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Revisiting the Impact of Foreign Direct Investment on Malaysia Economic Growth

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Abstract

Malaysia has shown a remarkable progress in its economic growth in the past decade. However, the economic growth in Malaysia has caused foreign direct investment (FDI) volatile in the market. The main objective of this research is to analyse the impact of FDI on Malaysia economic growth proxied by gross domestic product (GDP), foreign direct investment (FDI), gross fixed capital formation (DI), population growth (POP), and trade openness (TO). Analysis was done using Autoregressive Distributed Lag Model (ARDL) bound test approach with the period range of study was from 1970 until 2018. The study revealed that the chosen macroeconomics variables in the model contributed positively and significantly in increasing the growth of Malaysian economy. In terms of recommendations, there is a need for a policy change. The government ministry, primarily, the Ministry of International Trade and Industries (MITI), together with other government agencies such as Malaysia Investment Development Authority should formulate a strategy to upgrade the effectiveness of Malaysian tax policies and boost more business potential and attract investors from developed nations.

Keyword: Foreign direct investment, Economic growth, ARDL, Malaysian Economy

Introduction

Over the past half-century, Malaysia has experienced remarkable growth in the real gross domestic product (GDP) per capita. GDP or economic growth is the most powerful instrument to improve the quality of life in developing countries likes Malaysia's country. Every country is trying to achieve a high standard quality of economic growth from time to time. Economics growth can rise economy's performance by adjusting market value of products and services over time. It is traditionally evaluated as the percentage of real gross domestic product or actual GDP.

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Meanwhile, by the half of the 20th century, South-East Asian (SEA), including Malaysia, have experienced tiger economies and known as miracle economic growth. According to Okamoto (1994), since 1993, post-independence, Malaysia has quickly transformed and taken an important role of export that led to growth strategy and has sustained an average economic growth rate of 8% to 9% per year. Malaysia's economy has become one of the best economic performance in Asia starting from the year 1957 to 2005, real gross domestic product "GDP" had grown by an average of 6.5% per year.

In the early 1980s through the mid of 1990s, economic performance has faced rapid growth with the average is near to 8% per year. Lai (2003), has stated that economic growth is the most important key to evaluate the performance development and growth for every economy in the countries. As the economy been diversified and modernized, level of foreign and domestic private investment has increased as it has played an important role in macroeconomic variables toward the economy over time.

According to UNCTAD (2012), foreign direct investment (FDI) is the main factor to critical growth engine and is regarded as the backbone for the country's growth and it can give good and bad impact to the growth on economic. In addition, UNCTAD (2014) marketed FDI as a big advantage to become sustainable development engine. Sustainable development goals have been a dream for every country, and it has become an important mission to be achieved. Not only that, but FDI also is known as a source of funding for capital projects and have played a major role in rapid economic growth. Knowing the importance of FDI, every country is now looking aggressively for more FDI to drive the growth, including Malaysia. Lee (2013), has stated that almost all countries in the world nowadays seeking more FDI for their economy to give a positive impact that could result in capital financing, positive externalities, and thus stimulating economic growth through technology transfer, spillover effects, productivity gains and new processes and managerial skills implementation. The professional believes that a fall in FDI is strongly related to the level of economic growth (Tamajaj, 2000). If there is no action taken, it would be problematic to the economy because the dropped values in FDI inflows would make it hard to sustain the economic growth levels.

