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# The Effects of Economic Uncertainty on Multi-National Companies (MNCs) Investment in Malaysia\*

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#### Abstract

The purpose of this study is to examine the effects of economic uncertainty on MNC investment in Malaysia from 2009 to 2019 by employing an ARDL method. The results revealed that Economic Policy Uncertainty (EPU) has a positive association with the capital expenditures of Nestle, British American Tobacco, and Public Bank in the long run. In a similar period, the Gross Domestic Product (GDP) is positively significant with the capital expenditures of British America Tobacco and Heineken. However, inflation is negatively related to the capital expenditures of British America Tobacco and Heineken. Additionally, the exchange rate has a significant and negative relationship with the capital expenditures of Nestle and Petronas, while the ECT value is negative and significant in the short run, hence confirming that cointegration exists. In view of this, it is imperative that the government plays a prerogative role to support MNC operations, as MNCs foster the developing countries' economic development through facilitating full employment. This study sets to enhance the personal knowledge of those with a strong interest in the Malaysian financial market. As long as MNCs believe that the Malaysian market has the potential to grow, they will continue to invest for the benefit of the country.

Keywords: Economic Uncertainty, Investment, Multi-National Company, Autoregressive Distributed Lag (ARDL)

JEL Classification Code: F50, F230, C10

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# 1. Introduction

Throughout numerous economic cycles, it is not hard to notice that recessions are normally correlated or even triggered by economic uncertainty. For example, the great depression of 1929, the 1973 Organization of the Petroleum Exporting Countries (OPEC) Oil Price Shock, the 1997 Asian financial crisis, the financial crisis of 2008, or the United States and China trade war in 2018. Compellingly, most financial crises or market failures are indirectly related to the changes in economic factors.

As a consequence, since recession can cause huge negative impacts on the investment of multinational corporation (MNC) in a host country, MNC investors might pull out their invested funds when they notice that a similar economic cycle is about to happen (Shadkam, 2014). This leads to the idea that economic uncertainty might affect MNC capital in Malaysia. Similarly, whenever Malaysia experiences events of economic uncertainty, the KLCI index will also experience a strong wave of movement.

Likewise, the ongoing pandemic outbreak of the Covid-19 event in Malaysia has brought the KLCI index down to 1295 points (Bursa Malaysia, 2020). Although similar research had been carried out on the U.S. market (Chen et al. 2019), nonetheless, limited research has been done in the context of the Malaysian market. Therefore, to demonstrate that economic uncertainty will cause certain effects on MNC investment in Malaysia, it is best to examine the concept in a manner of forming an investigation. Then, it will be possible to identify whether the idea is valid or invalid.

Starting with MNC investment in Malaysia, from the perspective of corporations, changes in items like economic policy do not really do well for them as it will affect the decision of their capital allocation. Taking the United Kingdom Brexit as an example, it is a typical case that shows how a country's policy uncertainty can impact its foreign direct investment (Dhingra et al., 2016). Yet, the frequent changes in economic policy are an arising global phenomenon including Malaysia, since Malaysia is a nation with economic freedom where its market information can easily be obtained. Statistically speaking, Malaysia's economic freedom score is 74.7, making its economy the 24th freest in the 2020 Index. Its overall score has increased by 0.7 points primarily due to an increase in the judicial effectiveness score. Malaysia is ranked 6th among 42 countries in the Asia-Pacific region, and its overall score is well above the regional and world averages (Heritage, 2020). Thus, negative market information will create strong market fluctuation for any MNCs within Malaysia. With frequent changes in the system, MNC capital expenditure will be affected and will create an unwanted outflow of a foreign source of capital for Malaysia. Eventually, when the outflow of funds occurs, it potentially reduces employment and exports in the home country of the company leading to dreary wages and worker exploitation in Malaysia (Strycharz et al., 2018). For example, Nestle reduced its capital expenditure in the year 2018 compared to the previous financial year of 2017, and this action was triggered by the domestic economic uncertainty of that time.

