

# THE ROLE OF BAITULMAL TOWARDS THE EDUCATION OF POOR MUSLIMS IN SARAWAK

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## **Abstract**

Malaysia has a vision of becoming an international centre for education. It has formulated policies and programmes to achieve this noble vision. Several agencies have been established to operationalize these government educational programmes. In addition to these agencies, there are institutions that have also played remarkable roles towards education in Malaysia, notably the *Baitulmal*. The present study examines the role of *Baitulmal* towards educating poor Muslim students in Sarawak. Specifically, the study investigates the relationship between total expenditure growth rate of *Baitulmal* as dependent variable and five independent variables, which include the growth rates of total zakat collection, total expenditure on university student, total expenditure on secondary and primary student, total expenditure growth rate on university student and total expenditure growth rate on secondary and primary students. An Augmented-Dickey Fuller (ADF) unit root test, Johansen and Juselius cointegration approach and causality test based on Vector Error Correction Model (VECM) were employed to run the analysis using E-views software. The empirical evidences show that there exist causality effects between the growth rate of *Baitulmal* total expenditure and the growth rates of total collection of *zakat*, total expenditure on university students and, total expenditure on secondary and primary students, among others, in the estimation period. Thus, the results of the study indicate that *Baitulmal* has contributed significantly to the education of poor Muslims in Sarawak in the study period.

**Keywords** Baitulmal, vector error correction model (VECM), zakat.

## **Introduction**

Malaysia is aspiring to become a regional international centre for education excellence. According to the Ministry of Higher Education, Malaysia currently houses more than 50,000 international students from all over the world and expects to attract 80,000 international students to study in Malaysia by the year 2010 (Malaysia MOHE, 2011). This vision is possible given Malaysia's government robust policies, strategies and programmes.

Government policies have contributed positively to the growth of the educational sector in Malaysia. For example, under the New Economics Policy (NEP), the Malaysian government focused on education as a tool to eliminate poverty and restructure the society (Drabble, 2004). M. Z. Ragayah (<http://www.eadn.org>), in her study titled "Explaining the Trend in Malaysian Income Distribution", shows that there were two strategies that are emphasized to address poverty and restructure society in Malaysia. First was the provision of better and more efficient services in education. Second was the accelerated creation of productive employment opportunities in secondary and tertiary sectors.

To operationalize the policies to support its vision, the government has come up with various programmes. According to the Ministry of Education Malaysia, the education sector offers a variety of higher educational programs as well as professional and specialized skills courses that are competitively priced and of excellent quality. Underlying this is the current trend of setting up branch campuses in Malaysia by reputable universities from the UK and Australia. There are various universities from the UK, USA, Canada, Australia, France, Germany and New Zealand that offering twinning, franchised and external degree programs in partnership with Malaysian educational institutions (Malaysia, MOHE, 2011). Moreover, there are other various educational programmes provided by government especially to Malaysian citizens, to boost the literacy level in the country. These programmes include university enrolment quotas, scholarships, education loan and other educational subsidies.

The government policy on education has varied across the states in Malaysia, and many of these states have benefited from these programmes. For instance, the government has facilitated the establishment of several public universities and their campus branches in each state, such as Universiti Teknologi Malaysia, Skudai (UTM) and Universiti Tun Hussien Onn, Batu Pahat (UTHM) in Johor. There are also local programmes that have been designed to cater for educational need of particular states. In Sarawak, there are local programmes at state level, such as Baitulmal, established to cater for educational need of poor Muslim in the state (Baitulmal Fund, Sarawak, 2011). Hence, this paper focuses on the role of Baitulmal towards education in Sarawak. Sarawak is chosen for this study due to its relatively abundant resources, which have the potentials to enhance education especially among Muslim population and equally finance researches and practical studies in various fields. There have been several studies that have investigated the role of Yayasan and Jabatan Perkhidmatan Awam in education. However, there is hardly any literature that has examined the contribution of Baitulmal towards the growth of education especially in Sarawak. This is important given the evidences that Baitulmal has over the past 27years contributed towards the education of poor Muslim in Sarawak. Therefore this study tries to fill this gap by examining the role of Baitulmal toward the poor Muslim in Sarawak.

