic activities in the two countries is very large because economic activities really need support from the education sector in improving the quality of human capital.

Although the development of education in Indonesia has not been primarily satisfactory, there seems to be a clear direction in the strength of the relationship between education and the increase in Gross Domestic Product (GDP). Based on the description of the background above, it is necessary to conduct a study of the influence of the Level of Education on Economic Growth in Indonesia and

Malaysia in 1975-2015. This study was designed to empirically answer the strength of the relationship using the panel data regression approach. The results of this study will provide guidance for the government in designing future education planning and can be taken into consideration in determining education and economic policies.

2. LITERATURE REVIEW

2.1 Independent Variable Relationships (Education) and Dependent Variables (GDP)

Ali (2009) explains there are interesting findings about the relationship between education and economic growth in research in South Korea, the results of this study are the average education level of the population gives a real impact on economic growth, both seen from the indicators of PNB, GDP, or income per capita. There is a clear relationship between education and GDP, which is evident from a large number of students completing the basic education level and the level of continuing to a higher level is also quite a lot. In accordance with the results of the research put forward in the book by Ali (2009) that the average level of education must be achieved first to be a prerequisite for the occurrence of high economic growth on an ongoing basis. Ali (2009) describes the results of the analysis of his research which estimated the effects of three levels of education on economic growth in Greece during the period 1960-2009 (Ehrlich & Kim, 2015).

The study estimates the contribution of education to economic growth using the neoclassical model and the level of school enrollment as a proxy for human capital. The results of the study show that in the long run, the GDP elasticity of primary, secondary and high education is -2.81, 0.55 and 0.52. The results also show that there is a long-term unidirectional relationship from basic education to growth, a long-term two-way relationship between secondary education and growth, a long and short two-way relationship from higher education to economic growth. The overall conclusions from the study indicate that secondary and high education has a positive contribution to economic growth. The level of education is considered as one of the important aspects of human resources and economic growth. The higher the level of education pursued by a person, the more employment opportunities offered by business owners, so that it will increase income per capita (Gujarati & Dawn, 2009).

3. RESEARCH METHOD

This study uses a quantitative approach. Anshori (2013) explains a quantitative approach is an approach that has the main focus in testing hypotheses, the data analyzed is measured in nature will produce conclusions that can be generalized. This study uses panel data regression analysis techniques. Panel data regression analysis is a combination of cross section and time series data types. This analysis develops a regression theory analysis framework by facilitating the

incorporation of time and space sequential data, so as to provide benefits in the form of heterogeneity that is not possessed by time series form regression (Direktorat, 2013).

3.1 Variable identification

There are two types of variables used in this study, namely the dependent variable and the independent variable, namely:

1. Bound Variables (Dependent Variable).

Gross Domestic Product (GDP) per capita based on the 2010 base year constant price of the 1975-2015 Indonesia and Malaysia countries as a proxy for economic growth.

2. Free Variables (Independent Variable).

a. The highest education completed primary level

b. Highest education secondary level

c. The highest education tertiary (Eggoh, 2015).

3.2 Operational Definition of Variables

The operational definitions of the variables used in this study are as follows:

1. Gross Domestic Product (GDP) per capita based on constant prices produced by all business units in a particular country or the total value of the final goods and services produced by all economic units.

GDP is divided into two types according to the calculation of GDP at the current price and GDP at constant prices. This study uses GDP at constant prices calculated using prices that apply to a given year as the base year. GDP at constant prices (real) shows the rate of overall economic growth or each sector from year to year. The type of GDP used in this study is GDP per capita at constant 2010 prices. GDP per capita on the basis of constant 2010 prices is derived from GDP divided by mid-year population, GDP data on the basis of constant prices in 2010 US dollars ($).

2. Highest Islamic Education Completed in Primary (Chi, 2008).

The highest Islamic education completed by the primary level is the number of productive age population namely 15+ in the country of Indonesia and Malaysia in 1975-2015 who have completed the highest class at the elementary level, namely Junior High School or equivalent proved by graduation. The highest education completed by the primary level is expressed as a percentage.

3. Highest Islamic Education Completed Secondary Level

The highest education completed by secondary level is the number of productive age population, namely 15+ in Indonesia and Malaysia in 1975-2015 who have completed the highest class at the middle level, namely High School or equivalent as evidenced by a graduation mark. The highest education secondary level is expressed as a percentage (Babatunde & Rasak, 2005).