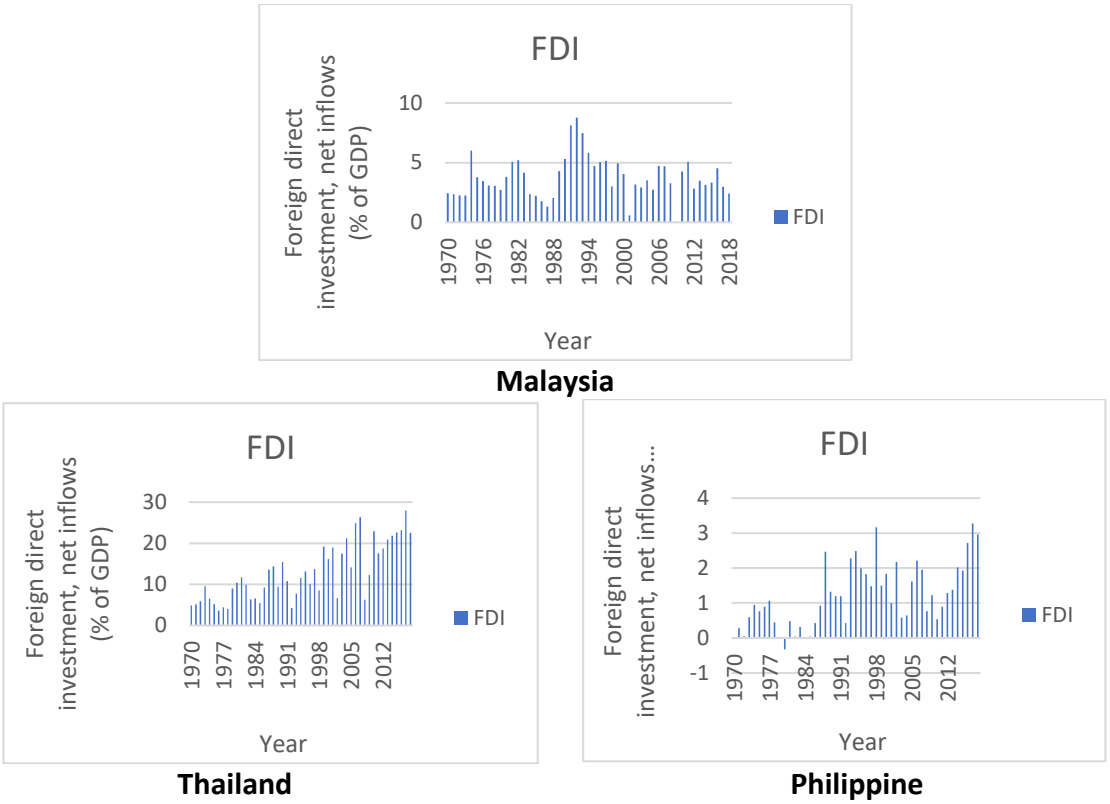


Figure 1: Foreign direct investment, net inflows (% of GDP).
Source: World Development Indicator 2018 (Period: Year of 1970 to 2018).

Figure 1 shows the trend of forei gn direct investment, net inflows (% of GDP) performance for Malaysia, Thailand, and Philippine countries from the year 1970 until 2018. Looking at Malaysia, the FDI shows a volatile movement trend since the year of 1970 and will make unpredictable movement in future. As compared to the other two countries, Thailand and the Philippines, they show an uptrend movement even though there are an up and downtrend but still, the economist can predict what will happen in future. For Malaysia itself, the lower percentage shown in the year 2009 with 0.05%, a very low FDI inflows (% of GDP). The problem became worse and due to the conflict of the financial crisis in the Asian country on that time, Malaysia's economy had experienced in rescission downturn such seen in the years of 1985, 1997, and 2001.

On the other hand, this paper aims to give a special highlight to the foreign direct investment (FDI) in Malaysia. Malaysia has received a significant amount of FDI and as the important keys to the growth. With more than 40 years' history of FDI, Malaysia should be count as one of the dynamic components to achieve success in economic growth. Not only the FDI is seen as the macroeconomic determinant, other potential determinants of growth such as gross fixed capital formation (DI), population growth (POP), and trade openness (TO) were also tested in this research paper. Therefore, the main objective of this paper is to identify the relationship between GDP and its independent variables (FDI, DI, POP, and TO) by using the annual data starting from 1970 to 2018.

