Universiti Malaysia Terengganu Journal of Undergraduate Research
Volume 2 Number 3, July 2020: 83-92
eISSN: 2637-1138

THE RELATIONSHIP BETWEEN GOVERNMENT EXPENDITURE ON SELECTED SECTORS TOWARDS ECONOMIC GROWTH IN MALAYSIA

NURUL FARHANA SENAWI[1] AND NOR FATIMAH CHE SULAIMAN*[1,2]

[1]*Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia*
[2]*Institute of Tropical Biodiversity and Sustainable Development, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia*

**Corresponding author: n.fatimah@umt.edu.my*

Abstract: Government expenditure plays an important role in the country's economic growth. Budget allocations through the annual budget presented have their strategies to ensure that the allocated budget can improve the growth and development in Malaysia and also can be enjoyed by all Malaysian. The government's expenditure has contributed to the expansion of this country's development from various sectors. However, there are various problems involving government expenditure such as low level of health, homeless poor people, weak public transportation and illegal immigrants. The purpose of this study is to examine the relationship between government expenditure on health, education, housing, transportation and defence sectors towards economic growth. The data used is secondary data from 1980-2017 for 38 years from the Department of Statistics, Malaysia and World Bank Data. The method used in this study is Descriptive Analysis and Autoregressive Distributed Lagged Model (ARDL). The result showed that economic growth and government expenditure on health, education, transportation, and defence has a long-run relationship. Therefore, the government should increase more expenditure on crucial sectors such as education, transportation, defence and health that will strengthen economic growth in the long run.

Keywords: Government expenditure, health, education, housing, transportation, defence, economic growth; Autoregressive Distributed Lagged Model (ARDL)

Introduction

Malaysia now is in a proactive step in developing the country's economy. So government expenditure plays an important role to ensure that a plan can be implemented properly. Through the national budget that has been presented in the previous year, the budget allocation has its strategic objective to ensure that the people of this country can continue to survive. By this, it will increase the growth of the country. This government expenditure has contributed to the expansion of this country's development from various sectors. According to the Department of Statistics Malaysia (DOSM), in 2018 3.8% of Malaysia's Gross Domestic Product has been allocated as development expenditure. According to the Economic Planning Unit and International Monetary Fund, Malaysia government expenditure trend's has shown a consistent increasing pattern from 1970 until 2018.

Government expenditure is divided into government operating expenditure and government development expenditure. Government operating expenditure is the expenditure experienced by the government to pay the cost of managing and administering the country. For example, emoluments, debt service provision, grant, and surrender to the state government and other administrative expenses. While development expenditure is the expenditure incurred by the government for national development. For example, the cost of construction of schools, housing, and hospitals. In this study, researchers will emphasis on government development expenditure through education, health, housing, transport and defence sectors on economic growth. Government

expenditure plays an important role in the country's economic growth. Budget allocations through the annual budget presented have their strategies to ensure that the allocated budget can improve the growth and development in Malaysia and also can be enjoyed by all Malaysian. The government's expenditure has contributed to the expansion of this country's development from numerous sectors. However, there are various problems involving government expenditure such as low level of health, homeless poor people, weak public transportation and illegal immigrants.

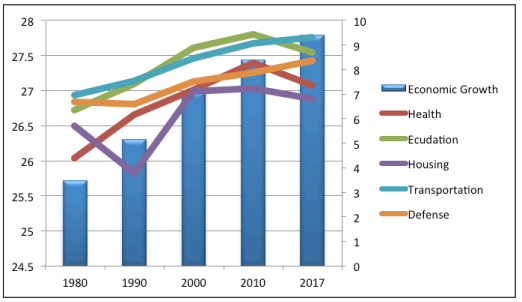

Figure 1: Government expenditure by sector on economic growth

This diagram shows the relationship between government expenditure by sector to economic growth in Malaysia every ten years. Economic growth indicates that there has been an increase from 1880 to 2017. This is because of the country's economic growth is growing rapidly. Government expenditure on the health sector has been increasing throughout the year. This shows that the government concerned with the country' society. Besides, government expenditure on education is increasing throughout the year. With the increase in government expenditure on this sector, illiteracy problems, unknowingly reading and others can be reduced. Malaysia adult illiteracy rate was 1.23 million in 2015 (DOSM, 2015) Illiteracy rate has declined significantly between 1980 and 2015; from 2.54 million in 1980 to 1.23 million in 2015. In the meantime, the adult literacy rate has increased from 82.9% in 1991 to 93.7% in 2016.