This paper is divided into five sections. The subsequent section that immediately follows reviews the related works on Baitulmal and its role towards education especially in Sarawak. Section three discusses the research methodology used in the study. Section four presents and discusses the results of the findings. The final section 5 concludes the paper and provides recommendations for future research.

## **Literature Review**

In modern state setting, the fiscal treasury of a state is different from classical voluntary institutions, which are considered only as charitable organizations, with no or little impact on the overall fiscal structure of the state. This demarcation between modern fiscal structure and traditional voluntary institutions may not be unrelated to the colonial influence over the legal fiscal systems in Muslims countries (Barizah & Rahim, 2007:36). However, the modern government treasury cannot cover every aspect of welfare security of the state. Thus, voluntary institutions must evolve to support government programmes towards the provision of social security to the citizens including education. Prominent among such institutions are Yayasan and Baitulmal.

Baitulmal is the institution that acts as a trustee for Muslims. It is an old institution that started with the birth of Islam. The revenues of Baitulmal included contributions from war booties, Zakat, voluntary charities and taxes.

During the era of the Prophet Muhammad s.a.w (1-11 H/622-632 M), the management of Baitulmal was carried out by Muslims, the Waliyyul Amri but the distribution of wealth was done by the consent of the Prophet s.a.w and sometimes the Prophet s.a.w himself is involved in the distribution. For example, the ghanimah (war booty) acquired during the Battle of Badar was the right of the Baitulmal. Therefore, all ghanimah collections in Baitulmal were handled and distributed by Prophet Muhammad s.a.w in whichever way he thought was important for the sake of Muslims (Zallum, 1983). In general, during the time of Prophet Muhammad s.a.w. he never kept the property for a long time. The property would be distributed before the middle of the day when it arrived in the morning. If the property arrived in the afternoon, it was distributed before the night time arrived. According to Zallum (1983), during the Prophet's s.a.w time, Baitulmal revenue was not there or at least not retained. This management of Baitulmal continued until Abu Bakar became caliph.

When Abu Bakar became caliph (11-13 H/632-634 M), he continued to carry out the obligations of Baitulmal the way it was done during the Prophet's s.a.w. time. He considered Baitulmal not only as means of providing services to his people but also as a place to keep the Muslim nation's properties safe and sound. Therefore, Abu Bakar prepared a special place in his home, in the form of bags (ghirarah), to keep all properties that were sent to Medina (Dahlan, 1999). After Abu Bakar died, Umar bin al-Khaththab (13-23 H/634-644 M) became the caliph and during his reign he took great care of Baitulmal, received income and other lawful articles in accordance with Shariah and distributed them to the beneficiaries (Dahlan, 1999). Hence, the collections and distributions of Baitulmal revenue, especially zakat, have been practiced since the time of Prophet s.a.w and caliph Abu Bakar as well as Umar bin al-Khaththab. Nowadays, the governments of various Muslim nations have established this significant institution of Baitulmal, mostly to collect and distribute zakat. These countries include Saudi

Arabia, Pakistan, Malaysia, Jordan, Kuwait, Qatar, Bahrain, Bangladesh, Indonesia, Sudan and etc. (Kahf 1989 and 1997).

In recent times, Baitulmal still serves, more or less, the same functions as it had served during the era of the Prophet s.a.w and the first two caliphs. It is still an institution that collects zakat and other Islamic revenues and ensures their distributions to the poor and needy.

