

ECONOMIC GROWTH ANALYSIS: A STUDY ON MALAYSIAN MARKET

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Abstract

Economic performance of a country is mostly determined by the growth and any other internal and external factors. In this study, researchers purposely focused on Malaysian market by examining the relationship between export, inflation rate, government expenditure and foreign direct investment towards economic growth in Malaysia by applying the yearly data of 47 years from 1970 to 2016 using descriptive statistics, regression model and correlation method analysis. By applying Ordinary Least Square (OLS) method, the result suggests that export, government expenditure and foreign direct investment are positively and significantly correlated with the economic growth. However, inflation rate has negative and insignificant relationship with the economic growth. The outcome of the study is suggested to be useful in providing the future research direction towards the economic growth in Malaysia.

Keywords: economic growth; export; inflation rate; government expenditure

1.0 INTRODUCTION

Economic growth has been a common subject of debate among researchers and development economists in which it is about the productivity potential level of the economy in a long-term period. Basically, when economy produces more, the sales of businesses in that country will be more profitable, and thus, it will make more foreign companies to invest in our country and at the same time it will increase our foreign direct investment (FDI). Furthermore, it will increase purchasing power because consumers have more money to buy additional goods and services. Malaysia continues to achieve the target to be a developed country by looking at the stabilization of the economic growth in which it can be influenced and measured by various factors such as gross domestic product (GDP), export, exchange rate, unemployment, government expenditure, foreign direct investment and others.

Malaysia's economic growth also reveals a variable pattern from 1970 to 2016. According to World Bank, Malaysia has faced serious negative GDP growth rate in 1997 and 1998 due to the Asian financial crisis

(Raja & Amalina, 2017). Besides, Malaysia also has faced significant challenges in 2016 in which the GDP has been decreased by 1.04% in 2015 and 0.73% in 2016. In an article wrote by Chin (2016), economic growth in Malaysia grew at slower pace for 4.2% in 2016 compared to 5% in 2015. Thus, when economic crisis happened, it affects to the certain economic indicators such as higher inflation rate, decreasing in export and foreign direct investment, and others.

Therefore, the purpose of this study is to examine the selected independent factors (export, inflation rate, government expenditure and FDI) that influence Malaysia's economic growth. This research uses GDP growth as a dependent indicator to measure economic growth in Malaysia. This study focuses on the relationship between variables and which variable is the most significant to Malaysia's economic growth that covers 47 years from year 1970 to 2016.

2.0 LITERATURE REVIEW

Economic growth is indeed a key factor in the immediate economic transition of less developed or developing countries to a stable income level. (Shaukat, Zhu & Khan, 2019). A study carried out by Mohsen et al. (2017) in Syria for year 1980 to 2010 using Johansen co-integration test and Ganger causality test, found that there were a positive relationship between public sector investment, private sector investment, exports, oil price and population growth with economic growth. Similar result also revealed by Shahbaz and Rahman (2014) using Autoregressive Distributed Lag bounds testing approach to co-integration, error correction model, vector error correction model Granger causality test and robustness of causality analysis to explore the relationship between exports, financial development and economic growth in Pakistan from year 1991 to 2012 in quarterly basis which shows positive correlation between those variables with economic growth. Besides, the findings from Hui and Nung (2002) also shows positive correlation between export and economic growth.

The other macroeconomic variables also have been found to influence the growth of economic of such countries. In a research done by Loizides and Vamvoukas (2005) suggested that government expenditure has positive relationship while inflation rate and unemployment have negative relationship with the economic growth. This is also giving similar result with a study conducted in Malaysia by Raja and Amalina (2017) that focuses on FDI and female labor force have positive correlation while inflation has negative correlation with economic growth. Therefore, it will give direction for this paper to test this variable whether it is equivalent with the previous studies.