Government expenditure in the housing sector in 1990 has been declining and has rebounded from 2000 to 2017. This is because in 1990 the Asian financial crisis caused Malaysia to be affected. At that time, the housing sector was not an important sector for the country compared to other sectors. However, the housing expenditure of the housing sector rose again the following year due to the increase in the population of the country. Government expenditure for the transport sector has seen an increase. This is because of exports and imports from overseas. Transport is used to improve goods and services within the country. For government expenditure on the defence, the sector showed improvement over the years 1980 to 2017. The government was very concerned about national of foreigners into the country.

The objective is to determine the extent of government expenditure through selected sectors affecting the economic growth in Malaysia. The paper is organised into five sections. The next section discusses the literature review followed by the methodology. The last two sections discuss the results and conclude the study.

Literature Review

Several studies see the role of government expenditure on human development and economic growth (Dzubaidi *et al.,* 2013; Ibrahim, 2016; Pahlevi, 2017). The issue discussed by the researcher is whether the increase in economic growth is due to expenditure and the extent to which human development is affected by expenditure, thus impacting economic growth. The method used is Two-Stage Least Squares (2SLS) through simultaneous equations 'Simultaneous-Equation Model'. The findings show that all variables are positive but not significant. This suggests that government expenditure on the health and education sector does not affect the human development index.

Shukri (2013) conducted a study on patterns and distributions in government expenditure and the impact on the country's economic growth. The main objective is to look at the link between the variables of government revenue and

expenditure each year. Johensen's cointegration test and Granger's causal test have been used to get results. Findings show Keynes's theory exists in the long run in Malaysia, which means total government expenditure affects national income. However, there are also public expenditure components influenced by state revenues, so there is a Wagner Law in the short term.

Asri *et al.* (2009) studied the composition of government expenditure and economic growth. This study was carried out to look at the relationship between government expenditure and economic growth in the short and long term. This means that this analysis takes into account the changes in the components of expenditure that are not fixed on a business cycle. The purpose is also to identify the existence of the Wagner Law using the Vector Autoregressive (VAR) method. The findings show that income is influenced by overall government expenditure over the long term. However, in the short term, the country's income is also seen to influence government expenditure regardless of its overall or only component.

Moreover, there are studies on the relationship between economic growth, government expenditure and government revenue (Karim *et al.,* 2006; Asri *et al.,* 2012; Za'afar *et al.,* 2014). This study uses a time series method comprising Johansen's cointegration test and Granger's causal test. The findings show that a large number of states are in line with the expenditure hypothesis (Karim *et al.,* 2006). The Johansen cointegration test was used in the study to analyze long-term relationships and vector error correction models (VECM). The purpose is to determine the causes of short-term and long-term causes for variables. (Asri *et al.,* 2012). The methods used are cointegration tests and ARDL models. The findings show that economic growth and government expenditure are intertwined in the long run. This means that Wagner's law and Keynes's theory are applied. (Za'afar *et al.,* 2014)

Arus (2014) reviews public expenditure on education development in Malaysia. The purpose is to see the relationship between government expenditure and educational attainment in Malaysia. The results of a qualitative assessment indicate an increase in the achievement of education through various variables. However, when the econometric method is used, the decision is not significant. The findings show that there is an inconsistent relationship between government expenditure and educational attainment.