The need to enhance Baitulmal as one of the important institutions for financing development in Muslim countries has slowly been gaining currency. For instance, the former Governor of Bank Negara Malaysia, Tan Sri Dato' Jaffar Hussein advanced a proposal to strengthen the institution during the Third International Conference on Islamic Economics in January 1992. At that time he put the total estimate of zakat collection in Malaysia at RM13.3 billion per year, provided it is collected from all those who are obliged to pay (International Islamic University p.21).

Today, in Malaysia, the administration and coordination of treasury are under two different jurisdictions. The state treasury is under the direct purview of the Ministry of Finance Malaysia, while Baitulmal is under the jurisdiction of state local administration (M.T. Hailani, 2007). Most of the funds of Baitulmal in Malaysia are derived from the zakat revenue, sadaqah and waqf. These funds are kept in separate accounts and administered accordingly to their own sets of guidelines. For example, Kuala Lumpur, Putrajaya and Labuan are the most successful in zakat administration in Malaysia because they follow the guideline and procedures laid down by Baitulmal Federal Territories in performing their responsibilities (Pakistan, ATAIC Conference, 2006). The efficiency of zakat administration would help the management in allocating a budget from Baitulmal for various projects. Baitulmal in Malaysia has contributed tremendously towards the welfare of the citizens.

The role of Baitulmal has been flourishing and expanding in most developing Muslim countries, especially Malaysia. Apart from the collection and distribution of zakat proceeds, the role of Baitulmal is now extended for economic growth as well as for the expansion of the education sector. For example, most of the poor Muslim students at various levels which include primary, secondary and tertiary education need financial supports to further their studies. Baitulmal is one of the institutions that have been instrumental in helping them achieve their ambitions. In Malaysia, Baitulmal has initiated two educational projects to further achieve excellence in education among Muslim students. The two educational institutions that have helped in the implementation of these programmes are Baitulmal Professional Training Institute (BPTI) and Baitulmal Skills Training Institute (BSTI), (Pakistan, ATAIC Conference, 2006).

Given the improvement in its administration, Baitulmal continues to allocate specific budgets to the education sector, at all the three major levels, namely primary, secondary and tertiary education. The focus of Baitulmal's budget goes to the education of a number of poor Muslims. This educational assistance is given to these students with the view that one day the recipients will get to help their family out of poverty. Table 1 below shows the number of poor Muslim students in Malaysia and the amount of scholarship given to them by Baitulmal. The table shows the effort that Baitulmal has rendered for the purpose of helping these poor Muslim students to obtain education at schools and universities (Pakistan, ATAIC Conference, 2006). The expenditure for

primary school increased from RM1.95 million in 2001 to RM2.98 million in 2005. Meanwhile, the amount of expenditure for secondary school level in 2001 was RM1.8 million, which increased to RM2.67 in 2005.

At the university level, the expenses from Baitulmal doubled compared to the secondary and primary levels. It increased from RM2.07 million in 2001 to RM3.63 million in 2005. Based on the figures for university level above mentioned, the increments in the amount of expenditure are due to the increase in the number of poor Muslim student entering university. The overall number of poor Muslim students and their financing for primary, secondary schools and university level reached about 50,652 students from 2001 until 2005 with total financing amounting to RM35.69 million. These figures indicate that most of the students performed well in their respective examinations and in turn succeeded in getting their degrees in various fields at the university. These Baitulmal programs have brought the poor Muslim students to the highest level of education and indirectly, given them the opportunities to get better job in future.

**Table 1** Number of Poor Muslim Students and Financial Assistance (2001-2005)

Year	Primary School Scholarship		Secondary School Scholarship		Universities Scholarship	
	No.	RM	No.	RM	No.	RM
2001	3,780	1.95 mil.	4,220	1.8 mil.	665	2.07 mil.
2002	4,224	2.17 mil.	4,576	1.83 mil.	601	2.08 mil.
2003	4,940	2.35 mil.	4,060	2.10 mil.	786	2.15 mil.
2004	5,290	2.77 mil.	4,210	2.33 mil.	1,113	2.81 mil.
2005	5,745	2.98 mil.	5,155	2.67 mil.	1,287	3.63 mil.
TOTAL	23,979	12.22 mil.	22,221	10.73 mil.	4,452	12.74 mil.

