

# The Factors that Influence Exchange Rates in Malaysia

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## ABSTRACT

Exchange rates are considered one of the most crucial sources of external financing for all countries in this era of globalization. Over the years, Malaysia's exchange rates have fluctuated significantly due to various economic, political, and global factors. As of 2024, the ringgit remains constrained by external macroeconomic variables. This study aims to examine the factors influencing exchange rates in Malaysia from 1992 to 2022. Specifically, it investigates the relationships between exchange rates and the proposed explanatory variables: foreign direct investment (FDI), unemployment rate (UR), inflation rate (IR), and gross domestic product (GDP). Utilizing secondary data sourced from the World Bank, the study employs descriptive analysis, correlation analysis, normality tests, and regression analysis to analyse these relationships. Findings indicate that foreign direct investment (FDI) and unemployment rate (UR) have significant impact on exchange rate (ER) in Malaysia. Inflation rate (IR) and gross domestic product (GDP) have no significant impact on exchange rate (ER) in Malaysia. Understanding these factors is crucial for policymakers and economists to develop strategies that stabilize and optimize Malaysia's exchange rates.

**Keywords:** Exchange Rates, Malaysia, Foreign Direct Investment (FDI), Unemployment Rate (UR), Inflation Rate (IR), Gross Domestic Product (GDP)

## INTRODUCTION

An exchange rate is the price of one currency expressed in terms of another currency or group of currencies (Hamilton, 2018). In Malaysia, the exchange rate refers to the value at which the Malaysian Ringgit (MYR) can be exchanged for foreign currencies, particularly the US Dollar (USD). It plays a vital role in the country's international trade and financial stability, influencing the cost of imports, exports, and overall economic performance. Malaysia employs a managed float system, where the exchange rate is allowed to fluctuate based on supply and demand in the foreign exchange market, while the central bank, Bank Negara Malaysia, occasionally intervenes to avoid excessive volatility (Hamid, 2022).

The data from 1992 - 2002 provides a historical view of the MYR to USD exchange rates, showcasing periods of relative stability, especially in the late 1990s when the government pegged the MYR to the USD following the Asian Financial Crisis (World Bank Open Data, 2024). After the peg was lifted in 2005, the exchange rate has experienced more fluctuations, reflecting broader global economic trends, including oil prices, foreign investments, and political changes.

Exchange rate is one of the tools of monetary stability with the aim to promote monetary stability that is conducive to the sustainable growth of the Malaysian economy. There have a few types of exchange rate such as Fixed Exchange Rate, Floating Exchange Rate (Flexible Exchange Rate), Pegged Exchange Rate, Managed Floating Exchange Rate, Crawling Peg Exchange Rate, Dual Exchange Rate, Forward Exchange Rate, and Spot Exchange Rate (Ahmad, 2023).

Malaysia, like many other countries, adopts a flexible exchange rate regime. Exchange rates are determined by

demand and supply. In short, the currency price will rise if demand is high and its price will fall if demand is low. Fluctuations in the ringgit should be expected from time to time - strengthening, or weakening against other foreign currencies, in response to changes in the economic and financial environment, globally and domestically. There are three main benefits of having a flexible exchange rate:

**Automatic Adjustment:** Flexible exchange rates can automatically adjust to changes in the economic environment. This facilitates the equilibrium of the balance of payments by permitting the currency's value to vary according to market demand and supply.

**Monetary Policy Independence:** Countries with flexible exchange rates can implement their own monetary policies without needing to maintain a fixed exchange rate. This autonomy enables more efficient reactions to internal economic circumstances.

**Shock Absorption:** Flexible exchange rates can better absorb and adjust to economic shocks, such as sudden changes in commodity prices or financial crises. This adaptability contributes to economic stability by spreading the effects of these shocks more uniformly (Paul, B., 2024).