Ismail et al., (2010) reviewed the relationship between government expenditure and household consumption in Malaysia. The GMM budgeting method was used for this study. The researcher made two separate regressions, namely operating expenditure and development expenditure. The purpose is to see whether operating expenditure and development expenditure have different effects on household consumption. The findings show that operating expenditure is positively correlated with household consumption while development expenditure is only certain sectors that have a positive impact on household consumption. Other studies related to the relationship between government expenditure and household consumption in Malaysia are for example study by Zulkefly Abdul Karim *et al.,* (2012). The study explained about fixed investment, household consumption, and economic growth in Malaysia using Structural Vector Error Correction Model (SVECM) method. Hasnul, (2015) also did a study about Malaysia regarding the effects of government expenditure on economic growth. A more recent study by Syazwani *et al.,* (2017) discuss understanding behaviour of consumption expenditure of households in Malaysia.

Methodology

This study uses secondary data obtained from internet sources and past studies. This study was obtained from the World Bank Data and the Department of Statistics Malaysia (DOSM). This data includes a dependent variable of economic growth and independent variables of education, health, housing, transportation, and defence sector from 1980 to 2017 for 38 years. The model

used for this study is Autogressive Distributed Lagged Model (ARDL). This ARDL model has been introduced by Pesaran *et al.* (2001). The goal is to see the long-term relationship between time series data. The relationship between these variables can be explained by:

The ARDL model for the relationship between government expenditure on selected sectors towards economic growth in Malaysia is as follows. GDP refers to economic growth, HE refers to government expenditure for the health sector, EE refers to government expenditure for the education sector, PE refers to government expenditure for the housing sector, TE refers to government expenditure for the transportation sector and DE refers to government expenditure for the defence sector:

$$\Delta \log(GDP)_t = \alpha_0 + \sum_{i=1}^{k} \beta_{1i} \Delta \log(GDP)_{t-i} + \sum_{i=0}^{k} \beta_{2i} \Delta \log(HE)_{t-i} + \sum_{i=0}^{k} \beta_{3i} \Delta \log(EE)_{t-i} + \sum_{i=0}^{k} \beta_{4i} \Delta \log(PE)_{t-i} + \sum_{i=0}^{k} \beta_{5i} \Delta \log(TE)_{t-i} + \sum_{i=0}^{k} \beta_{6i} \Delta \log(DE)_{t-i} + \delta_{1i} \log(GDP)_{t-1} + \delta_{2i} \log(HE)_{t-} \delta_{3i} \log(EE)_{t-1} + \delta_{4i} \log(PE)_{t-1} + \delta_{5i} \log(TE)_{t-1} + \delta_{6i} \log(DE)_{t-1} + \upsilon_t \quad (1)$$

Where υ_t is the error term that should be white noise, Δ shows the first-difference operator, for $i, j = 0, 1, 2,\ldots, k$ and k is the optimal lag length (p, q, r, s, v) and chosen by the author. The Akaike Information Criterion (AIC) is used to determine the optimal lag length selection. In the ARDL bounds testing approach, this study uses F-statistics tests to examine the null hypothesis that is no cointegration among the variables. The estimated F-statistics value will compare with the two sets of critical values of the upper- and lower bounds. If the estimated F-statistics are higher than the critical values (upper bound and lower bound), then the null hypothesis is rejected. It means there is cointegration among variables. After confirming the existence of cointegration between the variables, the estimated coefficients of a long-run calculated by using Equation (2) below:

$$\log(GDP)_t = \alpha_0 + \sum_{j=1}^{k} \lambda_{1j} \log(GDP)_{t-j} + \sum_{j=0}^{k} \delta_{1j} \log(HE)_{t-j} + \sum_{j=0}^{k} \delta_{2j} \log(EE)_{t-j} + \sum_{j=0}^{k} \delta_{3j} \log(PE)_{t-j} + \sum_{j=0}^{k} \delta_{4j} \log(TE)_{t-j} + \sum_{j=0}^{k} \delta_{5j} \log(DE)_{t-j} + \mu_t \quad (2)$$