Evidence in Sudan by Salih (2012) from year 1970 to 2010 by using co-integration, causality and error correction model (ECM) found that government expenditure has positive relationship with economic growth. It is interestingly to note the similar result by Keng et al. (2015) which shows that government expenditure, goods and services tax, FDI, and export have positive relationship while inflation has negative relationship with economic growth. In contrast, Majeed (2016) explore the results of income, inflation, government expenditure and inequality openness bring negative correlation while inequality, investment, education, openness have positive correlation with the economic growth. Similar study done by Hussin, Ros and Noor (2013) which resulted that trade openness, FDI and government expenditure are negatively correlated while gross fixed capital formation is positively correlated with the economic growth. However, most of studies about foreign direct investment relationship with economic growth show positive results as been discovered by Hamdan (2015), Gursoy, Sekreter and Kalyoncu (2013) and Rehman (2016), except for study by Baharom, Habibullah and Royfaizal (2008).

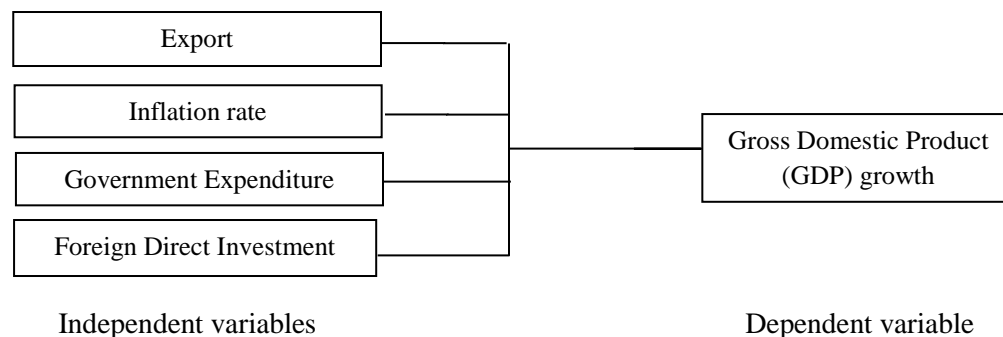
Economic growth is likely to be affected differently by FDI in different forms or in the same form by different economic environments. Combes, Kinda, Oudraogo and Plane (2019) explained that FDI may

hamper the diversification of the manufacturing sector in low-income African or natural-resource-rich economies where FDI is correlated with natural resource extraction and ultimately hurt production. On the contrary, as is the case in most Asian economies, FDI concentrated in the manufacturing sector can boost growth by exploiting low-cost skilled labor (Combes et al., 2019).

After the global financial crisis, the interest rate is widely debated among financial and economic structuralist and its influence is not only affected to develop countries but also the economies. Shaukat et al. (2019) examines the empirical basis on which the interest rate has multiple negative impacts on economic growth across different channels. It has always been a consideration with regard to the changing role of the real interest rate in economy, particularly with regard to transitional economies. It is always prominent that high interest rates contribute a decline in investment, further weakening local investment to grow, thereby providing a poor market structure in economy.

3.0 METHODOLOGY

The purpose of this study is to measure and analyse the most significant factors in gross domestic product growth with four variables namely export, inflation rate, government expenditure, and foreign direct investment in Malaysia. This research covers annual data for 47 years from 1970 to 2016 and were gathered from World Data Bank website. This study used Ordinary Least Square method to analyze the relationship between dependent and independent variables.



The following hypotheses have been formulated:

H¹: There is significant relationship between export and economic growth.

H²: There is significant relationship between inflation rate and economic growth.

H³: There is insignificant relationship between government expenditure and economic growth.

H⁴ : There is significant relationship between FDI and economic growth.

4.0 RESULTS AND DISCUSSIONS

This study uses an Ordinary Least Square (OLS) method to determine the relationship between dependent and independent variables. The results in the previous studies have shown different factors contribute to the economic growth in Malaysia. The findings of this study are analyzed using descriptive, correlation and regression analyses as following table.

Table 1. Descriptive Analysis

Variables	Mean	Standard Deviation	Min	Max
Growth domestic product	6.269043	3.700300	-7.359	11.71400
Export	7.791489	7.384856	-10.878	21.90700
Inflation rate	3.533915	2.920337	0.290000	17.32900
Government expenditure	6.901362	5.877786	-8.893	25.10100
Foreign direct investment	3.801872	1.743919	0.057000	8.761000

Table 1 indicates that independent variables are statically significant. For mean analysis, the computed mean values were 6.269043 for the gross domestic product (GDP) growth, 7.791489 for export, 3.533915 for inflation rate, 6.901362 for government expenditure, and 3.801872 for foreign direct investment (FDI).