In mid-1997, the Malaysian economy found itself in a financial crisis due to a contagion effect that spread throughout the region. The crisis plunged Southeast Asian nations into significant currency turmoil, causing the Malaysian ringgit to weaken by approximately 80 percent, from RM2.50 to RM4.50 per US dollar (Ahmad et al., 2013). To combat the crisis, the Bank Negara Malaysia (BNM) fixed the ringgit to the US dollar at RM3.80 per US dollar (Ahmad et al., 2013). The ongoing attachment of the ringgit to the US dollar resulted in a 38.1 percent decline in its value. However, the BNM later lifted the peg and permitted the ringgit to trade in a managed float starting in July 2005 (Ahmad et al., 2013). The measurement of exchange rates can be assessed using the bilateral exchange rate. The most prevalent method involves quoting a bilateral exchange rate, which indicates the value of one currency in relation to another. The Malaysian ringgit is frequently compared to the US dollar, as it is one of the most widely traded currencies in the world. For instance, the MYR/USD exchange rate reveals the number of ringgits you will obtain for each US dollar you exchange. Therefore, a MYR/USD exchange rate of 4 means you will receive 4 ringgits for every US dollar.

The statement from PricewaterhouseCoopers Malaysia Holdings Sdn. (PwC) regarding Malaysia's Budget 2025 (Steve, 2024) outlines various initiatives anticipated to enhance the exchange rate. The budget is focused on bolstering economic stability, which is essential for sustaining a robust and steady ringgit. By emphasizing fiscal responsibility and aiming to lower the fiscal deficit to 3.8% of GDP by 2025, the government intends to boost investor confidence, thereby supporting the ringgit's value against other currencies (Steve, 2024). Moreover, the introduction of fresh investment incentives, particularly in high-value sectors such as Electrical and Electronics (E&E) and Artificial Intelligence (AI), is expected to draw in foreign direct investment (FDI) (Steve, 2024). Such inflows can help strengthen the economy and positively impact the exchange rate. In summary, these initiatives are intended to foster a conducive economic environment that maintains a stable and strong ringgit, thus benefiting Malaysia's trade and investment sector.

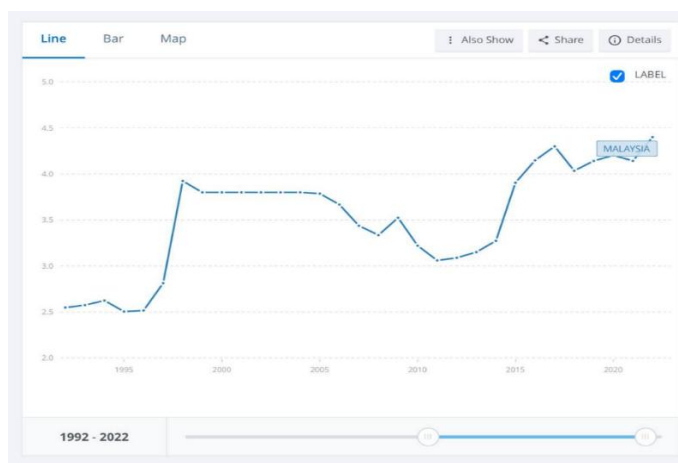


Figure 1: Malaysia Official Exchange Rate from 1992 – 2022 (World Bank, 2023)

Figure 1 shows the fluctuating performance of Malaysia's Official Exchange Rate from 1992 to 2022. It shows that in 1992 the exchange rate was RM2.25=1 USD, which was the highest exchange rate in the past 31 years. While the lowest exchange rate in 2022 was RM4.45= 1 USD, showing that the Malaysian Ringgit had depreciated significantly to the US Dollar.

The fluctuating exchange rate has significant implications for Malaysia's economy, impacting the cost of imports, business operations, and consumer purchasing power (Tan, 2022). Increased costs for imported goods have strained personal budgets and business operations, while the narrowing trade surplus has added pressure on the currency. According to The Star (2024), Malaysia's trade surplus narrowed in 2023, with imports growing faster than exports, contributing to the ringgit's weakness. In response to these challenges, the Malaysian government and central bank have indicated potential measures to defend the ringgit and implement reforms to stabilize the currency. However, the effectiveness of these measures remains to be unseen, and the ongoing volatility raises concerns about the country's economic stability and its ability to attract foreign investments (Bernama, 2024).

