

# The Impact of Economic Growth, Inflation Rate and Exchange Rate on Foreign Direct Investment in Malaysia

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#### **Abstract**

**Purpose:** To analyse the impact between economic growth, inflation rate, exchange rate and foreign direct investment in Malaysia.

**Design/methodology/approach:** All data analysed by using SPSS and methods of analysis are regression analysis.

**Findings:** The empirical results shows that the economic growth, inflation rate, exchange rate are significant with the foreign direct investment in Malaysia.

**Originality/value:** This study thus implies that economic growth, inflation rate, exchange rate are significant impact with the foreign direct investment in Malaysia.

Paper type: Research paper

**Keywords:** Economic growth, Inflation rate, Foreign direct investment

## Introduction

Foreign direct investment plays a vital part which able to influence the financial development of a nation, particularly to increase the economic growth, capital accumulation, innovation and labor productivity. Hong and Ali (2020) found that the inflation rate has negative effects on the foreign direct and economic growth has positive impact with foreign direct investment. The trading economy (2021) recently reported that FDI averaged RM7378.50 million from 2005 until 2021, highest of RM19466 Million in the first quarter of 2019 and a lowest of -RM1982.56 million in the 4 quarter of 2009 in Malaysia. Inflation rate averaged 3.40 % from 1973 until 2021 in Malaysia, highest of 23.90 % in March of 1974 and a lowest of -2.90% in April of 2020. GDP averaged 100.57 USD Billion from 1960 until 2020 in Malaysia, highest of USD364.68 billion in 2019 and a lowest of USD1.90 billion in 1961.



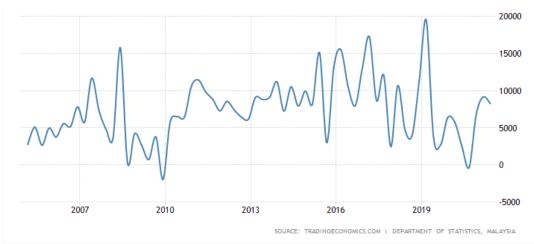


Figure 1: Foreign Direct Investment in Malaysia



Figure 2: Inflation Rate in Malaysia

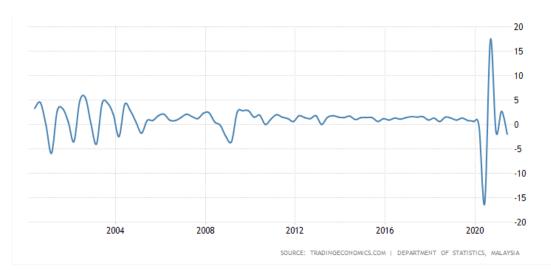


Figure 3: GDP Growth Rate in Malaysia

In recent decades, foreign direct investment (FDI) has played an essential role in the economic growth and development of various countries. Foreign direct investment (FDI) is still critical,



especially for developing economies. This is especially important for developing countries that have limited access to private funding. In Malaysia's economy, FDI has played a critical role in spurring economic growth by increasing local capital formation (Nabi & Malarvizhi, 2014). These objectives to explore the impact and correlation between the economic growth, inflation, exchange rate and FDI in Malaysia.

## **Literature Review**

Hong and Ali (2021) revealed a positive impact on FDI by GDP, exchange rate and inflation; however, Okonkwo et al. (2021) found that exchange rate is positive impact with foreign direct investment in Nigeria. According to Pala and Örgün (2015), demonstrated that GDP have positive impact with Foreign Direct Investment in Turkey. Sharma et al. (2015) and Karal and Onder (2013) also claimed that foreign direct investment (FDI) has considerably aided Malaysia's economic transition.

FoEh et al. (2020) investigated the effect of the inflation rate, exchange rate and gross domestic product to the foreign direct investment in the ASEAN countries in periods of 2007-2016. The study revealed that the inflation rate, exchange rate, and gross domestic product have a very significant effect to the foreign direct investment. An inflation and the exchange rate has the impact on FDI inflows in Nigeria between 1981 and 2018 (Adebayo & Gambiyo, 2020). Boateng et al. (2015) found that the real GDP, sector GDP, exchange rate and trade openness have a positive and significant impact on FDI inflows.

Sarker and Khan (2020) studies about the between foreign direct investment and economic growth in Bangladesh. The studied found that economic growth positive relationship with FDI. Alshamsi et al. (2015), the result revealed that inflation has no significant effect on FDI whereas GDP has a significantly positive impact on FDI inflows at UAE. Awad (2020) found that inflation, GDP has significantly effect on FDI. Abdul Rashid et al. (2017) found that the impact of inflation has positively impact towards Foreign Direct Investment (FDI) in Construction Sector in Malaysia. Thaker et al. (2017) and Dal Bianco and Loan (2017) found that GDP and exchange rate has strongly impact towards FDI.