Sources: Third ATAIC Technical Conference Association of Tax Authorities of Islamic Countries. 22-25 November 2006, Islamabad, Pakistan

These programs shown in Table 1 above apply to all the states in Malaysia although this study focuses on Sarawak and examines how Baitulmal has been effective in supporting poor Muslim students in Sarawak. Accordingly, Baitulmal has helped Muslim student to enter UCSI University as reported in the news on 17 February 2010 (<http://www.ucsi.edu.my>).

In Sarawak, Baitulmal has widely been helping in matters of virtue and religion among Muslims in the state. It disburses zakat funds directly to the poor or to religious teacher, village midwives and poor Muslim student (Sarawak, Baitulmal, 2011). The assistance given to Muslim needy may help them to support their families especially children. In 2009, Sarawak Baitulmal Fund (TBS) set a target to help Muslim's needy especially the rural folks. According to Assistant Minister in the Chief Minister Office (Islamic Affair) Datuk Haji Daud Abdul Rahman, after launching at "A Day with Baitulmal and MARA in Pustaka's Miri", he said: "TBS generate RM40 million a year. Last year (2008), TBS distributed RM17 million to help the needy Muslim community. Thus there is no need for us to fix yearly financial assistance and TBS is likely to spend RM20 million to RM25 million this year, if necessary"

(Eastern Times, Tue, 21st April 2009). Therefore, Baitulmal in Sarawak is concerned with, and put serious effort towards, elevating the status of Muslims to become competent, respectful, with high integrity, and most importantly intellectuals who fear Allah S.W.T. During the handing out of financial aid to needy students by the political secretary of Chief Minister of Sarawak, Abu Seman said: "This is the main aim of such aid from Baitulmal, that is, to lighten the financial burden of struggling parents, who in most cases have to dig deep into their pockets to send their children to further their studies in an institute of higher learning of their choice" (Sarawak Tribune, Wed, 4th August 2010)

Baitulmal in Sarawak has played important role towards the education of poor Muslim since 1984. These noble contributions from Baitulmal have however not been documented so far. Several literatures on Baitulmal have focused instead on the role of this vital institution in a wider scope, mostly at the national levels. For instance, Saad al-Harran (1994) pointed out that Baitulmal serves as Islamic micro-finance institution that helps micro-entrepreneurs as a strategy for eradicating rural poverty, especially in villages and traditional markets, and it is operationalised based on Shariah principles and cooperation. Hence, as mentioned above, there is hardly any literature that has examined the success of Baitulmal in Sarawak in providing funds for education of the poor Muslims there.

Consistent with its role, Baitulmal of Sarawak has since started to move forward to relieve the Muslims who are caught in poverty and hardship as well as poor Muslim students. For instance, the group of Mustadh'afin (disabled) needs support and assistance, including subsistence allowances, to finance their children's education (Sarawak, Baitulmal, 2011). It is therefore, not impossible now for poor Muslim students to get assistance from the Baitulmal. The poor Muslim students could use wisely the financial assistance from Baitulmal to improve their level of learning by attending higher learning institutions such as university because of the importance of education. Education sector is important because it is one of the vital platforms that give opportunities for Muslim students in Sarawak to find jobs in the labor market as well as reduce their poverty rate. As highlighted earlier, it is easier now for Muslim populace to have access to knowledge in Sarawak due to educational programmes provided by Baitulmal.