Besides, the reason that Economic Policy Uncertainty (EPU) must be taken into consideration in this investigation is that it explains the need for urgency in promoting changes in the economic policy through the Government Effectiveness Index (GEI). The government effectiveness index is an index elaborated by the World Bank Group which measures the quality of public services, civil service, policy formulation, policy implementation, and credibility of the government's commitment to raising these qualities or keeping them high. (The World Bank, 2020). However, the high frequency of changes in a nation's economic policy is not always viewed as a positive event from the perspective of most firms. Although some firms might be benefiting from the postchanges period, it still causes potential conflicts with the firm's initial planning with its host country (Baker et al., 2019). Under most circumstances, such changes can lead to

other issues such as the increment in financial burden rather than benefiting the MNC firms in Malaysia.

In the recent corporate world and for many organizations, the method to tackle issues is normally known as, first, to identify the problem. In many cases, waiting until a problem is severe enough to be obvious sets the business up for failure. Pro-active organizations seek out information to help them manage today and anticipate tomorrow. By developing a shared view of the future, proactive organizations shape the future, defining new ways of capturing value. For instance, many economists acknowledge that markets are filled with vast opportunities and uncertainties. Thus, to make a favorable return from the unpredictable and ruthless market, ample research must be done. It is concluded that there is an existing gap regarding the threats that can cause a negative impact on the investment of MNC in Malaysia, and such a gap is believed to be the economic uncertainty. In fact, the evidence can be seen by constantly monitoring the several factors that are closely tied to the economic environment in Malaysia such as Economic Growth, Economic Policy Uncertainty, Foreign Exchange Rate, and Inflation, which are likely to bring about a big and negative market fluctuation in Malaysia.

Furthermore, the fluctuation brought by these factors can affect people from all walks of life in Malaysia. These factors can also cause the MNC to easily disinvest in most Malaysian sectors. As such, it will cause serious unemployment problems in Malaysia. As economic uncertainty is viewed as a financial pressure for MNCs in Malaysia, and if MNCs feel that their invested capital is at risk, they will simply withdraw it from Malaysia and invest it back in their home country. To a certain extent, it is understandable because even Malaysian citizens are not in favor of the frequent economic policy changes by the newly reformed government. However, with the multiple impacts of economic uncertainty and the Covid-19 pandemic in Malaysia as well as other factors like slow economic growth that is potentially caused by trough stages in the economic cycle, inflation, and weak currency, it is best to investigate and identify any possible cause and effects and subsequently eliminate the threats from economic uncertainty.

In the final analysis of this study, the research findings can identify all the factors influencing MNC investment. Generally, in light of this study, investors can wisely and cautiously choose their investment options in a way that is better and safer upon obtaining better market information from this paper. The investors can also avoid making investments in sectors that tend to be adversely influenced by economic uncertainty. Moreover, they can benefit from this study as they understand the current market's movement better; hence, their investments can be less risky and their market profitability may also increase. Finally, this study will enhance the personal knowledge of individuals with a strong interest in the financial market. To profit or to hedge, this

article is created with the research purpose to benefit every reader regardless of foreign or local investors, academicians, and even those with corporate backgrounds.

### 2. Literature Review

# 2.1. EPU Effect on MNC Investment

As Economic Policy Uncertainty (EPU) can use various indicators to measure its impact, some researchers prefer to follow the method by Baker et al. (2016). Although Baker et al. (2016) believed that the media such as newspapers has the power to provide a strong negative link to MNC's financial performance, Gehlbach and Sonin (2015) mentioned that the news-based approach is ineffective, while Asogwa and Ezema (2017) supported their point of view by describing that the media is the tool for the government to mobilize individuals. However, the news-based approach will not be as effective as using the Government Effectiveness Index (GEI) for indicating the impact of EPU on MNC in Malaysia.

Hebous and Zimmermann (2016) also agreed that the GEI is a better and transparent tool for measuring the Malaysian EPU because it illustrates how the governing body interferes with private investment. However, Chen et al. (2019) argued that EPU might potentially and positively influence the potential of short-term investment. Additionally, Hu et al. (2018) believed that EPU can identify whenever one's economy is unstable because governments tend to impose policies like fiscal policy to stimulate aggregate demands in the market. Consequently, a strong EPU movement represents frequent policy changes (such as the fiscal policy) that will ultimately direct firms towards eliminating or retaining their long-term plan for investment (Hu et al. 2018). Chen et al. (2019) also justified that the MNC will remain to invest in short-term projects in an attempt to offset inflation or diversify its investment portfolio, but not for the long-term. As such, EPU is believed to negatively affect a firm in the long run.