#### **Methods**

The sample size consists of GDP, FDI, Inflation rate and exchange rate from 1984 to 2019 on an annual basis. The data collected from World Bank.

Variables Proxies

Dependent Foreign Direct Investment

Independent Exchange GDP

Table 1: Dependent and Independent Variables

The multiple regression equations can be represented as follows:

 $FDI_{it} = \alpha + \beta_1 GDP_{1it} + \beta_2 EXC_{2it} + \beta_3 INF_{3it} + \varepsilon_{it}$ 

Where.

FDI = Foreign Direct Investment
Inflation (INF)
Gross Domestic Product (GDP)



Exchange rate (EXC) Hypothesis 1

H1: there is an impact between GDP, Inflation and exchange rate with FDI.

Hypothesis 2

H1: there is a relationship between GDP, Inflation and exchange rate with FDI.

## **Findings**

Multivariate regression was used to analyse between GDP, inflation rate and exchange rate with FDI at significant value  $\alpha$ =0.05.

# The impact between GDP, Inflation rate and Exchange rate With FDI

Table 2: Regression

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	Coefficients	t	p-value			
(Constant)	7.204	16.764	0.000			
GDP	0.386	1.909	0.045			
Inflation	3.222	4.217	0.000			
Exchange rate	0.784	3.783	0.001			

a. Dependent Variable: FDI

The estimated regression equation for FDI

FDI= 0.386GDP+ 3.222INF+ 0.784EXC+7.204

 $R^2 = 0.529$ 

F-value= 11.956 (0.000)

In term of FDI as refer to the Table 2, the results indicate a significant positive relationship between GDP (+0.386), inflation (3.222) and exchange rate (0.784) at 5% significant level with FDI. Yet, 52.9% of the amount of variation in FDI can be a attributed to GDP, inflation and exchange rate. Since p value =0.000 < 0.05, it has significant impact in between GDP, inflation and exchange rate with FDI. Thus, finding depicts that the hypothesis is accepted as GDP, inflation rate and exchange rate has significantly effect towards FDI. This is in line with Awad (2020), who found that a rise GDP makes it easier to attract investors. Gokmenoglu et al. (2019) and Karal and Onder (2013) backed up the findings, explaining that a GDP increase means the country's resources will be used more efficiently and economies of scale will be used.

# The Correlation between GDP, Inflation rate and Exchange rate With FDI

The result shows a positive relationship between GDP, inflation rate and exchange rate with FDI. The study shows a positive strong relationship between FDI and GDP by 0.484 at 1% significant level. Inflation rate have a positive strong relationship with FDI by 0.378 at 1% significant level. Lastly, a positive strong relationship FDI and exchange rate by 0.0.324 at 5% significant level.

This result are supported by Sarker and Khan (2020) there is continuously a positive significant relationship between GDP and FDI for all region. Okonkwo et al. (2021) and Eregha (2020) find strong evidence significantly effect on FDI and exchange rate. Thus, the finding depicts



that the hypothesis is accepted as GDP, inflation rate and exchange rate has significant relationship towards FDI and this result is supported by Adebayo et al. (2021) and Khan and Gavrilo (2015).

Table 3: Correlation

	FDI	GDP	INFLATION	EXCHANGE
				RATE
FDI	1	0.484**	0.378*	0.324*
Sig. (2 tailed)		0.003	0.023	0.044
GDP	0.484**	1	0.448**	-0.298
Sig. (2 tailed)	0.003		0.006	0.078
	0.378*	0.448**	1	-0.222
INFLATION	0.023	0.006		0.193
Sig. (2 tailed)				
<b>EXCHANGE RATE</b>	0.324	-0.298	-0.222	1
Sig. (2 tailed)	0.045	0.079	0.193	

<sup>\*\*.</sup> Sig. 0.01 (2-tailed).

# **Discussion and Conclusion**

The research discovers GDP, inflation rate and exchange rate has significantly impact on FDI. Furthermore, the study is shown GDP, inflation rate and exchange rate to be significant correlation with FDI which is also constant with the results for this study. As a recommendation, the study to explore the relationship between the FDI with different variables like infrastructure, political stability, country risk, country openness, and others. Moreover, a study suggests the Bank Negara ought to guarantee a satisfactory stream of forex within the outside trade showcase and guarantee a sustained inflation rate and exchange rate. Finally, the government should also keep enhancing the GDP and applied the macroeconomic policies such as fiscal and monetary policies to increase FDI.