Further, Equation (3) is to estimate the short-run coefficient:

$$\Delta \log(GDP)_t = \alpha_0 + \sum_{j=1}^{k} \lambda_{1j} \Delta \log(GDP)_{t-j} + \sum_{j=0}^{k} \delta_{1j} \Delta \log(HE)_{t-j} + \sum_{j=0}^{k} \delta_{2j} \Delta \log(EE)_{t-j} + \sum_{j=0}^{k} \delta_{3j} \Delta \log(PE)_{t-j} + \sum_{j=0}^{k} \delta_{4j} \Delta \log(TE)_{t-j} + \sum_{j=0}^{k} \delta_{5j} \Delta \log(DE)_{t-j} + \mu_t \quad (3)$$

Moreover, the ARDL specification of the short-run dynamics derived by constructing an Error Correction Model (ECT(-1)). The Equation (4) and (5) below displays the speed of the adjustment to converge back to its long-run equilibrium:

$$\Delta \log(GDP)_t = \alpha_0 + \sum_{i=1}^{k} \lambda_{1i} \log(GDP)_{t-i} + \sum_{i=0}^{k} \delta_{1i} \log(HE)_{t-i} + \sum_{i=0}^{k} \delta_{2i} \log(EE)_{t-i} + \sum_{i=0}^{k} \delta_{3i} \log(PE)_{t-i} + \sum_{i=0}^{k} \delta_{4i} \log(TE)_{t-i} + \sum_{i=0}^{k} \delta_{5i} \log(DE)_{t-i} + \Psi ECM_{t-1} + \mu_t \quad (4)$$

Further,

$$ECM_{t-1} = \log(GDP)_t - \alpha_0 - \sum_{i=1}^{\kappa} \lambda_{1i} \log(GDP)_{t-i} - \sum_{i=0}^{\kappa} \delta_{1i} \log(HE)_{t-i} - \sum_{i=0}^{\kappa} \delta_{2i} \log(EE)_{t-i} - \sum_{i=0}^{k} \delta_{3i} \log(PE)_{t-i} - \sum_{i=0}^{k} \delta_{4i} \log(TE)_{t-i} - \sum_{i=0}^{k} \delta_{5i} \log(DE)_{t-i} \quad (5)$$

Where ψ represents the speed of adjustment coefficient and ECM_{t-1} represents the error correction term. In general, the value of ψ should be negative and range from 0 to 1. It indicates the speed of adjustment relative to the last period (Kim et al. 2007). For instance, number -0.50 indicates there was 50 % adjustment occurs in the previous period to the equilibrium.

To analyze the data, researchers have used descriptive analysis, ARDL, stationary test and diagnostic tests. Descriptive analysis is used to describe the characteristics of a sample or a combination of variables. ARDL aims to see long-term relationships between time series data. Stationarity test is conducted to identify non-stationarity problems that happen in time series data. This study used the unit root test for time series to see whether that data is stationarity or non-stationarity.

The diagnostics test aims to see whether the independent variable is appropriate to the dependent variable. To see the suitability of the variable there are three methods used under the diagnostics test that is coefficients diagnostics, residual diagnostics, and stability diagnostics. From the model estimated, we then proceed to residual checking to check whether there is any problems exist in the model like autocorrelation problem, heteroskedasticity problem, specification error problem, and whether the residual is normally distributed. To examine the autocorrelation problem, the Breusch-Godfrey test were used. Heteroskedasticity problem was tested using ARCH test, while Normality test using Jacque – Bera was used to checking whether the residual is normally distributed. To check the model specification error problem, Ramsey Reset test was used.

Results and Discussion

Table 1 shows a descriptive analysis of dependent variables namely economic growth and independent variables namely government expenditure on the health, education, housing, transportation and defence sectors. Economic growth toward positive kurtosis shows the relative distribution and positive skewness indicates that it is oriented to the right. Kurtosis values of less than three indicate normal distribution. Government expenditure on the health sector has shown that it achieves positive kurtosis and is relatively scattered. However, this data is not normally distributed because the kurtosis value is greater than three. Government expenditure on the education sector is normalized as the kurtosis value is less than three. Skewness is positive and right-wing. Government expenditure on the housing sector is not normalized as the kurtosis value is more than three. Skewness is positive and tilted to the right. Government expenditure on the transport sector showed positive skewness and was right-handed. The value of kurtosis is positive and normalized. Government expenditure on the defence sector shows normal distribution as the kurtosis value is less than three. However, skewness is negative and tends to the left.

