

ISEBA 2022
International Symposium & Exhibition on Business and Accounting 2022

**ANALYSIS OF FDI, GOVERNMENT DEBT AND POPULATION
GROWTH IN MALAYSIA**

Hamidah Ramlan (a)*, Azura Abd Latip (b)
*Corresponding author

(a) Accounting and Finance Department, Universiti Tenaga Nasional, Muadzam Shah, Pahang, Malaysia,
Hamidah@uniten.edu.my

(b) Accounting and Finance Department, Universiti Tenaga Nasional, Muadzam Shah, Pahang, Malaysia,
Azura@gmail.com

Abstract

Economic growth has long been a popular topic of research in a wide range of industries and countries around the world. Gross Domestic Product (GDP) is the total market value of all the finished goods and materials that are produced in a country's borders at a particular time. Commonly, these indicators are mostly statistics that show government-issued health and growth of the country especially in economic. This paper aims to analyse the impact of FDI, government debt and population growth on economic growth in Malaysia. The data was gathered through The World Bank and Trading Economic from the year 2005 until 2019, been analysed and has employed multiple regression model. There are very few studies conducted consider the impact of FDI, government debt and population growth to many countries. Therefore, the reported findings found that there is positive impact of FDI and population growth on economic growth while government debt is insignificant impact economic growth. Notably that, policymaker as well as government across countries are recommended to investigate details the growth of macroeconomic factors especially government debt and FDI in ensuring the performance of the economic growth received for country development.

2672-8958 © 2023 Published by European Publisher.

Keywords: FDI, government debts, population growth, economic growth

1. Introduction

Gross Domestic Product (GDP) is the total market value of all the finished goods and materials that produced in a country's borders at a particular time period. Commonly, these indicators are mostly statistics that show government-issued health and growth of the country especially in economic. Grobéty (2018) was conducted the research among the government debt and growth, the role of liquidity for period 1990-2000. The employed variables are government debt and economic growth. Checherita-Westphal and Rother (2012) found that a non-linear impact of debt on growth with a turning point beyond which the government debt to GDP ratio has a negative impact on long term growth towards GDP.

According to Chen and Zulkifli (2012) is conducted research regarding to the Malaysian outward FDI and economic growth between 1980 to 2010. The findings show that outward Foreign Direct Investment (FDI) is a positive and significant affect to the Gross Domestic Product (GDP) in the long run. In addition, there is also show that relationship between growth and outward Foreign Direct Investment has a positive bidirectional in the long term (Almfraji & Almsafir, 2014). Based on Makiela and Ouattara (2018), these studies examined foreign direct investment and economic growth showed a positive and significant impact FDI towards economic growth. Next, Al-Iriani (2007) found that FDI have a positive impact between FDI with economic growth.

According to the research by Payne and Ewing (1997) is conducted research regarding population and economic growth. The employed variables are population and economic growth. The finding shows that there is a positive relationship between population growth and economic growth in Mexico. These results find that the population growth to be statistically significant and positive through F-statistic on the lagged values. As indicated by Nepal and Pajja (2019), the study showed there is a strong positive impact between population on economic growth.

2. Problem Statement

In the past few years, the foreign direct investment (FDI) shows a large declining trend in Malaysia. The major impact in decreasing FDI is due to the competition from emerging economies such as in China and India. Declining domestic markets and lower profit margins, many Malaysian companies have utilized to venture abroad to seek newer markets. The outward FDI has become an option to cater the slow global economic growth while the inflow of FDI is growing at slower pace (Chen & Zulkifli, 2012). The problem statement that occurs and exists in this study designed to investigate how government debt, population growth and foreign direct investment can give effects to the economic growth in Malaysia between 2005 until 2019. Therefore, indirectly it can give impact to the economic growth either significant or insignificant.

3. Research Objectives

The objectives of this study are to identify the significant impact of FDI, government debts and population growth on economic growth in Malaysia.

4. Research Methods

The yearly FDI, government debts, population growth and GDP data were gathered from The World Bank and Trading Economics which cover the period from year 2005 until 2019. Regression analysis were tested using SPSS software. Correlation test used to determine the relationship between the variables while regression test employed to test the significant impact of the variables. Table 1 below shows the variables description in this study.

Table 1. Description of Variables

Independent Variables	Dependent Variable
Foreign Direct Investment	Economic Growth (GDP)
Government debts	
Population growth	

5. Findings

5.1. Model summary

Table 2 shows the impact between all independent variables and dependent variable. The R-Square is determined whether dependent variable and independent variable have been a strong or not connection.

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.877 ^a	0.770	0.707	0.21328

Note: a. Predictors: (Constant), Log Population Growth, Log FDI Net Inflows, Log Government Debt towards Log Economic Growth.

Based on the result above, R-Square is 0.770, it means the independent variables (Foreign Direct Investment, government debt and population growth) can explain 77% of the variation in dependent variable (economic growth). Hence, the independent variables and dependent variable in the table above have a strong connection.

5.2. ANOVA

Table 3 show the value of F-statistic is 12.251 and p-value at 0.001 is less than 0.05, if $p < 0.05$ then the result shows that the independent variables are strongly impact to the economic growth.