Table 2. Correlation Analysis

	Gross Domestic Product	Export	Inflation rate	Government Expenditure	Foreign Direct Investment
Growth domestic product	1.000000				
Export	0.657194	1.000000			
Inflation rate	0.229126	0.172716	1.000000		
Government expenditure	0.283238	-0.109598	0.263404	1.000000	
Foreign direct investment	0.439972	0.421446	0.337968	0.151830	1.000000

Table 2 above discovered the relationship among variables. Findings indicated that all the independent variables have positive relationship with GDP growth by 0.657194, 0.559126, 0.283238 and 0.439972. However, only export shows a negative trend with the government expenditure by -0.109598. Overall, the correlation statistic result brings no multicollinearity problem in the model because the values are not more than 0.8 between independent variables.

$$\text{GDP} = 1.055448 + 0.305577 \text{ EX} - 0.139506 \text{ INF} + 0.200719 \text{ GE} + 0.505162 \text{ FDI}$$

Based on the above model, if all the variables are held constantly, the GDP growth will increase by 1.055448 %. It shows that increasing in export by 1 % will increase GDP growth by 0.305577 %. Note that inflation rate shows the negative relationship with the GDP growth which 1 % increase in the inflation rate will decrease the GDP growth by 0.139506 %. Furthermore, government expenditure and foreign direct show a positive relationship with the GDP growth. By increasing 1 % in the government expenditure and FDI, it will increase 0.200719 % and 0.505162 % respectively. From the estimated coefficient, it is found that the relationship direction of export, government expenditure and FDI are expected. Nonetheless, inflation rate is not expected to give negative impacts toward the economic growth in Malaysia.

Table 3. OLS Regression Analysis

Variables	T-Statistic	Probability	Remark
Export (EX)	5.352183	0.0000	Significant
Inflation Rate (INF)	-0.897411	0.3753	Insignificant
Government Expenditure (GE)	2.818882	0.0077	Significant
Foreign Direct Investment (FDI)	1.897874	0.0655	Significant

To summarize the OLS result, export has a positive relationship with GDP growth and it is the most significant variable. It has t-statistic value by 5.352183 which significant at 1 % significance level. This result is consistent with the findings from Shahbaz and Rahman (2014) and Hui and Nung (2002). Government expenditure and foreign direct investment also show a positive relationship with the GDP growth, similar result discovered by Salih (2012). However, government expenditure is significant at 1 % significance level with the probability of 0.0077 while foreign direct investment significant at 1 % significance level with the probability by 0.0655. Meanwhile, inflation rate has a negative relationship and insignificant with the economic growth, indicates that when the inflation is higher, it will decline the purchasing power, and thus it will slow down the economic growth in Malaysia (Raja and Amalina, 2017).

5.0 CONCLUSION

In this paper, the determinants of economic growth in Malaysia were analysed from year 1970 to 2016. This study has completed with the use of Ordinary Least Square (OLS) method that has been used for 47 years, with the intention to determine the relationship between dependent and independent variables and the most significant variables that influence the economic growth in Malaysia. The result has been analysed and discussed which resulted to positive significant indicators for export, government expenditure and foreign direct investment, while inflation rate provides insignificant findings. Other than that, the researchers have achieved the objective of the study.

To that extent, economist can use the findings in this study to make an improvement in the economy. Based on the findings, higher inflation rate can decline the purchasing power and at the same time can slow down the economic growth. Thus, they need to come up with the new strategies to lower the inflation rate and sustain the economic growth performance.

For future research, it is important to note that this investigation considers four independent variables which are believed to contribute towards the economic growth in Malaysian market. As such, for further study we are proposing that there is a need to include other variables. Besides, the other researchers should use longer period of time in order to get the better result when using time series analysis.

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