Needless to say, the local programs in Sarawak such as Baitulmal has played commendable role in catering for the educational need of poor Muslims in the state (Baitulmal Fund, Sarawak, 2011). Baitulmal has one unique concept. If a person (Muslim students) is offered admission into any university; Baitulmal provides him with advance money as a charity before the person is registered as a student (Sarawak, Baitulmal, 2011). This is one of the viable solutions offered by Baitulmal to lower the burden of poor Muslim students in order for them to fulfill their dream of enrolling into high schools. On the contrary, other public financial institution like Yayasan and Jabatan Perkhidmatan Awam (JPA) only provide financial assistance for those who are already registered as students in universities and their financial assistance are not only specific to Muslims but are extended to everyone regardless of their religion and/or race. This would limit the chance for Muslim students to obtain scholarships from these two institutions as they have to compete with other races to get the financial assistance (Sarawak, MOHE, 2011).

## **Methodology**

### **Data Description and Tests**

The data were obtained from the Department of Baitulmal in Sarawak. Time series data were used in the analysis. The data span quarterly from 2001 to 2010 for four variables – total expenditure of Baitulmal ( $\Delta\text{TEXP}$ ), total collection of zakat ( $\Delta\text{TCOL}$ ), total expenditure for poor Muslim student ( $\Delta\text{TEXPUN}$  &  $\Delta\text{TEXPSP}$ ) and expenditure growth for university, secondary and primary scholarship ( $\Delta\text{EXPUN}$  &  $\Delta\text{EXPSP}$ ). Several statistical methods were used to investigate the relationship between the dependent and independent variables, and the respective outputs of descriptive statistics from the secondary data collected were analyzed accordingly. In order to obtain the accuracy of the data and rule out the possibility of spurious correlation, several standard econometric tests were also conducted. In general, most of empirical studies used Granger causality, unit root and cointegration to determine the relationship between the variables under investigation. Thus, this section describes the method and testing procedures involved in the study, which include the Augmented Dickey Fuller (ADF) unit root test, Johansen and Juselius Cointegration test and Granger Causality in Vector Error Correction Model (VECM).

#### *1. Unit Root Test*

As a prerequisite for a time series analysis, we conducted the ADF unit root test for stationary (Said and Dickey, 1984) to test the null hypothesis of unit root against the alternative hypothesis to ascertain that the time series properties of total expenditure growth of Baitulmal with student ratio and expenditure growth for university, secondary and primary level are non-stationary in levels and are stationary in first differences.

#### *2. Cointegration Test*

When two or more variables in a system are found to be cointegrated, it is said to have a long-run equilibrium relationships. Granger (2004) pointed out that a pair of integrated series must have the property that their linear combination is stationary – they are cointegrated. The cointegration series developed by Johansen and Juselius (1988, 1990) provide a new insight in determining the long-run relationships between variables in a series before proceeding to the Granger causality test.

#### *3. Granger Causality in Vector Error Correction Model (VECM)*

Engle and Granger (1987) exhibited that once variables are proven to be cointegrated, there will also be the existence of a corresponding Error Correction Term (ECM) representation. The ECM implies that changes in the dependent variable are a function of the level of disequilibrium in the cointegrating relationship captured by the error-correction term as well as changes in other explanatory variables. Granger causality test in VECM can be conducted by testing the significance of the error-correction term. Vector error correction model (VECM) can be derived through a VAR model constraints, as shown in the following equation:

$$\Delta Y_t = \sum_{i=1}^n A_i \Delta Y_{t-1} + \sum_{i=1}^y \zeta_i \Theta t - 1 + v_t$$

The equation above refers to the variable  $Y_t$  in the form of vectors,  $A_i$  and  $\zeta_i$  the parameter estimator,  $\Delta$  is the differential operator,  $v_t$  is the vector describing the movement of the reaction not expected in the  $Y$  and  $\Theta$  containing any  $r$ , the error correction cointegrating vector is derived from the Johansen maximum likelihood estimation. VECM is a special case of VAR that imposes cointegration on its variables where it allows one to distinguish between short run and long run Granger causality. The relevant error correction terms (ECTs) must be included in the VAR to avoid misspecification and omission of the important constraints.