Literature Review

Some previous studies have shown that macroeconomic variables significantly influence the FDI on economic growth, for example, one of the most important from the previous study is the relationship between economic growth and foreign direct investment

(FDI). The research is conducted by Liu et al (2002), has stated that a test has been run to economic growth, foreign direct investment, and trade and there is a positive long-run relationship exist among them in China. By using the data from 1981 to 1997 and used cointegration framework, it has found that there is the existence of bidirectional causality between the FDI, GDP, and also for export.

De Mello (1999), however, has stated that there is a significant level between foreign direct investment (FDI) and the growth (GDP). He also has found support for the growth hypothesis based on FDI while examining time-series data. He estimates there is the effect of the FDI in the recipient economy on capital accumulation and production growth. as a result, FDI has led growth hypothesis for a sample of 32 OECD and non-OECD countries for the period of 1970 to 1990.

Meanwhile, according to Ali, Alam, Islam, & Hossain (2015), on a study of empirical analysis of population growth on economic development in Bangladesh has shown negative significant and adversely to population growth that affects economic growth. But, it does not mean that it does not support the view of population growth because Bangladesh has rapid population growth and the highest ranking for the total fertilization in the Asian area.

In addition, according to Piketty (2014), there is a positive outcome and completely independent relationship between population growth (POP) and GDP per capita. The result has shown an increase in economic growth rates will that lead to higher rates of population growth and automatically will gain economic well-being. The World Bank (2017) has stated that there is a positive connection between population growth and real GDP per capita. The result shows higher population growth rates would give causality to the overall growth of economic either lower or higher but depends on the impact of population growth and real GDP per capita.

However, referred to Yusuf (1990), the determinants of economic growth in Malaysia 1970-2010 has stated that trade openness (TO) has positive significant and plays a main role in economic growth in Malaysia. The result shows an economic boom through exports of raw materials likes rubber and tin and gained international trade as trade openness is the main engine to stimulate the growth of economic. Miszztal (2010), in his research, has mentioned there is a positive correlation between economic growth and foreign direct investment (FDI) and this has affected a high in the level of competition of domestic products and give better efficiency than local companies. As a result, it has boost economic growth to the next level in the market.

Table 1
Summary of Empirical Studies

Studies of	Sample and Period	Method	Explanatory Variables
		Time Series	
Liu et at (2002)	China 1981 - 1997	ARDL	-FDI positive toward GDP
De Mello (1999)	OECD 1970 - 1990	OLS	-FDI positive toward GDP
Asian Development Outlook (2002)	Bangladesh 1973 - 2000	OLS	-FDI positive toward GDP
Afzal (2009)	South Asia 1996 - 2006	ARDL	-FDI positive toward GDP
Zhang (2006)	Malaysia 1970 - 2005	ARDL	-FDI positive toward GDP
Ali, Alam, Islam, & Hossain (2015)	Bangladesh 2000 - 2001	OLS	-POP negative toward GDP
Piketty (2014)	OECD n/a	ARDL	-POP positive toward GDP
World Bank (2017)	OECD n/a	ARDL	-POP positive toward GDP
Miszztal (2010)	Uganda 1970 - 2000	OLS	-FDI positive toward GDP
Ghali & Mutawa (1999)	Malaysia 1960 - 1998	OLS	-DI positive toward GDP
Hatemi (2002)	Japan 1960 - 1999	OLS	-TO positive toward GDP
Saad (2012)	Lebanon 1970 - 2011	ARDL	-TO positive toward GDP

Methodology

In this paper, following model was adopted as follows:

$$GDP = \int(FDI, DI, POP, TO) \quad (1.0)$$

Where:

GDP = GDP (constant 2010 US$)

FDI = Foreign Direct Investment, net inflow (% of GDP)

DI = Gross Fixed Capital Formation (% of GDP)

POP = Population Growth, total

TO = Trade Openness (% of GDP)