The main objective of this research is to identify the determinants of factors that influence exchange rate fluctuations in Malaysia. The earlier discussions have impelled several specific research objectives: (i) The relationship between foreign direct investment (FDI) and exchange rate in Malaysia. (ii) The relationship between unemployment rate and exchange rate in Malaysia. (iii) The relationship between inflation rate and exchange rate in Malaysia. (iv) The relationship between gross domestic product (GDP) and exchange rate in Malaysia.

Given that Malaysia's exchange rate is presently experiencing negative fluctuations, it is necessary to look into how economic factors affect the country's exchange rate volatility. Export and import costs have an impact on the exchange rate, which impacts the nation's daily consumer expenditure and aggregate demand. Producers of arrangements may take advantage of this relationship. The foreign exchange rate is crucial for major importers and exporters, such as Malaysia, as it is a developing nation (Mohamed et al., 2021).

## LITERATURE REVIEW

FDI is a crucial driver of Malaysia's exchange rate dynamics; larger inflows of foreign capital not only boost economic growth but also strengthen the ringgit. According to (Zaharum et al., 2024) significant FDI inflows can boost investor confidence and stimulate demand for the local currency, allowing it to be appreciated. Other than that, a growing economy typically attracts more investment, both domestic and foreign, which can lead to an appreciation of the currency. Studies have shown a strong correlation between GDP growth rates and exchange rate stability in Malaysia, suggesting that periods of economic expansion are often accompanied by a stronger ringgit (Mohamed et al., 2021). Additionally, high inflation rates can lead to the depreciation of the ringgit as they erode purchasing power and reduce demand for the currency. In Malaysia, inflation has been closely monitored by policymakers due to its potential impact on economic stability and currency valuation. Recent data indicate that fluctuations in inflation rates have directly influenced market perceptions and investor behaviour towards the MYR. Moreover, the unemployment rate, while traditionally linked to overall economic health, has a more nuanced impact on the exchange rate. Malaysia's unemployment rate has stabilized around 3.2%, reflecting improvements in labor market conditions following economic recovery efforts post-pandemic.

### Foreign Direct Investment (FDI)

According to Mohamad Khairi (2020), econometric methods were used to analyse the relationship between FDI and exchange rates. The data collected from 1988 to 2018 underwent analysis through panel data regression. The findings revealed that the exchange rate did not have a statistically significant effect on FDI inflows in the ASEAN-5 nations (Malaysia, Indonesia, the Philippines, Singapore, and Thailand). The relevance of the exchange rate was evaluated using t-tests within the panel data regression model, which demonstrated that fluctuations in the exchange rate do not significantly affect foreign investors' choices regarding investments in these countries. This may be attributed to various factors, such as economic stability, as investors typically prioritize overall economic health and growth potential over short-term exchange rate changes. Moreover, numerous firms utilize financial instruments to mitigate exchange rate risks, which lessens the influence of

exchange rate volatility on investment decisions. Additionally, long-term market opportunities and elements like trade openness and favorable economic policies might play a more critical role in attracting FDI.

Next, according to Zaibedah et al. (2024) used Multiple Linear Regression to analyze the relationship between FDI and various macroeconomic variables, including the exchange rate. The data, collected over 31 years from 1992 to 2022, showed that the exchange rate was positively related to FDI inflows in Malaysia. The importance of the exchange rate was examined through t-tests within the Multiple Linear Regression model, suggesting that advantageous exchange rates entice foreign investment. This attraction may stem from elements like economic output, which is a crucial factor; a robust domestic economy boosts the country's attractiveness to foreign investors. In addition, stable inflation rates foster a predictable economic climate, which promotes investment. Moreover, favorable exchange rates can increase the profitability of investments for foreign investors, further heightening the allure of the host nation

### **Unemployment Rate**

One important study by Suhana et. al (2021) found that unemployment does not have a significant effect on the exchange rate, with a high p-value of 0.9597. This suggests that fluctuations in GDP and inflation are much more critical in determining changes in the exchange rate in Malaysia. This finding is consistent with other research that emphasizes the importance of macroeconomic indicators such as inflation and foreign direct investment, rather than direct links between unemployment and exchange rates. For instance, when inflation rises, it can lead to a depreciation of the local currency, which in turn may affect employment levels indirectly.