4. Highest Islamic Education with Higher Levels

The highest education tertiary level is the number of productive age population, namely 15+ in Indonesia and Malaysia in 1975-2015 who have completed diploma education programs, bachelor, master, specialist, and doctoral degrees held by higher education institutions proven by graduation marks diploma). The highest education tertiary level is expressed as a percentage (Badan, 2016).

3.3 Types and Data Sources

The type of data used in this study is secondary data, in the form of panel data (pooled data) which is a combination of cross data (cross section) and time series data (time series), in Indonesia and Malaysia. The type of data used in this study is secondary data in the form of quantitative panels, which are in the form of the highest education data that is completed once every five years in the form of numbers in the period 1975-2015 (9 periods) and GDP of Indonesia and Malaysia in the period

1975-2015. Data sources were obtained from the official World Bank website, scientific journals, research results and other reading sources related to the variables used for the purposes of this study.

3.4 Data Collection Procedure

The procedure for collecting data in this study uses literature studies and secondary data, following further explanation:

1. Literature study: looking for theories that support previous research and literature in order to solve problems and find alternative solutions to research carried out, in the form of journals, theses, theses, or articles.

2. Secondary data collection: obtained from the official World Bank website.

4. DISCUSSION

4.1 Long-term relationship between the Islamic Education Sector and economic growth in Indonesia

The statistical test results show that there is no long-term relationship, this is clarified by the results obtained from the Johansen cointegration test. The cointegration test results in this study are:

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. vecrank lngi lnei, lag (2)

                        Johansen tests for cointegration
Trend: constant                                    Number of obs =        8
Sample:  3 - 10                                         Lags =        2

                                                       5%
maximum                                      trace    critical
  rank     parms       LL     eigenvalue   statistic   value
   0         6     5.3822488        .        8.8420*   15.41
   1         9     9.2104476     0.61598     1.1857     3.76
   2        10     9.8032727     0.13775
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From the results above, we can see the cointegration test using the Johansen Test. The results show that Islamic education and economic growth variables are not cointegrated in the long term, which is indicated by trace statistic <critical value 5%. So, in the long run, the variables will not affect each other. This shows that Islamic education in Indonesia has not been able to increase economic growth, because the percentage of Islamic education is still dominated by Madrasah and Tsanawiyah education so that in the long term it has not been able to provide the skills needed by the world of work.

4.2 Long-term relationship between the Islamic education sector and economic growth in Malaysia

There is a long-term relationship, this is clarified by the results obtained from the Johansen cointegration test. The cointegration test results in this study are:

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                    Johansen tests for cointegration
Trend: constant                                Number of obs =      8
Sample:  3 - 10                                       Lags =        2

                                                   5%
maximum                                   trace    critical
  rank     parms        LL     eigenvalue statistic   value
    0        6      -23.301205      .       19.0758   15.41
    1        9      -15.466532   0.85895     3.4064*   3.76
    2       10      -13.76332    0.34676
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From the results above, we can see the cointegration test using the Johansen Test. The results show that Islamic education variables and economic growth are cointegrated in the long run, which is indicated by trace statistics greater than the 5% critical value. So, in the long run, the variables will influence each other. This shows that Islamic education in Malaysia has not been able to increase economic growth, because the percentage of Islamic education is not evenly distributed at the level of Aliyah education and above. This means that education in Malaysia in the long term has not been able to provide the skills needed by the world of work.

4.3 Causal relations between the Islamic education sector and economic growth in Indonesia

The results obtained from this study are:

Equation	Parms	RMSE	R-sq	chi2	P>chi2
lngi	5	.464672	0.4822	7.451208	0.1139
lnei	5	.119463	0.9384	121.9732	0.0000

From the test results above, it can be concluded that:

1. Economic growth variables affect variable education.

2. Education variable affects economic growth variables.

So, there is two-way causality, namely from economic growth to education. Economic growth influences Islamic education, meaning that with economic growth that is prosperous the community will increase the opportunity to take education. Islamic education influences economic growth, meaning that Islamic education in Indonesia, which is relatively large in number from the basic to secondary education, is able to motivate and improve skills so that education can increase economic growth.