Dorall (2020) explained the typical effect of EPU in Malaysia by using Heineken Malaysia as an example. Heineken Malaysia had obtained approval from the government previously, and it was allowed to resume limited operations despite the government's "Movement Control Order (MCO)". However, the Malaysian government revoked its permit just one week after. Overall, the series of movements in EPU has not only impacted MNC investment in Malaysia but has also impacted social development (Zainudin & Kamarudin, 2015).

# 2.2. Economic Growth Effect on MNC Investment

Economic growth has been regarded as the primary macroeconomic factor influencing investments. Ferdausy and Rahman (2019) indicated that the impact of MNC on

a host country is neither positive nor negative. On one side, the MNC creates employment opportunities, promotes development, and increases a country's GDP growth thus reducing poverty. On the other side, the MNC is guilty of global pollution and abusing human rights in many countries. MNC investors interpret a country's potential growth by understanding the current GDP of the country; thus, they will speculate and invest in the country if they have a positive forecast about the country and believe that their investment will result in great profitability (Choi & Yuce, 2016).

Twine et al. (2015) commented about the relationship between GDP and MNC investment using the accelerator theory and it was found that if the national output increases, the investment will also increase. Moreover, by measuring the growth rate of GDP, Nipun (2019) indicated that economic growth can significantly influence firm investment. Hence, it is reasonable to believe that GDP enables economists and analysts to forecast the economy's direction. Kennon (2020) suggested that investors can research the MNC market capitalization from its stock price and possibly testify the accelerator theory based on the findings. Thus, economic growth is essential for MNC investment even in a form that is indirect.

#### 2.3. Inflation Effect on MNC Investment

For inflation's effect on investment, Li and Xia (2019) presumed that MNC investment will reduce as the market constantly faces inflation effects, primarily when a high rate of inflation is anticipated. Although inflation can be indicated by the consumer price index (CPI), it is a consumer-centric data. Mcmahon (2017) determined that inflation is rather more impactful on MNC. To illustrate this, he mentioned that inflation will negatively increase the cost of borrowing, inventory, and raw materials from the MNC's perspective.

Besides, since inflation volatilities are so impactful, Zhang et al. (2019) advised investors to adjust their consumption and portfolio strategies to reduce risk exposure. MNCs are supposedly more prepared for the inflation impact than non-MNCs; however, MNCs' forecasts tend to be less specific and incorrect. While investors will stay in the market when the risk increases at a very slow rate, they will, however, immediately withdraw their investment portfolio if the market faces high inflation volatility and the depreciation value of the investment exceeds by a particular amount of money or rate (Amar et al., 2018). Briefly, when inflation goes up, it causes a significant negative impact on MNC investment. Therefore, in a situation where the inflation rate is low, this will benefit both MNC and the host country.

# 2.4. Exchange Rate Effect on MNC Investment

According to Moore and Glean (2016), the foreign exchange rate is significantly associated with the firm investment. Additionally, it is known that MNCs can

substantially increase their reserve holdings as MNCs assume that reserving foreign funds can insure against external shocks. Comparably, Kass (2019) also believed that the effect of the foreign exchange rate is crucial as most MNC products are priced in dollars. Therefore, when the exchange rate is uncertain, these products can become expensive for both foreign consumers and businesses.

Lee and Wang (2018) agreed that the risk management strategy of MNC's geographical diversification has effectively reduced the significant impact of inflation on MNC investment. Moore and Glean (2016) asserted that the MNC tends to retain foreign exchange reserves so that they are secured from uncertainties when facing a high exchange rate risk. Nevertheless, Gilreath (2017) addressed that holding too much cash is a financial risk and a red flag; thus, it will not do good for the growth of MNC in the long run.