Additionally, research by Mohd Azmin et al. (2017) suggests that although the exchange rate may not directly cause significant changes in unemployment levels, it does play a role in shaping the overall economic environment that influences job demand and employment opportunities. For example, when the Malaysian ringgit depreciates against other currencies, it can make exports cheaper and more competitive internationally. This could potentially lead to job creation in export-oriented industries. However, if the depreciation is too severe or prolonged, it may lead to increased costs for imported goods and services, which could ultimately harm domestic consumers and businesses.

### **Inflation Rate**

A significant finding is the degree of exchange rate pass-through (ERPT) to inflation, which Bank Negara Malaysia (BNM) reported shows that approximately 40% of changes in the exchange rate impact overall import prices after one year (Chung, 2023) This study indicated that a 5% change in the ringgit against the US dollar correlates with a 0.8 percentage point increase in import price inflation in the short term and about 2.1 percentage points over a year (Chung, 2023). The findings also suggest that while there is a notable pass-through to consumer price index (CPI) inflation, it remains incomplete, influenced by factors such as market structure and exporters' pricing behaviour.

Moreover, according to Ha et al., (2019) the relationship found that exchange rate and inflation are nonlinear and asymmetric responses. The study highlights that the relationship between exchange rate movements and inflation is not always linear or symmetric. Specifically, large depreciations tend to generate a stronger response in consumer prices compared to appreciations. This suggests that inflation reacts differently depending on whether the currency is depreciating or appreciating, indicating the presence of nonlinearities in the pass-through effect (Ha et al., 2019). The study finds that when a currency depreciates significantly, the resulting increase in consumer prices tends to be more pronounced compared to the effects of currency appreciation.

### **Gross Domestic Products (GDP)**

According to Lubis et al. (2017), Malaysia's GDP levels can rise as a result of exchange rate depreciation. With an estimated coefficient of approximately 1.14028, a study using panel data from the ASEAN-5 nations discovered that the real exchange rate coefficient had a statistically significant impact on GDP. This implies that a rise in national output is linked to a decline in the exchange rate, making Malaysian exports more competitive. The literature concludes by confirming the claim that exchange rate depreciation and GDP growth in Malaysia

are significantly positively correlated.

Other than that, the finding by Wesseh & Lin (2018), that currency appreciation did not significantly affect GDP, likely due to the uneven relationship between exchange rate variations and macroeconomic results, wherein depreciation adversely impacts GDP due to the high costs of imports, which constitute over 75% of total trade. As a result, the effects of exchange rates on GDP may be constrained by distinct trade and economic structures.

**DEVELOPMENT OF THEORETICAL FRAMEWORK**

Purchasing Power Parity (PPP) is an economic concept and method used to assess the relative values of currencies by comparing the prices of a set of goods and services across different countries. This theory seeks to establish the exchange rate at which one country's currency must be converted to acquire the same set of goods and services in another country (Eldridge, 2024). In Malaysia, PPP can be applied to evaluate the cost of living and economic productivity in comparison to other nations (Madeira et al, 2017). For instance, if a basket of goods has a price of MYR 1,000 in Malaysia and USD 100 in the United States, the PPP exchange rate would be 10 MYR/USD (Eldridge, 2024). When considering elements that affect exchange rates, such as Foreign Direct Investment (FDI), unemployment rates, inflation rates, and GDP, Relative PPP is often more suitable. This is because Relative PPP considers changes in inflation rates, which are vital for interpreting fluctuations in exchange rates over time (Chen, 2023). An increase in FDI inflows may lead to a rise in the domestic currency's value due to heightened demand for it. On the contrary, a rise in the unemployment rate can result in diminished economic growth and potentially a weaker currency. In the same way, a higher inflation rate generally results in a depreciation of the currency since it diminishes its purchasing power. Additionally, robust GDP growth can enhance the currency's value, as it indicates a strong economy. According to Murad & Hossain (2018), data supports the application of PPP which indicates that exchange rates generally trend towards their PPP equilibrium in the long term.