The stationary for each variables was tested using the log form of the variables. The variables were transformed to log form as a way to decrease the issue of heteroscedasticity. When variables were presented in log form, the scale of the variables would be compressed and in turn, the differences between the two value was reduced to twofold difference (Gujarati,1995)

$$LNGDP = \delta_0 + \beta_1 LNFDI + \beta_2 LNDI_t + \beta_3 LNPOP_t + \beta_4 LNTO_t + \mu_{t_t} \quad (2.0)$$

ARDL bound testing approach was used to estimate both short and long-run dynamic relationship of the stock market and other counterpart variables. This method, the ARDL bound testing approach was first popularized by Pesaran et al. (1997). The ARDL has numerous advantages. The ARDL approach has its distinctive feature, as it allows testing to be conducted in multiple conditions, something that is inapplicable to be done in other cointegration procedures. Therefore, ARDL approach can be run under the stationarity properties of the variables in the samples and testing also can be run for inferences on long-run estimates. Therefore, despite series are either I(0), I(1), or fractionally integrated, ARDL approach is permissible to be run for testing and this method has helped to solve some issues in testing the variables that usually stemmed from non-stationary time series data (Pesaran et al. 1997; Bahmani-Oskooee and Ng 2002; Laurenceson and Chai, 2003). Another advantage of the ARDL model is this model will Secondly, the ARDL model gather the appropriate amount of lags during the data generating process, and it will be presented through a general-to-specific modelling framework (Laurenceson and Chai, 2003). The regression would be estimated in (p+1)k number of regressions, and this estimation aims to conclude the optimal lag-length in each variables, where p denotes the maximum lag to be used, and k represents the number of variables in the equation. The last advantage of the ARDL approach is it will generate a strong result when smaller sample size was used for cointegration analysis.

ARDL Model

The model was transformed into Bound Testing approach.

$$\Delta LNGDP_t = \beta_0 + \theta_0 LNGDP_{t-1} + \theta_1 LNFDI_{t-1} + \theta_2 LNDI_{t-1} + \theta_3 LNPOP_{t-1} + \theta_4 LNTO_{t-1}$$
$$+ \sum_{i=1}^{a} \beta_i \Delta LNGDP_{t-i} + \sum_{i=0}^{b} \gamma_i \Delta LNFDI_{t-i} + \sum_{i=0}^{c} \delta_i \Delta LNDI_{t-i} + \sum_{i=0}^{d} \lambda_i \Delta LNPOP_{t-i} + \sum_{i=0}^{e} \vartheta_i \Delta LNTO_{t-i} + \upsilon_t \quad (2.0)$$

where Δ denotes the first difference operator and vt is a white-noise disturbance term. The final model represented in equation (3.0) above can also be viewed as an ARDL of order, ($p\ q\ r\ s\ t\ u$). The model shows that total foreign direct investment inflows (TFDI) is influenced and explained by its past values. Also, TFDI is influenced by some forms of disturbance or shocks. Based on the estimation of UECM, the long-run elasticities were noted to be the coefficient of the one lagged explanatory variable (multiplied by a negative sign), divided by the coefficient of the one lagged dependent variable. As for the short-run effects, they were seen

in the result of the coefficient of the first differenced variables. For the null of no cointegration in the long-run relationship, the values were shown as $H0$: $\theta0=\theta1=\theta2=\theta3=\theta4=\theta5=0$ (there is no long-run relationship), and they were tested against the alternative of $H1$: $\theta0\neq\theta1\neq\theta2\neq\theta3\neq\theta4\neq\theta5\neq 0$ (there is a long-run relationship exists), using the well-known F-test. For the asymptotic distribution of F-statistics, it is non-standard regardless of the condition of the variables, either I(0) or I(1). In the case of a small sample size, noted from 30 to 80 observations, Narayan (2004) has introduced two sets of appropriate critical values. The first set would make the assumption that all variables are I(1), and the second set would assume that all variables are I(0). If the result showed that the F-statistics value was under the bound level, the null hypothesis cannot be rejected. Alternatively, if the values of F-statistics exceed the upper bound level, the null hypothesis would be rejected, and it would provide the proof of cointegration. When the value falls within the band, the result is deemed to be inconclusive.