# 3. Methodology

This study employed a time series data analysis for the purpose of investigating the effects of economic uncertainty on selected multi-national companies in Malaysia, namely Nestle, British and American Tobacco, Heineken, Public Bank, and Petronas. The data on economic uncertainty (Government Policy, economic growth, inflation, and exchange rate) and MNC investment (capital expenditure) from 2009 to 2019 was collected and analyzed. Meanwhile, the data on government policy is measured by GEI and economic growth is measured by GDP, while inflation is measured by consumer price index (CPI), and the exchange rate is measured by the exchange rate of United States Dollar (USD) to Ringgit Malaysia (MYR). The data was obtained from the Department of Statistics Malaysia and The Global Economy. This study has also applied an ARDL bound testing approach whereby the following equation is obtained:

$$CE_{t} = \beta_{0} + \beta_{1}GEI_{t} + B_{2}GDP_{t} + B_{3}CPI_{t} + B_{4}Ex_{t} + \varepsilon_{t}$$
 (1)

It is necessary that the equation is expressed in logarithm for best results and explanations regarding the association between the dependent variable and the independent variables in percentage since the data measurement for the variables is different. Capital expenditure and GDP are measured in Millions (MYR); government effectiveness and consumer price index are measured by the index; and the exchange rate is measured by the currency rate. As such, logarithm is the best method for obtaining unbiased results; thus, the new equation is expressed in the following form:

$$lnCE_{t} = \beta_{0} + \beta_{1}GEI_{t} + \beta_{2}lnGDP_{t} + \beta_{3}lnCPI_{t} + \beta_{4}EX_{t} + \varepsilon_{t}$$
(2)

Where lnCE is the log of capital expenditure, GEI is the government effectiveness index and lnGDP denotes the log of gross domestic product, while lnCPI entails the log of the consumer price index and the exchange rate is denoted by EX.

This study performed a unit root test in accordance with the Augmented Dickey-Fuller (ADF). ADF tests the null hypothesis that a unit root is present in a time series sample. The alternative hypothesis is different depending on which version of the test is used but is usually stationarity or trend-stationarity. Generally, in time series data analysis, a stationary test is essential for examining the stationarity of the data in terms of whether or not a unit root exists; hence, the following equation is taken into consideration:

$$\Delta Y_{t} = \beta_{1} + \delta Y_{t-1} + \alpha \sum_{i=1}^{p} \Delta Y_{t-1} + U_{t}$$
 (3)

Where  $\alpha$  and  $\delta$  are the estimated set of parameters. This model has the following hypothesis:

H0: 
$$\delta = 0$$
 (Non-stationary/has unit root) (4)

H0: 
$$\delta \neq 0$$
 (Stationary/no unit root) (5)

The null hypothesis will be accepted if the results indicate that it is not significant ( $\delta = 0$ ); thus, the data is deduced to be non-stationary or having a unit root present. However, the alternative hypothesis will otherwise be accepted if the results indicate that it is significant ( $\delta \neq 0$ ); hence, the data is deduced to be stationary or having no unit root. Autoregressive Distributed Lag Models (ARDL) model plays a vital role when comes a need to analyze an economic scenario. In an economy, change in any economic variables may bring change in another economic variable beyond the time. This change in a variable is not what reflects immediately, but it distributes over future periods. The ARDL model is useful for forecasting and disentangling long-run relationships from short-run dynamics (Gujarati & Porter, 2003). The ARDL co-integration method was developed by Pesaran and Shin (1999), and as opposed to the Johansen co-integration method, the ARDL method has several advantages. For instance, it can be applied despite the order of integration in terms of whether the data is purely I(0), purely I(1), or involve a mixed-order integration. Generally, both methods can be used if all variables are stationary at first difference; however, the Johansen cointegration method is not preferable in such a case when a variable or more than one variable is at a stationary level while the rest is at first difference. ARDL model addresses the issue of collinearity by allowing the lag of dependent variables in the model with other independent variables and their lags. Several test combinations performed in the ARDL analysis are cointegration test, bound test, diagnostic test, error correction model (ECM), the cumulative sum of recursive residuals (CUSUM), and also the cumulative sum of squares of recursive residuals (CUSUMSQ).