Table 1: Descriptive analysis of dependent and independent variables

	HE	EE	PE	TE	DE	GDP
Mean	1040.053	4250.947	972.395	4250.947	2393.684	5.300
Median	775.500	3321.000	940.000	4054.000	2320.000	4.850
Skewness	0.924	0.858	0.643	0.338	-0.019	0.487
Kurtosis	3.496	2.592	3.142	1.612	1.750	2.103

Note: mean and median in million

Table 2: Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) Unit Root Test

Variables	**Level**		**First Difference**	
	ADF	**PP**	**ADF**	**PP**
HE	-2.683	-2.683	-5.7978***	-5.932***
EE	-3.769**	-2.393	-3.919***	-3.547***
PE	-3.089	-3.162	-6.502***	-7.035***
TE	-2.429	-2.476	-4.800***	-4.457***
DE	-3.188	-3.204*	-7.832***	-8.095***
GDP	-0.091	-0.091	-3.989***	-4.036***

Note: ***, ** and * refer significant level at 1% , 5% and 10%

Table 2 shows the unit root test used to test the robustness of each variable. Through unit root tests, the tests used are Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. Government expenditure on the health sector shows that the data stands at the 1 per cent significance level for ADF and PP at -5.7978 and -5.932 in the first difference. This value is smaller than the critical value of -3.626. This data is not stable at the level because it is greater than the critical value of -2.683 for ADF and PP. The ADF test on government expenditure for the education sector shows that the 5% mean level is -3.769 and that of the PP data is -2.393. For both ADF and PP tests the first difference was 1% significance level with values lower than -3.919 and -3.547. For the government expenditure on the housing sector, ADF and PP tests showed that the data were non-stop at the levels of -3.089 and -3.162. Because the data are not static so the ADF and PP tests are performed on the first difference. The first difference shows the stationary data at the 1 per cent significance level of -6.502 and -7.035 smaller than the critical value of -3.626.

For the government expenditure on the transport sector, the ADF and PP tests at both levels were -2.429 and -2.476, respectively. So the ADF and PP tests are done on the first difference. The first difference value stands at the 1 per cent significance level of -4.800 and -4.457 which is smaller than the critical value of -3.626. Furthermore, government expenditure on defence sector shows that the data at the ADF test level is not up to date while the PP test shows that the data at the 10 per cent level is still at stake. Thus, the ADF and PP tests were performed on the first difference. In the first difference, the freezing data were −7.833 and −8.095. This value is smaller than the critical value at the 1 per cent level of -3.626. For economic growth, the ADF and PP tests do not stand at a level of -0.091 for both. This value is greater than the critical value. In the first difference, ADF and PP tests showed that the data remained stable at the 1 per cent significance level of -3.989 and -4.036, respectively. This value is smaller than the critical value of -3.626.

Table 3: Summary Result of Long Run and Short Run Relationship

	Coefficient	Probability	
HE	-4.200***	0.0006	Long-run
EE	9648***	0.0000	Long-run
TE	8822***	0.0003	Long-run
DE	-9822***	0.0002	Long-run
PE	3212	0.1966	Short-run

Note: coefficient in RM'000,000 and *** refer significant level 1%.

ARDL model is used to look at the long-run relationship between dependent variables and independent variables through time-series data. This table shows the overall results of economic growth and government expenditure on the health, education, transportation, housing and defence sectors. F-bound tests show that this data has a long-run relationship between economic growth and government expenditure for the health, education, transportation and defence sectors. The F-stat value is greater than the critical value at the 1 per cent level. Given the value of the coefficients, only government expenditure on health, education, transportation, and defence sectors has a long-run relationship with economic growth. For government expenditure, the housing sector has no long-run relationship with economic growth.