Source of Data

The data used in this research paper, which are GDP, FDI, DI, POP and TO are collected from World Development Indicator (WDI) 2018, that can be accessed freely from the internet. The sample data used is annual data starting from 1970 to 2018 that consists of 48 years collected data.

Empirical Results and Discussion

The analysis began with testing of the unit root test for each selected variable in Malaysia. There are two standard unit root test is being used in this research which is Dickey-Fuller (DF)/Augmented Dickey-Fuller (ADF) and the Phillip Perron (PP) test, whereas it is essential to carry out for determining the order of integration of variables.

Each variable was tested based on two stages: 1) intercept and 2) trend and intercept. Based on ADF and PP, the result found that there is variable has mixed evidence of stationary for at level stage. Foreign direct investment (FDI), gross fixed capital formation (LNDI), and population growth (LNPOP) are significant at both level intercept and intercept and trend with the result shows to be stationary at 10%, 5% and 1% significance level respectively.

While, after running the result for each variable at first difference level it has found that all macroeconomics to be stationary at 1% significant level for both ADF and PP tests but except for population growth (LNPOP), which shows stationary at 5% significant level for trend and intercept on ADF only and for PP unit root test is non-significant level. However, it can be concluded that the data meet the requirement to define the short-run and long-run relationship and to proceed as its to fulfil the condition by using Autoregressive Distributed Lags (ARDL) module as suggested by Pesaran Shin and Smith (2001).

Table 2
Results of Unit Root Tests

Model		Variable	ADF test statistic		PP test statistic	
			Intercept	Trend and intercept	Intercept	Trend and intercept
	Level	LNGDP	-2.373 (0)	-1.732 (0)	-2.335 (2)	-1.820 (3)
		LNFDI	-5.895 (0)***	-5.871 (0)***	-5.897 (1)***	-5.872 (1)***
		LNDI	-2.604 (1)*	-2.771 (1)	-2.380 (2)	-2.487 (1)
		LNPOP	-3.286 (9)**	-1.489 (9)	-3.372 (5)***	2.734 (5)
		LNTO	-1.930 (1)	-0.626 (1)	-1.471 (0)	-0.181 (4)
	First difference	LNGDP	-5.729 (0)***	-6.089 (0)***	-5.691 (2)***	-6.091 (1)***
		LNFDI	-7.784 (1)***	-7.701 (1)***	-25.902 (27)***	-27.312 (27)***
		LNDI	-5.006 (0)***	-4.979 (0)***	-4.938 (3)***	-4.910 (3)***
		LNPOP	-1.813 (8)	-3.658 (8)**	0.067 (4)	-1.623 (3)
		LNTO	-5.233 (0)***	-5.757 (0)***	-5.233 (0)***	-5.723 (6)***

Note: 1. (*), (**), (***) indicate significant at 10%, 5% and 1% significance level respectively.
2. The optimal lag is selected using the Schwarz info criterion for ADF test and the bandwidth had been selected by using the Newey–West method for the PP test.

Detecting the Long Run Relationship

Before proceeding to the long run and short-run elasticities, the test must pass and examine by using the ARDL cointegration to see whether there is an existence in long-run relationship between the dependent variable and independent variable. As the result shown in Table 3 below, it can be seen that by using the maximum lag of 4 and the estimation through Akaike Information Criterion (AIC), it was reported that the optimum lag orders was 1, 2, 4, 2, 4 and has been implied the F-statistics are greater than to 1%, 5%, and 10% levels of significance of upper critical bound. For example, in the result of ARDL cointegration has shown F-statistics critical value is 6.408 is more than the highest value in upper bound value at 1% significant levels. Also, Narayan (2004), has stated that the value of F-statistics must to examined first with the other critical values provided. Thus, the existence of long-run dynamics among the variables in this model has been proved and confirmed.