## Acknowledgment

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

#### References

Abdul Rashid, I. M., Yeong, S. J., Abu Samah, I. H. & Hassan Basri, H. (2017) Impact of inflation and exchange rate towards foreign direct investment (FDI) in construction sector in Malaysia: An empirical study on the cross-sectional data by using EViews, 1992 2012. *Jurnal Intelek*, 12(1), 79-84. https://jurnalintelek.uitm.edu.my/index.php/main/article/view/149

Alshamsi, K. H., Hussin, M., & Azam, M. (2015). The impact of inflation and GDP per capita on foreign direct investment: the case of United Arab Emirates. *Investment Management and Financial Innovations*, 12(3), 132-141.

Adebayo E. O. & Gambiyo S. P. (2020) Economic analysis of the determinants of foreign direct investment (FDI) in Nigeria. *Archive of Business Research*, 8(1), 4–81. https://doi.org/10.14738/abr.81.7542

Adebayo, T. S., Onyibor, K. & Akinsola, G. D. (2021). The impact of major macroeconomic variables on foreign direct investment in Nigeria: Evidence from a wavelet coherence

<sup>\*.</sup> Sig. 0.05 (2-tailed).



- technique. *SN Business & Economics*, 1(11), 1-24. https://doi.org/10.1007/s43546-020-00018-5
- Awad, A. (2020). Foreign direct investment inflows to Malaysia: Do macroeconomic policies matter? *Journal of International Studies*, 13(1), 196-211. Doi: 10.14254/2071-8330.2020/13-1/13
- Boateng, A., Hua, X., Nisar, S., & Wu, J. (2015). Examining the determinants of inward FDI: Evidence from Norway. *Economic Modelling*, 47, 118-127. https://doi.org/10.1016/j.econmod.2015.02.018
- Dal Bianco, S., & Loan, N. C. T. (2017). FDI inflows, price and exchange rate volatility: New empirical evidence from Latin America. *International Journal of Financial Studies*, 5(1), 6. https://doi.org/10.3390/ijfs5010006
- Eregha, P. B. (2020). Exchange rate regimes and foreign direct investment flow in West African Monetary Zone (WAMZ). *International Economic Journal*, *34*(1), 85-99. https://doi.org/10.1080/10168737.2019.1669689
- FoEh, J., Suryani, N., & Silpama, S. (2020). The influence of inflation level, exchange rate and gross domestic product on foreign direct investment in the ASEAN countries on 2007 2018. *European Journal of Business and Management Research*, 5(3). https://doi.org/10.24018/ejbmr.2020.5.3.311
- Gokmenoglu, K., Kirikkaleli, D., & Eren, B. M. (2019). Time and frequency domain causality Testing: The causal linkage between FDI and economic risk for the case of Turkey. *The Journal of International Trade & Economic Development*, 28(6), 649-667. https://doi.org/10.1080/09638199.2018.1561745
- Hong, T. Y., & Ali, D. H. A. (2020). The impact of inflation towards foreign direct investment in Malaysia and Iran. *International Journal of Academic Research in Business and Social Sciences*, *10*(6), 210–216. http://dx.doi.org/10.6007/IJARBSS/v10-i6/7280
- Karal, Z., & Onder, G. (2013). Determinants of foreign direct investments outflow from a developing country: the case of Turkey. *Business, Management and Education*, 11 (2), 241-255. Doi: 10.3846/bme.2013.14
- Khan, M. A. & Gavrila, L. (2015). Inward foreign capital flows and economic growth in African countries, *Journal of Applied Economic Sciences*, 3 (33), 362-371.
- Nabi, M. H. & Malarvizhi, C.A. (2014). Impact of GDP and exchange rate on foreign direct investment in Malaysia. *Australian Journal of Basic and Applied Sciences*, 8(1), 473-478
- Okonkwo, J. J., Osakwe, C. I., & Nwadibe, E. C. (2021). Exchange rate and foreign direct investment in Nigeria 1981-2018. *International Journal of Academic Research in Business and Social Sciences*, 11(1), 213–232. http://dx.doi.org/10.6007/IJARBSS/v11-i1/8466
- Pala, A. & Örgün, B. O. (2015). The effect of macro economic variables on foreign portfolio investments: An implication for Turkey, *Pressacademia Journal*, *4*(1), 108.
- Sarker, B., & Khan, F. (2020). Nexus between foreign direct investment and economic growth in Bangladesh: an augmented autoregressive distributed lag bounds testing approach. *Financial Innovation*, *6*(10). https://doi.org/10.1186/s40854-019-0164-y
- Sharma, P. K., Jadhav, U. N., Singh, E. H., & Mahapatra, A. (2015). Foreign direct investment (FDI): An observation about tourism sector of Bhutan. *Mediterranean Journal of Social Sciences*, 6(4), 201-206.
- Thaker, H. M. T., Tan, S. E. & Narayanan, S. (2017). Foreign direct investments (FDI) in Malaysia: Determinants and policy issues. *Skyline Business Journal*, 13(1), 1-5.