The results of this study are supported by various studies. Previous studies found that economic growth, expenditure and government revenue have a long-run relationship. This proves that the result of this study is supported by Wagner's theory and Keynes theory (Za'afar *et al.,* 2014). In addition, (Dzubaidi *et al.,* 2013) examined the role of government expenditure on human development and economic growth. Subsequently, Shukri, (2013) studied patterns and distributions in government expenditure and their impact on the country's economic growth.

This study also shows that Keynes's theory exists in long-term relations in Malaysia, which means that dominant countries' income is influenced by total government expenditure. However, there are also components of public expenditure that are affected by national income. This is where Wagner's law came into existence in the short run. (Asri *et al.,* 2009) The composition of government expenditure and economic growth. It can be seen that the dominant income of the state is influenced by government expenditure overall in the long run. However, in the short term, the country's income is also seen as likely to affect government expenditure as a whole and as a component.

Table 4: Diagnostic Test Results

Test	Result
Autocorrelation (*Breusch-Godfrey*)	2.3439
	(0.1696)
Heteroskedasticity (ARCH)	3.2993
	(0.0512)
Normality(*Jarque-Bera*)	0.6219
	(0.7327)
Specifications (*Ramsey-Rest*)	0.6809
	(0.5178)

Table 4 shows the diagnostic test results. The diagnostic test aims to ensure that the model does not have problems such as autocorrelation, heteroskedasticity, specification errors model and normality test. The diagnostic test consists of Breusch-Godfrey Serial Correlation test, ARCH test, Jarque-Bera test, CUSUM test, and Ramsey RESET test. For the correlation test, the researcher used the Breusch-Godfrey Serial Correlation LM test. From this test, it is found that the model does not correlate. This can be seen when F-statistic is smaller than F-critical which is 2.344 smaller than 2.69 at 5 per cent significance level. This is due to the existence of a relationship between the dependent variable and independent variable. For heteroskedasticity tests, researchers have used ARCH. The purpose is to see how much lag it will take to determine if the independent variable affects the dependent variable. The lag used is lag 2. F-statistics indicate that the value is greater than the F-critical which is 3.299 greater than 2.69 at 5 per cent significance level. So the variables depend on each other. The normality test shows that distribution is normal. This is because the kurtosis value is 2.432 which is less than 3. The Jarque-Bera value of this study is 0.622 and the probability is 0.733. A small probability of 0.733 fails to reject H0 and the conclusion can be made that this data is normal. The Ramsey RESET test is intended to detect errors in regression results. T-statistics are 0.681 which is greater than the critical level at the 5 per cent significance level. This indicates that the result of this regression is error-free.

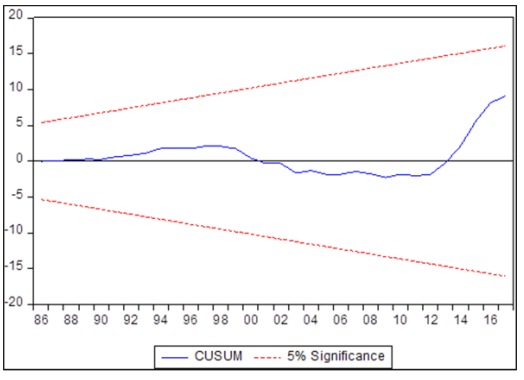

Figure 2: Diagnostics test result for CUSUM

The CUSUM test aims to find out whether or not the data is stable. It can be seen that the data used by researchers are stable at 5 per cent significance level. This can be determined when the blue line does not exceed the red line.

Conclusion

As a result of this study, it is hoped to contribute to the government, not the government or the individual. This is because government expenditure is one of the most important ways to boost the country's economic growth. Moreover, it can meet the needs of the community. As we know, in this era of globalization, government expenditure is crucial to ensuring that people can live in a comfortable and orderly manner. In addition, increasing government expenditure on important sectors of the country could create employment opportunities for the public. Therefore, the problem of unemployment can be reduced.