Table 3
Result of ARDL cointegration

Model	Critical Values for F-statistics	Max. lag	Lag order	
GDP = *f*(FDI, DI, POP, TO)	6.408***	4	1, 2, 4, 2, 4	
k =4	Significant level		Lower I (0)	Upper I (1)
	1%		3.74	5.06
	5%		2.86	4.01
	10%		2.45	3.52

Note: 1. The critical values for F-statistics are based on Pesaran (2001), case III: unrestricted intercept and trend. 2. k is a number of variables. 3. *, **, and *** represent 10%, 5% and 1% level of significance, respectively. k =4 for a model of income distribution.

Diagnostic Checking

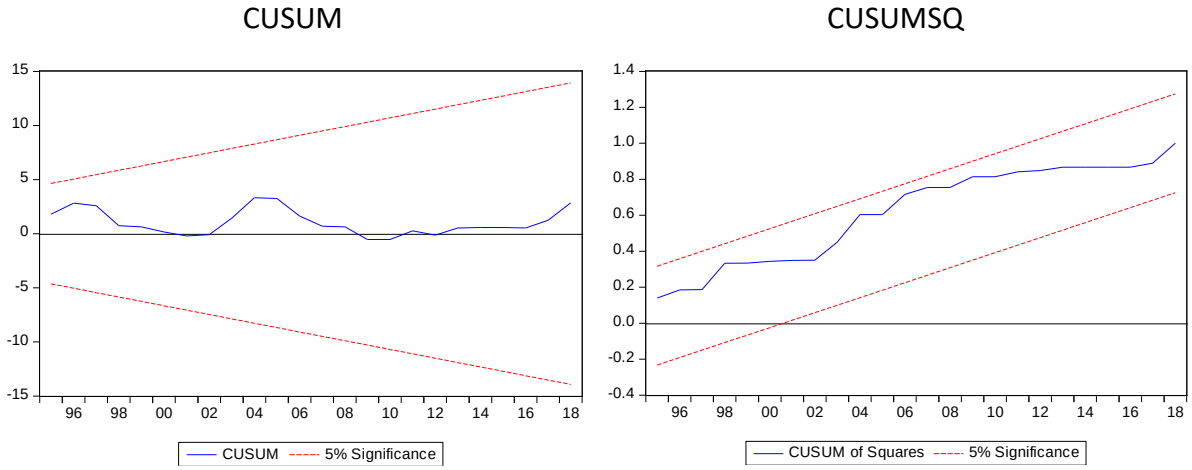
The next step of the study, the result analysis is a vital step because it would determine the robustness of the model. There were several options for diagnostic test, for example; ARCH test, Breusch-Godfrey serial correlation LM test, Jacque-Bera normality test and Ramset RESET specification test. Based on the tests, the model has demonstrated the desired econometric properties. Normally, it has a correct functional form and the model's residuals are serially uncorrelated, and homoscedastic given the probability value of the t-test is all 10% significant value. Therefore, the result from Table 8 has confirmed that the proposed model has no evidence of serial correlation, no heteroscedasticity effect in disturbance, and the specification model is well specified.

Table 4
Result of Diagnostic Checking

Model	Normality test	Serial correlation	Functional form	Heteroscedasticity
Value	0.733	1.683	0.228	1.216
	[0.693]	[0.206]	[0.636]	[0.314]

Note. 1. ** represent 5% significant levels. 2. The diagnostic test performed as follows A. Lag range multiplier test for residual serial correlation; B. Ramsey's RESET test using the square of the fitted values; C. Based on a test of skewness kurtosis of residuals; D. Based on the regression of squared fitted values. 2. The numbers in brackets [ ] are p-values.