Table 3. ANOVA

Model	Sum of squares	df	Mean square	F	Significance
Regression	1,672	3	0.557	12.251	0.001 ^b

Note: a. Dependent Variable: Log Economic Growth

b. Predictors: (Constant), Log FDI, Log Government Debt, Log Population Growth

5.3. Regression analysis

Table 4 below extracted from multiple regression analysis. Based on coefficients in table 4, the research regression model can be rewrite as $GDP = 39.147 + 0.325(FDI) + 1.073(GD) + (-2.879(PG)) + e$

This shows that some independent variable has positive relationship which are Log Foreign Direct Investment, Log Population Growth and one independent variable which is Log Government Debt has negative impact toward economic growth.

The first variable is Foreign Direct Investment. Based on the table above, the value of t-statistic of Foreign Direct Investment is 6.012 indicating a positive association between the variable while the value of p-value of Foreign Direct Investment is significant at 1%. It represents that Foreign Direct Investment have positive significant impact to economic growth and it supported by Makiela and Ouattara (2018), Acemoglu and Robinson (2008).

The second variable is government debt the value t-statistic of government debt is 1.297 indicating positive association between the variable. The value p-value of government debt towards economic growth is insignificant because $>1\%$. The government debt has an insignificant impact towards economic growth, and it is supported by Grobéty (2018), Daud and Podivinsky (2014) and Chen et al. (2017).

The third variable is population growth, the value of t-statistic of the variable is -2.158 indicating negative association between two variables. The value p-value of population growth is significant 0.054. It shows that population growth has positive impact with economic growth and this result supported by Nepal and Pajja (2019), Chenavaz and Escobar (2015).

Table 4. Coefficients^a

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	t	Significance
1 (Constant)	39.147	19.916	1.966	0.075
Log FDI	0.325	0.054	6.012	0.000
Log Government debt	1.073	0.827	1.297	0.221
Population Growth	-2.879	1.334	-2.158	0.054

Note: a. Dependent Variable: Log Economic Growth

6. Conclusions

This study analyses the impact of FDI, government debt, population growth on economic growth in Malaysia for 15 years. The result shows that two independent variables which are Foreign Direct Investment and population growth have a positive impact while one independent variable which is government debt shows insignificant impact towards economic growth. In future studies, it is recommended to study the impact of economic growth with different variable such as towards savings, fiscal deficits, and trade openness. It may show the different result whenever it is positive or negative result depends on the variables. Besides, future research can be increasing their time frame of period. It may show the different result at the end of the research. Policymaker as well as government across countries are recommended to look into details the growth of macroeconomic factors especially government debt and FDI in ensuring the performance of the economic growth received for country development.

Acknowledgments

We thank you to Universiti Tenaga Nasional for Pocket Grant awarded under this study.

References

- Acemoglu, D., & Robinson, J. (2008). *The role of institutions in growth and development* (Vol. 10). Washington DC: World Bank.
- Al-Iriani, M. (2007). Foreign direct investment and economic growth in the GCC countries: A causality investigation using heterogeneous panel analysis. *Topics in Middle Eastern and North African Economies*, 9.
- Almfraji, M. A., & Almsafir, M. K. (2014). Foreign direct investment and economic growth literature review from 1994 to 2012. *Procedia-Social and Behavioral Sciences*, 129, 206-213. <https://doi.org/10.1016/j.sbspro.2014.03.668>
- Checherita-Westphal, C., & Rother, P. (2012). The impact of high government debt on economic growth and its channels: An empirical investigation for the euro area. *European economic review*, 56(7), 1392-1405. <https://doi.org/10.1016/j.euroecorev.2012.06.007>
- Chen, C., Yao, S., Hu, P., & Lin, Y. (2017). Optimal government investment and public debt in an economic growth model. *China Economic Review*, 45, 257-278. <https://doi.org/10.1016/j.chieco.2016.08.005>
- Chen, J.-E., & Zulkifli, S. A. M. (2012). Malaysian Outward FDI and Economic Growth. *Procedia - Social and Behavioral Sciences*, 65, 717-722. <https://doi.org/10.1016/j.sbspro.2012.11.189>
- Chenavaz, R., & Escobar, O. (2015). Population distribution, effective area and economic growth. *Applied Economics*, 47(53), 5776-5790. <https://doi.org/10.1080/00036846.2015.1058907>
- Daud, S. N. M., & Podivinsky, J. (2014). Government debt and economic growth in Malaysia: the role of institutional quality. *Applied Economics Letters*, 21(17), 1179-1183. <https://doi.org/10.1080/13504851.2014.916378>
- Grobéty, M. (2018). Government debt and growth: The role of liquidity. *Journal of International Money and Finance*, 83, 1-22. <https://doi.org/10.1016/j.jimonfin.2018.01.004>
- Makiela, K., & Ouattara, B. (2018). Foreign direct investment and economic growth: Exploring the transmission channels. *Economic Modelling*, 72, 296-305. <https://doi.org/10.1016/j.econmod.2018.02.007>
- Nepal, R., & Paija, N. (2019). Energy security, electricity, population and economic growth: The case of a developing South Asian resource-rich economy. *Energy Policy*, 132, 771-781. <https://doi.org/10.1016/j.enpol.2019.05.054>
- Payne, J. E., & Ewing, B. T. (1997). Population and economic growth: a cointegration analysis of lesser developed countries. *Applied Economics Letters*, 4(11), 665-669. <https://doi.org/10.1080/758530645>