Vector error correction model can also be used to distinguish the causes of long-term relationship and short term cause. The cause of short-term relationship can be described by F test for additional generating intervals for each variable. The cause of long-term relationships can be identified by a t test for the lag parameter error correction. Lag parameter is the error correction adjustment parameter for which long-term imbalances are corrected for any short-term (Sarmidi et al, 2002).

### Empirical Result and Discussion

This section analyzes and reveals the major findings of the study focusing on the empirical result of the variables generated from the econometrics tests and time series regression analysis of the secondary data collected earlier. As explained above, the ADF test was carried out to detect the presence of unit root for all variables. The test is intended to show that all variables used are stationary as a prerequisite for cointegration test that follows. The ADF test shows that TEXP, TCOL & EXPSP variables are stationary in level as the null hypothesis of unit root can be rejected. The only exception is TEXPUN, TEXPSP & EXPUN are fail to reject the null hypothesis of unit root and they are non-stationary. In the first differences, ADF test results provide evidence against the hypothesis of unit root. In other words, all variables are stationary after taking first difference. All the probabilities are less than 0.05, which signifies that it is stationary at 5 percent significance level during the period of the quarterly time series data from 2001-2010. Table 2 below presents the results of the unit root test.

**Table 2** Results for Unit Root Test

Series	ADF Test			
	Levels		1 <sup>st</sup> Differences	
	Intercept	Trend & Intercept	Intercept	Trend & Intercept
TEXP	-4.908(0)***	-4.961(0)***	-10.277(0)***	-10.217(0)***
TCOL	-5.490(1)***	-5.917(1)***	-11.304(2)***	-11.192(2)***
TEXPUN	-0.836(0)	-1.612(0)	-6.209(0)***	-6.120(0)***
TEXPSP	-2.842(0)*	-3.065(0)	-6.592(0)***	-6.522(0)***
EXPUN	-2.514(2)	-3.987(1)**	-8.088(1)***	-7.981(1)***
EXPSP	-6.288(0)***	-6.224(0)***	-7.309(1)***	-7.206(1)***

Note: Asterisks (\*), (\*\*),(\*\*\*) indicate the rejection of the null hypothesis of non-stationary at 10%, 5% and 1% and ( ) denote the lag length.

Since the unit root test are sensitive to different values of auto-regression lag length, the selection rule of truncation lag parameter is crucial in determining the integration of data. In this study, the optimal lag length is chosen based on Schwarz Information Criterion (SIC) to ensure the errors are white noise. According to Cuthbertson, Hall and Taylor (1992), if three or more variables are utilized, there is a possibility for the variables with different order of integration to be cointegrated. Since the unit root test are favourable, this requisition permits the multivariate cointegration test because in this test, as long as the variables are not  $I(2)$ , the cointegration test can be proceeded with the variables with order of integration that consist of  $I(0)$  and  $I(1)$ . With this regards, this paper continued with Johansen and Juselius (1990) cointegration test.

### Cointegration Test

The result of the ADF test presented in Table 3 below shows that all variable are stationary, where by the null hypothesis is rejected at 5 percent significant level. Accordingly, the study proceeded with Johansen and Juselius test to analyze the long-run equilibrium using the cointegration technique. The cointegration test was carried out to determine the cointegrating relationship among the endogenous and exogenous variables, namely the total collection of zakat, the growth rate of total expenditure on university, secondary and primary students and the expenditure growth for university, secondary and primary scholarship to the growth of the total expenditure growth. The advantage of this method is that it allows one to draw conclusion on number of cointegrating relationships between the variables.