The results showed that at both CUSUM and CUSUMSQ plots were significant at 5% significant level. It means that the parameter was showing signs of stability. The stability diagnostic tests were run to detect stability for both short-run and long-run parameter estimates. The graph below shows the plots for both CUSUM and CUSUMSQ and these plots indicated that the stability test has been run prior. Referring to the CUSUM plot result, it shows that the blue line lies were adjusted in between the two dotted red lines that stand for the significance level. Plus, the graph below shows that the plot of the CUSUMSQ test lies within the area of two polar bounds at the 5% significance level. Based on these results, it was confirmed that the selected time series model is structurally stable.



Note: The straight line symbolizes critical bounds at 5% level of significant for each plot

Short Run Dynamic and Long Run Elasticities

Eagle and Granger have introduced an ECM technique which is it will analyze over the time of behaviour for short-term and long-term variables. While economic variables will turn to be cointegrated among of them if there are disturbances between the long-run regression and thus it can apply to estimate the empirical error correlation model and will affect the economic variables after justified the long-run plus short-run in the test being run as to notice the adjustment of the coefficient.

However, as shown in the table below, we need to make sure for the model estimation is negative and for the probability is significant as it is necessary for model stability and as to estimate the lagged error correction term (ECT) in ARDL regression. Due to the adjustment, the ECT value of -4.290 or 42.90% needs to adjust completely in the year.

Table 5
Short run elasticities

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Short run elasticities				
D(LNFDI)	0.018***	0.005	3.565	0.001
D(LNFDI(-1))	-0.006	0.004	-1.436	0.162
D(LNFDI(-2))	-0.007	0.004	-1.571	0.127
D(LNFDI(-3))	-0.007	0.004	-1.536	0.136
D(LNDI)	0.233***	0.037	6.170	0.000
D(LNDI(-1))	-0.069*	0.035	-1.970	0.059
D(LNPOP)	26.925	31.065	0.866	0.393
D(LNPOP(-1))	-210.717	163.493	-1.288	0.208
D(LNPOP(-2))	180.194	114.923	1.567	0.128
D(LNPOP(-3))	-62.452*	33.043	-1.889	0.069
D(LNTO)	0.066	0.059	1.118	0.273
D(LNTO(-1))	-0.138**	0.058	-2.373	0.025
CointEq(-1)	-0.681***	0.158	-4.290	0.000

For estimation of long-run elasticities as revealed in Table 6, it measures between real gross domestic product (GDP) and the other determinants of independent variables that significant

at 5% level which is foreign direct investment (FDI), and trade openness (TO) while significant at 1% level is gross fixed capital formation (DI), and population growth (POP). The result has indicated that all the independent variables have a positive relationship between real gross domestic product (GDP).

For gross fixed capital formation (DI), it shows the estimated elasticities is 0.207 respectively. It means an increase in 1% of gross fixed capital formation (DI) will increase in result of 0.207% to the GDP. Ghali and Mutawa (1999), has stated there is a strong significant relationship between gross fixed capital formation toward economic growth in Malaysia. Therefore, it has given an outcome to the GDP as to growth the variable is really needed to lead the country development projects. Typically, gross fixed capital formation is essential to gain GDP growth, productivity, and also income in future. While, for population growth (POP) with estimated elasticities of 2.318, it indicates that an increase of 1% in population growth (POP) will result in 2.318% increase in GDP. World Bank (2017), has stated that there is a positive connection between population growth and real GDP per capita. The result shows a higher population growth rate would give causality to the overall growth of economic either lower or higher but depends on the impact of population growth and real GDP per capita.

Moreover, the result shows foreign direct investment (FDI) have estimated elasticities of 0.068. This will show that a 1% increase in foreign direct investment (FDI) will result in 0.068% increase in GDP in Malaysia. Asian Development Outlook (2002), has shown a positive result and highly significant for implying the relationship between economic growth and foreign direct investment (FDI). As a result, both of dependent variable and independent variable has shown high in saving rate whereas it is important to do domestic saving because most funds come from investment. Other than that, trade openness (TO) also shows a positive result in estimated elasticities with 0.14 respectively. With an increase of 1% at trade openness (TO), it will increase by 0.14% in the GDP result. Hatemi (2002), has found a positive significant result on openness and economic growth and it has given a result which will lead TO to grow as well as for economic growth.