The ARDL tests begin with a bound test to see whether a co-integration exists. The null hypothesis can be rejected

if the F-statistics value is greater than the upper bound, thus suggesting a co-integrated relationship between the variables. However, if a co-integration is present, a long-term relationship can further be estimated. In general, the long-term relationships among variables are significant for examining whether GEI, GDP, CPI, and exchange rate are capable of affecting MNC investment in the long run. Hence, the ARDL model's order of lag can be selected in accordance with the Akaike Information Criteria (AIC). The following expression denotes the long-run ARDL estimation for this study:

$$\Delta \ln CE_{t} = \beta_{0} + \sum_{i=1}^{p} \beta_{1} \Delta \ln CE_{t-i} + \sum_{i=0}^{p} \beta_{2} \Delta GEI_{t-i} + \sum_{i=0}^{p} \beta_{3} \Delta \ln GDP_{t-i} + \sum_{i=0}^{p} \beta_{4} \Delta \ln CPI_{t-i} + \sum_{i=0}^{p} \beta_{5} \Delta EX_{t-i} + \sigma_{1} \ln CE_{t-1} + \sigma_{2} GEI_{t-1} + \sigma_{3} \ln GDP_{t-1} + \sigma_{4} \ln CPI_{t-1} + \sigma_{5} EX + \varepsilon_{t}$$
(6)

Where  $\Delta$  denotes the first difference operator and p denotes the optimal lag length, while  $\beta_1$  to  $\beta_4$  entails the short-run dynamics of the model and  $\sigma_1$  to  $\sigma_4$  entails the long-run relationship. As this study is based on quarterly data; thus, the maximum number of lags used is four as selected through the Akaike Information Criterion (AIC).

$$\Delta \text{lnCE}_{t} = \beta_{0} + \sum_{i=1}^{p} \beta_{1} \Delta \text{lnCE}_{t-i} + \sum_{i=0}^{p} \beta_{2} \Delta \text{GEI}_{t-i}$$

$$+ \sum_{i=0}^{p} \beta_{3} \Delta \text{lnGDP}_{t-i} + \sum_{i=0}^{p} \beta_{4} \Delta \text{LCPI}_{t-i}$$

$$+ \sum_{i=0}^{p} \beta_{5} \Delta \text{EX}_{t-i} + \lambda \text{ECT}_{t-i} + \varepsilon_{t}$$

$$(7)$$

Where  $\lambda$  is the speed of adjustment parameter that should be significant and carry a negative sign and will support the presence of cointegration among variables. Meanwhile, ECT is one-period lagged of the error correction terms, by which it measures the adjustment speed at which the house price returns to equilibrium due to changes in the explanatory variables.

Next, a diagnostic test was performed to test the model's goodness for Equation (1). Some of the diagnostic tests include Ramsey's RESET, LM (serial correlation), Jarque-Bera (normal distribution), and also ARCH (heteroscedasticity test). The model is deemed good if the diagnostic results are insignificance. Subsequently, the CUSUM and CUSUMSQ tests were conducted to confirm the model's stability for Equation (1). The model is deemed stable if the CUSUM and CUSUMSQ lines are within the 5% line of significance.

# 4. Results

Table 1 presents the unit root test results. Based on the results, all of the variables are not significant at levels under intercept with trends and without trends. Nevertheless, under intercept and at the first difference, all of the variables are significantly stationary at 1%, while the capital expenditure of British America Tobacco (CEBAT) is significantly stationary at 5%. Other than that, the government effectiveness index (GEI) is significantly stationary at 5%, while other variables recorded significant stationarity at 1% first difference under intercept with the trend.

Table 2 presents the results of the bound test that was conducted prior to the estimated long-term coefficient test. The *F*-statistics (12.295, 13.906, and 10.745) for the capital expenditures of Nestle, British America Tobacco, and Heineken are higher than the critical value at a 1% level of significance. Besides, all values are greater than the lower and upper bounds of 3.74 and 5.06 respectively. In the meantime, the *F*-statistics (6.026 and 5.595) for the