**Table 3** Results for Cointegration Test

Null	Alternative	$k=1, r=2$			
		Trace		$\lambda$ -max	
		Test Statistics	95% (CV)	Test Statistics	95%
$r = 0$	$r = 1$	124.372**	95.754	48.003**	40.078
$r \leq 1$	$r = 2$	76.370**	69.819	36.554**	33.877
$r \leq 2$	$r = 3$	39.816	47.856	21.734	27.584
$r \leq 3$	$r = 4$	18.082	29.797	8.630	21.132
$r \leq 4$	$r = 5$	9.452	15.495	6.203	14.265
$r \leq 5$	$r = 6$	3.249	3.841	3.249	3.841

Notes: The k is the lag length and r is the cointegrating vector. Asterisks (\*\*) indicate significant of the 5% level.

From the result shown in Table 3 above, it is evident that there are two cointegrating vectors in the system. Consistent results are derived from trace test and max eigenvalue test. This shows that the system possess a long run relationship. Based on the result, it can be interpreted that unique cointegrating relationship has emerged for all variables.

The result proves the existence of cointegration relationship between total collection of zakat and total expenditure of Baitulmal which is necessary to indicate growth rate in the statistics of poor Muslim students in the long run.

### Granger Causality Analysis

The results for VECM in table 3 above are in line with the cointegration that has been discussed previously. The result shows that total expenditure of Baitulmal ( $\Delta$ TEXP) appears to be the initial receiver of any exogenous shocks that disturb the equilibrium of the system. There are 2 ECTs that are negative, less than 1 and significant, which are the ECTs of total expenditure growth of Baitulmal and total collection of zakat. This is also evident in the statistically significant error correction term (ECT) in the total expenditure of Baitulmal ( $\Delta$ TEXP) equation. The coefficient of ECTs in  $\Delta$ TEXP equation is 0.911, indicating that about 90 percent of the adjustment is completed in a quarter. This means that Baitulmal needs approximately 1 and  $\frac{1}{4}$  quarter to reach long run equilibrium from the estimated result. The result demonstrates that total collection of zakat, total expenditure for poor Muslim students and expenditure growth for university, secondary and primary scholarship are the main drivers of the total expenditure of Baitulmal in Sarawak. From the Granger causality test, there are four short run relationships established at the 5% significant level.

**Table 4** Result for Granger Causality test

Dependent Variable	$\Delta$ TEXP	$\Delta$ TCOL	$\Delta$ TEXPUN	$\Delta$ TEXPSP	$\Delta$ EXPUN	$\Delta$ EXPSP	ECT <sub>1</sub>	
							ECT	t-test
$\Delta$ TEXP	-	0.0218*	0.0298*	0.3580	0.1406	0.9379	-0.911	-2.958*
$\Delta$ TCOL	0.8923	-	0.8539	0.9958	0.8218	0.2697	-0.655	-1.774
$\Delta$ TEXPUN	0.0354*	0.2475	-	0.8359	0.3665	0.4767	0.000	1.082
$\Delta$ TEXPSP	0.5654	0.0079*	0.4110	-	0.9774	0.0353*	0.014	1.241
$\Delta$ EXPUN	0.0469	0.1204	0.0265*	0.5589	-	0.2239	-0.012	-0.033
$\Delta$ EXPSP	0.9169	0.0155*	0.9011	0.7897	0.5609	-	-0.600	-0.114

Notes: D is the first different operator. Asterisk (\*) indicates statistically significant at 5% percent level.

Firstly,  $\Delta\text{TEXP}$  are found to granger cause  $\Delta\text{TCOL}$  growth rate. Secondly,  $\Delta\text{TEXPUN}$  granger causes  $\Delta\text{TEXP}$  at 5% significant level. Thirdly,  $\Delta\text{TEXPSP}$  are found to granger cause  $\Delta\text{TCOL}$  and  $\Delta\text{EXPSP}$ . Finally,  $\Delta\text{EXPUN}$  granger causes  $\Delta\text{TEXPUN}$  while  $\Delta\text{EXPSP}$  granger causes  $\Delta\text{TCOL}$  also at 5% significant level. This indicates that in the short run, the system possesses causality with each variable in the system. It is also evident that  $\Delta\text{EXPUN}$  and  $\Delta\text{TEXPSP}$  are the variables that are independent from being mutually caused by other variables related in the system.