Table 6
Long run elasticities

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Long run elasticities				
LNFDI	0.068**	0.026	2.633	0.013**
LNDI	0.207***	0.049	4.211	0.000***
LNPOP	2.318***	0.061	37.410	0.000***
LNTO	0.140**	0.054	2.590	0.015**
C	-14.545	0.821	-17.713	0.000

Note: (*), (**), (***) indicate significant at 10%, 5% and 1% significance level respectively. DV is dependent variable, IV is independent variable.

Conclusion and Policy Recommendation

In the nutshell, the objective of this paper is to study the impact of selected macroeconomic variables on the real gross domestic product (GDP) in Malaysia with a focus on the FDI. Several previous types of research have been studied to ensure the connection between the independent variable and dependent variable by using some various methodology. There are four independent variables being used in this study which are foreign direct investment (FDI), gross fixed capital formation (DI), population growth (POP), and trade openness (TO).

From the result, it can be concluded that unit root test has illustrated a mixed of stationary between the selected macroeconomic variables as a prove the data meet the requirement to define both relationships between short-run and long run. Also, inside the empirical study, the model of cointegration from Autoregressive Distributed Lag (ARDL) bound test approach has been used as to investigate the positive relationship between long-run relationship and the rest of selected macroeconomic variables. Overall, it can be concluded the propose of the finding confirms that there is a long-run correlation among all the macroeconomic variables (FDI, DI, POP, and TO). As a result, using the ARDL model approach it can be seen all the macroeconomic variables are significant and as a prove to confirm there are a negative ECT result and the probability is significant for model stability in short-run test and for long run test, need to make sure the independent variables toward dependent variable is meet at the significant levels. Therefore, it has confirmed that all the macroeconomic variables have influenced and given positive relationship result towards the economic growth in Malaysia.

Based on the above empirical results and long-run elasticities results, it has shown that the foreign direct investment (FDI), gross fixed capital formation (DI), population growth (POP), and trade openness (TO) are significantly positive towards the economic growth. Every government should take massive action to improve the quality of economic to achieve developed state status. The finding in this study has highlighted one of the most impacting factors to the economic growth which is foreign direct investment. With cooperation from government agencies likes Malaysia Investment Development Authority (MIDA) and Minister of Finance (MOF), they could help in increasing the level of economic growth by promoting foreign and local investment in manufacture and services to the public and outside investors for the growth in Malaysia. However, for gross fixed capital formation, the responsible parties to improve the gross fixed capital formation is the Department of Statistics Malaysia (DOSM) and National Accounts. They can make an improvement by analysing and increase the investment which will give an impact on economic development. Also, should increase the per capita income so that can contribute to the higher in purchasing power, which in turn can increase the demand in the market. Not just that, increase in investment also can give high return in production.

For population growth, government agencies that responsible for the improvement, in this case, is the Ministry of Economic Affairs (MOEA), and Department of Statistics Malaysia (DOSM). They should limit the number of immigrants to come to the country and encourages couples lived to not only focused on quality life but also have children for the long-term benefit to the country. Besides, could introduce to the public about how important to have a big family and at the same time can promote by doing fertility campaign through social media or newspaper. Finally, for trade openness, the government that should respond is the Ministry of International Trade and Industry Malaysia (MITI). MITI can provide help by increasing the industry of imports and exports of goods and services. With this way, it can improve domestic technology to become more efficient. As a result, economic trade can open widely and could grow faster than the closed one and can have a positive impact on economic growth. Therefore, the result from this study perhaps that can help the government to analyze for the best macroeconomic variables as to give a positive result and stability in economy performance toward Malaysia in future.

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