Table 1: Unit Root Augmented Dickey-Fulle	er Test (ADF) With and Without Trends

Variables	Intercept		Intercept and Trend	
	Level	First Difference	Level	First Difference
InCENEST	-1.991 (0.289)	-3.205*** (0.000)	-1.983 (0.590)	-4.594*** (0.004)
InCEBAT	-1.414 (0.564)	-3.089** (0.037)	-1.336 (0.862)	-7.183*** (0.000)
InCEHEI	-1.058 (0.721)	-6.855*** (0.000)	-1.502 (0.810)	-6.746*** (0.000)
InCEPB	-1.892 (0.331)	-6.788*** (0.000)	-2.476 (0.337)	-6.679*** (0.000)
InCEPET	-1.208 (0.659)	-8.034*** (0.000)	-1.864 (0.652)	-7.914*** (0.000)
GEI	-1.983 (0.292)	-4.237*** (0.002)	-2.245 (0.452)	-4.192** (0.011)
InGDP	-1.264 (0.636)	-6.612*** (0.000)	-2.993 (0.148)	-6.724*** (0.000)
InCPI	-1.388 (0.578)	-4.759*** (0.000)	-1.748 (0.709)	-4.972*** (0.001)
EX	-0.931 (0.767)	-4.699*** (0.000)	-2.352 (0.397)	-4.617*** (0.003)

Note: \*\*\* and \*\* entail the respective significance levels of 1% and 5%.

capital expenditures of Public Bank and Petronas are higher than the critical value at a 5% level of significance. Both values are greater than the lower and upper bounds of 2.86 and 4.01 respectively. Moreover, based on the results, the null hypothesis is rejected and a long-term co-integration between the variables is also reported. Further, a long-term estimation test was conducted to investigate how economic uncertainty affects MNCs in Malaysia.

The long-term coefficient results through the ARDL approach are presented in Table 3. Based on the results, the government effective index (GEI) is significantly and positively associated with capital expenditures of Nestle (lnCENEST), British America Tobacco (lnCEBAT), and

Table 2: Bound Test

Model	F-Statistics	
InCENEST	12.295***	
InCEBAT	13.906***	
InCEHEN	10.745***	
InCEPB	6.026**	
InCEPET	5.595**	
Critical Value	Lower Bound	Upper Bound
1% significance level	3.74	5.06
5% significance level	2.86	4.01
10% significance level	2.45	3.52

Note: \*\*\* and \*\* entail the respective significance levels of 1% and 5%.

Public Bank (InCEPB) in the long run at 1%, 5%, and 10% significance levels respectively. Therefore, an increase of 1% in the government effectiveness index can cause the capital expenditures of Nestle, British America Tobacco, and Public Bank to increase by 7.109%, 8.201%, and 2.029% respectively. In the case of gross domestic product (InGDP), it is positively significant with the capital expenditures of British American Tobacco and Heineken at a 1% significance level (for both). This shows that if the GDP increases by 1%, the capital expenditures of British American Tobacco and Heineken will increase by 12.618% and 1.729% respectively.

Apart from that, a similar result has been found for the consumer price index (lnCPI), whereby it is negatively related to the capital expenditures of British American Tobacco and Heineken at a 1% level of significance (for both). Hence, if the consumer price index increases by 1%, the capital expenditures of British American Tobacco and Heineken will decrease by 2.416% and 3.527% respectively. Finally, the exchange rate (EX) is found to be negatively significant with the long-term capital expenditures of Nestle and Petronas (lnPET) at 5% and 10% significance levels respectively. The findings revealed that an increase of 1% can cause the capital expenditures of Nestle and Petronas to decrease by 1.198% and 0.880% respectively.

As can be seen in Table 4, the existence of a co-integrated relationship is confirmed as the ECT value is negative and significant. The coefficients are -1.032, -1.194, -1.797, -1.062, and -1.830, thus implying that the variables' longrun equilibrium deviations are corrected by 1.032%, 1.194%, 1.797%, 1.062%, and 1.83% within a year.

Table 3: Estimated Long-Run Coefficient

	Model 1	Model 2	Model 3	Model 4	Model 5
Variables	InCENEST	InCEBAT	InCEHEN	InCEPB	InCEPET
GEI	0.937	7.109***	8.201**	2.029*	1.765
	-0.288	0	-0.011	-0.055	-0.145
InGDP	9.967	12.618***	1.729***	6.777	10.669
	-0.232	-0.005	-0.003	-0.229	-0.272
InCPI	-9.386	-2.416***	-3.527***	-7.647	-5.526
	-0.728	-0.003	-0.004	-0.155	-0.299
EX	-1.198**	-0.129	-0.23	-0.249	-0.880*
	-0.01	-0.775	-0.886	-0.376	-0.054
С	-82.387*	-283.432***	-394.543***	-27.327**	-36.613***
	-0.064	-0.009	-0.001	-0.017	-0.009

Note: \*\*\*, \*\*, and \* entail the respective significance levels of 1%, 5%, and 10%.