Acknowledgments

The authors would like to thank Universiti Malaysia Terengganu for its financial support, logistics and administrative support. The authors collaborate in collecting data and writing this article with direct funding support from Universiti Malaysia Terengganu. The authors also expressed sincere appreciation for indirect support in terms of facilities usage that made the collaboration and writing process possible.

References

Arus. (2014). Kesan Perbelanjaan Awam Terhadap Pembangunan Pendidikan di Malaysia, Fakulti Ekonomi dan Pengurusan, Universiti Kebangsaan Malaysia.

Asri et al. (2009). Komposisi Perbelanjaan Kerajaan dan Pertumbuhan Ekonomi: Kajian Emprikal di Malaysia. *Jurnal Kemanusiaan, 1*, 21-42.

Asri et al. (2012). Perbelanjaan Awam dan Pertumbuhan Ekonomi: Bukti Empirik daripada Kerajaan Negeri di Semenanjung Malaysia. *International Journal of Management Studies, 19*(2), 125-150.

Department of Statistics Malaysia (2017). Government Expenditure. http://www.jabatanperangkaanmalaysia.com.

Dzubaidi et al. (2013). Peranan Perbelanjaan Kerajaan Terhadap Pembangunan Manusia dan Pertumbuhan Ekonomi. *Jurnal Ekonomi Malaysia, 2*(2013), 872-879.

Hasnah A, Luqman A., Sanep A. & Noraziah A. (2009). Keperluan, Kepentingan dan Sumbangan Perancangan Pendidikan Dalam Pembangunan Ekonomi Malaysia, *4*, 13-29.

Ibrahim, Taofik. (2016): Human Capital-Growth nexus: the role of Government Spending on Education and Health in Nigeria. MPRA Paper No. 73712.

Ismail et al. (2010). Hubungan Perbelanjaan Kerajaan dan Penggunaan Isi Rumah Di Malaysia: Analisis Mengikut Sektor, *Jurnal Ekonomi Malaysia*, *2*(2010), 470-481.

Jabatan Penerangan Malaysia, Dasar Pertahanan Negara. (2018). pmr.penerangan.gov.my.

Karim et al., 2006. Hubungan Antara Hasil Dengan Perbelanjaan Kerajaan: Bukti Empirikal Kerajaan Negeri Di Semenanjung Malaysia. *Jurnal Ekonomi Pembangunan, 7*(1),17-37.

M. Hashem Pesaran, Yongcheol Shin & Richard J. Smith. (2001). Bounds Testing Approaches To The Analysis Of Level Relationship. *Journal of Applied Econometrics*, *16*(3), 289-326.

Marcussen, L. (1990). Third World Housing in Social and Spatial Development. Aldershot: Avebury. 208 pp.

Musgrave. (1969). Cost-Benefit Analysis and the Theory of Public Finance. *Journal of Economic Literature*, *7*(3),797-806.

Pahlevi Merita (2017), Impact of Governance and Government Expenditure on Human Development in Indonesia, International Institute of Social Studies.

Sebastian Kripfganz & Daniel Schneider. (2016). ARDL: Stata Module To Estimate Autoregressive Distributed Lag Models, Stata Conference, Chicago, July 29, 2016.

Shukri M. Zaki (2013). Corak dan Agihan dalam Perbelanjaan Kerajaan dan Kesan Terhadap Pertumbuhan Ekonomi Negara : Kajian Empirikal bagi Kes Malaysia, Prosiding PERKEM (2013) 719-724.

World Bank Data. (2018). GDP Malaysia. http://www.worldbankdata.com.

Za'afar et al. (2014). Hubungan Di Antara Pertumbuhan Ekonomi, Perbelanjaan Dan Hasil Kerajaan: Kajian Kes Di Negeri Sarawak, *Prosiding PERKEM,* 71-80.