Based on the theory that has been identified, researchers have determined the framework of this study.

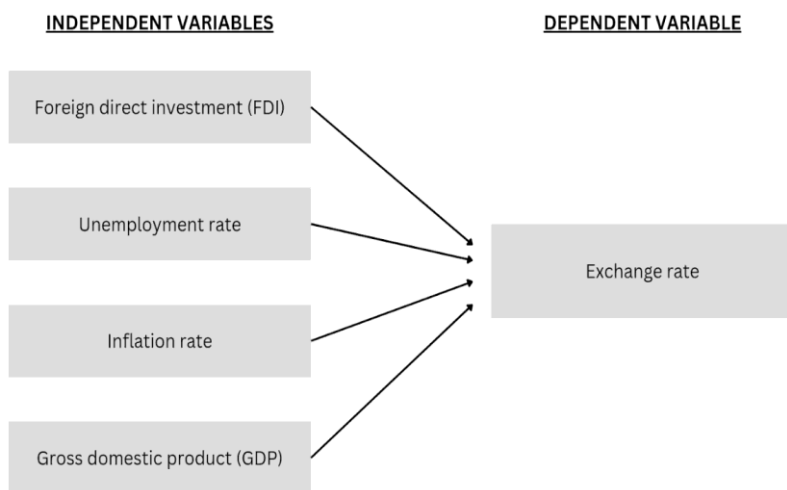


Figure 2: Theoretical Framework “Factors Influencing Exchange Rates in Malaysia”

**DATA ANALYSIS**

**Descriptive Analysis**

	ER	FDI	GDP	IR	UR
Mean	3.52033	3.8454	5.2191	2.50295	3.4074
Median	3.7871	3.5079	5.5848	2.4771	3.39

Maximum	4.4011	8.7605	10.0027	5.4408	4.64
Minimum	2.5044	0.0567	-7.3594	-1.1387	2.45
Std. Dev.	0.57941	1.779	4.00347	1.43515	0.4687
Skewness	-0.44598	0.415	-1.62977	-0.06712	0.6382
Kurtosis	2.01508	4.0257	5.74346	3.14571	4.2127
Jarque-Bera	2.28063	2.2486	23.4453	0.0507	4.0042
Probability	0.31972	0.3249	8E-06	0.97497	0.1351
Sum	109.13	119.21	161.792	77.5915	105.63
Sum Sq. Dev.	10.0716	94.943	480.834	61.7895	6.5896
Observations	31	31	31	31	31

Table 1: Descriptive analysis

Notes: The dependent variable is the exchange rate (ER). The independent variables are foreign direct investment (FDI), gross domestic product (GDP), inflation rate (IR) and unemployment rate (UR).

The mean value of the Exchange Rate (ER) is 3.520332. The ER is not a normal mean as it is more than 5%. When observing the standard deviation, the dispersion of the ER from its mean is 0.579413. In addition, the median indicates the midpoint of a discovered data value frequency distribution, and the study reveals that ER obtained 3.787100 data frequencies. Furthermore, the skewness of the ER data is -0.445977, suggesting that the distribution of probability is negative in value and shows a longer tail on the left tail of the distribution of the probability of the sample. The 2.015078 kurtosis is less than 3, which is a platykurtic distribution with less concentration of items around the central value.

The mean value of the Foreign Direct Investment (FDI) is 3.845416. The FDI is not a normal mean as it is more than 5%. When observing the standard deviation, the dispersion of the FDI from its mean is 1.778975. In addition, the median indicates the midpoint of a discovered data value frequency distribution, and the study reveals that FDI obtained 3.507900 data frequencies. Furthermore, the skewness of the FDI data is 0.414965, suggesting that the distribution of probability is positive in value and shows a longer tail on the right of the distribution of the probability of the sample. The 4.025691 kurtosis is more than 3, which is a leptokurtic distribution with a more significant kurtosis than the normal distribution and a heavy tail.