Table 4: Error Correction Term (ECT)

	Model 1	Model 2	Model 3	Model 4	Model 5
ECT	-1.032**** (0.000)	-1.194*** (0.000)	-1.797*** (0.001)	-1.062*** (0.000)	-1.83*** (0.000)

Note: \*, \*\*, \*\*\* indication of significance level at 10%,5% and 1% respectively.

**Table 5:** Diagnostic Tests

Model	A. Functional Form χ² (1) (ρ-value)	B. Serial Correlation χ² (1) ( <i>p</i> -value)	C. Heteroscedasticity χ² (1) (p-value)	D. Normality χ² (1) ( <i>p</i> -value)
Model 1	0.255 (0.804)	1.525 (0.239)	1.841 (0.114)	1.099 (0.577)
Model 2	1.317 (0.203)	0.218 (0.806)	0.823 (0.645)	0.944 (0.623)
Model 3	0.893 (0.378)	0.420 (0.661)	1.236 (0.314)	0.483 (0.785)
Model 4	1.287 (0.207)	0.382 (0.685)	0.996 (0.435)	1.322 (0.516)
Model 5	0.312 (0.591)	0.216 (0.808)	0.690 (0.781)	1.774 (0.411)

Note: The P-values are shown in brackets.

As displayed in Table 5, the diagnostic results revealed that the models are properly quantified and that all probability values are not significant at 1%, 5%, or 10%. The critical value of one degree of freedom, the null hypothesis for the absence of first-order serial correlation, the null hypothesis of zero heteroskedasticity, and the null hypothesis of residuals normality, are accepted in the models.

# 5. Conclusion

At the outset, the purpose of this study is to examine the effects of economic uncertainty on MNC investment (Nestle, British and American Tobacco, Heineken, Public Bank, and Petronas) in Malaysia from 2009 to 2019 by employing an ARDL method. The results revealed that Economic Policy Uncertainty (EPU) has a positive association with the capital expenditures of Nestle, British American Tobacco, and Public Bank in the long run. In a similar period, the Gross Domestic Product (GDP) is positively significant with the capital expenditures of British America Tobacco and Heineken. However, inflation is negatively related to the capital expenditures of British America Tobacco and Heineken. Additionally, the exchange rate has a significant and negative relationship with the capital expenditures of Nestle and Petronas, while the ECT value is negative and significant in the short run, hence confirming that co-integration exists.

The existence of a co-integrated relationship is also confirmed in the short run as the ECT value is negative and significant. As such, even the smallest changes in investment decisions made by the MNC can cause a serious impact on businesses in Malaysia. Hence, if the companies felt that their invested capital is threatened, they will simply withdraw it from Malaysia and invest it back in their home countries without any hesitation. Their decision to engage with such moves will eventually trigger more serious problems such as unemployment, slow economic growth, inflation, and a weak currency. Hence, it is imperative that the government plays a prerogative role to support MNC operations, as MNCs foster the developing countries' economic development through facilitating full employment (Tirimba & Macharia, 2014). Thus, any stakeholder needs to understand the correlated effects, regardless of whether one has a direct or indirect relationship with the MNC. Furthermore, the implication can also be understood to benefit various levels of investors and readers such as MNC managers, fund managers, hedge fund managers, bankers, venture capitalists, and personal investors including SME suppliers who have business relationships with MNCs.

Generally, in light of this study, investors can wisely and cautiously choose their investment options in a way that is better and safer upon obtaining better market information from this paper. The investors can also avoid making investments in sectors that tend to be adversely influenced by economic uncertainty. Moreover, they can benefit from this study as they understand the current market's movement better; hence, their investments can be less risky and their market profitability may also increase. This study sets to enhance the personal knowledge of those with a strong interest in the Malaysian financial market. As long as MNCs believe that the Malaysian market has the potential to grow, they will continue to invest for the benefit of the country.

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