4.4 Long-term relationship between the Islamic education sector and economic growth in Malaysia

The results obtained from this study are:

Equation	Parms	RMSE	R-sq	chi2	P>chi2
lngm	5	.931653	0.3259	3.8672	0.4243
lnem	5	.936417	0.8664	51.87266	0.0000

From the test results above, it can be concluded that:

a. Economic growth variable does not affect the Education variable

b. Educational variables affect the variables of Economic growth

So, there is one-way causality, namely from education (education) affecting economic growth (economic growth). This shows that education in Malaysia is quite stable in its development, a high awareness of education, so that whatever happens in economic conditions does not affect education. Likewise, Islamic education pursued by residents of Malaysia fulfills the skills needed by the workforce, so as to be able to provide welfare for the population, or in other words to increase economic growth in Malaysia. So Islamic education affects the improvement of the economy. By using VAR (Vector Autocorrelation Regression), variance decomposition and impulse response function are generated to further assess the interaction between variables, especially the proxy of the Islamic education sector and economic growth.

The results of this study generally show, in the long run, that Islamic education represented through education from madrasas to tsanawiyah is positively and significantly related to economic growth in Indonesia. This shows empirically that the presence of Islamic education is not only theoretically and ideologically able to contaminate the economic activities of a country, but this theory can be empirically proven in the scope of education and the economic sector in Indonesia. Through the results of this study, Islamic education has effectively played its role as an educational institution that facilitates the mobilization of human resources. Therefore, we can say that government policies to develop a comprehensive Islamic education system in Indonesia are considered effective as long as the development of the education sector and economic growth / real sector are strongly linked.

This research also indicates that improving education infrastructure in Indonesia will provide benefits to economic development and this is important in the long term for the development of public welfare. Malaysia, which is the object of this research, is relatively more serious in handling education, planning and even distribution of education. so that the progress and welfare of the people are more assured.

5. CONCLUSION

Based on the results of statistical tests and discussion of research, the conclusions of this study are:

a.   There is no long-term relationship between Islamic education variables on economic growth in Indonesia.

b.   There is a long-term relationship between Islamic education variables on economic growth in Malaysia.

c.   There is a causal relationship between Islamic education variables on economic growth in Indonesia.

d.   There is a one-way causality relationship between Islamic education variables on economic growth in Malaysia.

6. SUGGESTION

a.   Education is important in the development process, among others, as a breaker in the chain of economic shortages. Thus, the government needs to increase the education budget so that qualified human resources can be achieved.

b.   All components of the nation should have the same motivation in efforts to advance education so that the development target of education can be achieved.

7. CONFLICT OF INTEREST

The author confirms that this article content has no conflict of interest.

8. ACKNOWLEDGEMENTS

REFERENCES

AFZAL, M. 2010. **Relationship Between School Education and Economic Growth in Pakistan: ARDL Bounds Testing Approach to Cointegration**. Pakistan Economic and Social Review. Vol. 48, N° 1: 39-60. Pakistan.

ALI, M. 2009. **Pendidikan untuk Pembangunan Nasional**. Jakarta: Grasindo. Indonesia.

ANSHORI, M. 2013. **Buku Ajar Metodologi Penelitian Kuantitatif**. Surabaya: Airlangga University Press. Indonesia.

BABATUNDE, M., & RASAK A. 2005. **Long Run Relationship between Education and Economic Growth in Nigeria: Evidence from the Johansen's Cointegration Approach**. Senegal: Cornell University. West Africa.

BADAN, P. 2016. **Penduduk Berumur 15 Tahun Ke Atas Menurut Jenis Kegiatan Tahun 1986-2016**. (Online), (http://www.bps.go.id, diakses pada 5 Januari 2017). Indonesia.

CHAPRA, M. 2012. **Ibn Khaldun's theory of development: Does it help explain the low performance of the present-day Muslim**

world? The Journal of Socio-Economics. Vol. 37, pp. 836-863. Netherlands.

CHI, W. 2008. **The Role of Human Capital in China's Economic Development: Review and New Evidence**. China Economic Review. pp. 421–436. China.

DIREKTORAT, J. 2013. **Buku Statistik Pendidikan Islam Tahun Pelajaran 2011/2012**. Jakarta: Kementerian Agama. Indonesia.

EGGOH, J. 2015. **Education, Health, and Economic Growth in African Countries**. Journal of Economic Development. Vol. 40. N° 1. Netherlands.

EHRLICH, I., & KIM, J. 2015. **Immigration, Human Capital Formation and Endogenous Economic Growth**. National Bureau of Economic Research. USA.

GUJARATI, N., & DAWN, C. 2009. **Dasar-dasar Ekonometrika**. Edisi kelima. New York: Mc. Graw-Hill. USA.