## **Conclusion**

Education is part of important sector that contributes to economic growth in Malaysia, especially in Sarawak. It is not only for the purpose of obtaining a good future prospective in a country, but also one of the tools to bring reduction in poverty. In order to overcome the incidence of poverty among Muslim people, the provision of better and more efficient education services in primary, secondary and tertiary sectors is needed. Education is important for all races and religions, including Muslim people, especially in Sarawak. Thus, to help poor Muslim student in Sarawak to get proper education, Baitulmal has played a role in helping these student.

In this study, an effort is made to determine the role of Baitulmal towards the education of poor Muslims in Sarawak. Since there is no much evidence (based on the knowledge of the author) of works that have empirically examined the role of Baitulmal towards the education of poor Muslims in Sarawak, this study is important as it has addressed the subject systematically. This study is conducted to contribute to the literature on Baitulmal in Sarawak as one of the most important institution that has persistently continued to assist Muslims there. The general consensus that has emerged from the study is that the total expenditure of Baitulmal, which is the role of Baitulmal, is directly influenced by total collection of zakat. The null hypothesis is accepted, where the growth rate in total zakat collection has positive relationship with the growth rate of total zakat expenditure. In other words, any movement of the total collection of zakat will affect the movement of the total expenditure of Baitulmal. Given the total collection and other factors, expenditures on student scholarships and expenditures on growth for university, secondary and primary education have become an important target for the expenditures of the education sector. This has been proven by the tests conducted on the variables using Augmented Dickey Fuller (ADF) unit root test, Johansen cointegration Test and Granger causality test, based on vector error correction model. The results indicate the long run co-movement relationship between the total expenditure and the total collection of Baitulmal. Student ratio and expenditure growth of university, secondary and primary scholarship also have significant result towards the total expenditure of Baitulmal. This shows that the role of Baitulmal towards poor Muslim students in Sarawak has positive impact in the education sector.

Given such positive impact in the education sector, the expansion of the role of Baitulmal would lead to poverty alleviation because the poor Muslim students now have opportunities to further their study and help their families to come out from abject poverty. This study is consistent with the study of Malaysian case by Third ATAIC Technical Conference Association of Tax Authorities of Islamic Countries on 22-25 November 2006 in Islamabad, Pakistan. As previously mentioned, there are two

interesting programs being implemented for Muslim students, namely the program of Baitulmal Professional Training Institute (BPTI) and Baitulmal Skills Training Institute (BSTI). Hence, by encouraging payers and supported by programs from the Baitulmal, the total collection of zakat can be increased every year. The increment will help Baitulmal to disburse more scholarships to the poor Muslim students in Sarawak.

Therefore, it can be inferred from this study that the significant impact of the role of Baitulmal towards the education of poor Muslim students in Sarawak justifies the need for public intervention aimed at promoting and increasing zakat collection as well as zakat distribution among the needy. In order to further enhance the education of poor Muslim students, Baitulmal needs steady and sufficient financial assistance and campaign to increase the number of these students entering schools and universities. Any effort in providing a good financial assistance for Muslim students to obtain better education would also help in reducing a number of poverty among Muslims in Sarawak. Furthermore, by having sufficient fund, Baitulmal will be able to upgrade the content of its education programs and offer more quality services for the poor Muslim students and their parents as well. In other words, the more Baitulmal spends to finance the education of poor students and launch many effective programs, the more it will continue to contribute in a wider sphere towards the welfare of the Ummah. Finally, this study suggests that future research could explore the possibility of other sources of funds for Baitulmal, which can include developing Islamic financial instruments for tapping resources from Islamic capital markets and Baitulmal cash. On the other hand, researches are also needed to explore other viable areas where Baitulmal can contribute. One such area can be micro-financing.

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