The mean value of the Gross Domestic Product (GDP) is 5.219103. The GDP is not a normal mean as it is more than 5%. When observing the standard deviation, the dispersion of the GDP from its mean is 4.003473. In addition, the median indicates the midpoint of a discovered data value frequency distribution, and the study reveals that GDP obtained 5.584800 data frequencies. Furthermore, the skewness of the FDI data is -1.629771, suggesting a negative skewness with a longer left tail. The 5.743458 kurtosis is more than 3, which is a leptokurtic distribution with a more significant kurtosis than the normal distribution and a heavy tail.

The mean value of the Inflation Rate (IR) is 2.502952. The IR is not a normal mean as it is more than 5%. When observing the standard deviation, the dispersion of the IR from its mean is 1.435148. In addition, the median indicates the midpoint of a discovered data value frequency distribution, and the study reveals that IR obtained 2.477100 data frequencies. Furthermore, the skewness of the IR data is -0.067116, indicating a negative skewness with a longer left tail. The 3.145714 kurtosis is more than 3, which is a leptokurtic distribution with a more significant kurtosis than the normal distribution and a heavy tail.

The mean value of the Unemployment Rate (UR) is 3.407419. The UR is not a normal mean as it is more than 5%. When observing the standard deviation, the dispersion of the UR from its mean is 0.468672. In addition, the median indicates the midpoint of a discovered data value frequency distribution, and the study reveals that UR obtained 3.390000 data frequencies. Furthermore, the skewness of the UR data is 0.638222, suggesting that the

distribution of probability is positive in value and shows a longer tail on the right of the distribution of the probability of the sample. The 4.212715 kurtosis is more than 3, which is a leptokurtic distribution with a more significant kurtosis than the normal distribution and a heavy tail.

### Correlation Analysis

Sample: 1992 2022  
Included observations: 31

Correlation t-Statistic	EXCHANGE RATE	FDI	GDP	INFLATION	UNEMPLOYMENT RATE
EXCHANGE_RATE	1.000000				
FDI	-0.570616 -3.741838 0.0008	1.000000			
GDP	-0.488889 -3.018007 0.0053	0.629031 4.357500 0.0002	1.000000		
INFLATION	-0.384599 -2.243705 0.0327	0.557316 3.614643 0.0011	0.274734 1.538698 0.1347	1.000000	
UNEMPLOYMENT_RATE	0.362610 2.095317 0.0450	-0.003821 -0.020575 0.9837	-0.284491 -1.598065 0.1209	-0.218356 -1.204957 0.2380	1.000000

Table 2: Correlation Analysis

The correlation between ER and FDI is **-0.5706**, which indicates a moderate negative relationship. This suggests that when FDI increases, the exchange rate decreases. The p-value for this relationship is **0.0008**, which is less than **0.05**, leading to the rejection of the null hypothesis (H0), which assumes no relationship between ER and FDI. Therefore, FDI has a significant effect on the exchange rate. Next, the correlation between ER and GDP is **-0.4889**, also showing a moderate negative relationship. When GDP goes up, the exchange rate tends to go down. The p-value for this relationship is **0.0053**, which is also below 0.05. Therefore, the null hypothesis is rejected, and GDP significantly affects the exchange rate. Furthermore, the relationship between ER and inflation rate (IR) is weaker, with a correlation of **-0.3846**. This means higher inflation is linked to a lower exchange rate, but the effect is smaller. The p-value for this relationship is **0.0327**, which is less than 0.05. Again, the null hypothesis is rejected, meaning the inflation rate also has a significant effect on the exchange rate. Lastly, the correlation between ER and unemployment rate (UR) is **0.3626**, showing a weak positive relationship. This means that as unemployment increases, the exchange rate tends to rise slightly. The p-value is **0.0450**, which is just under 0.05, so the null hypothesis is rejected. This shows unemployment also has a small but significant effect on the exchange rate.

### Normality Test

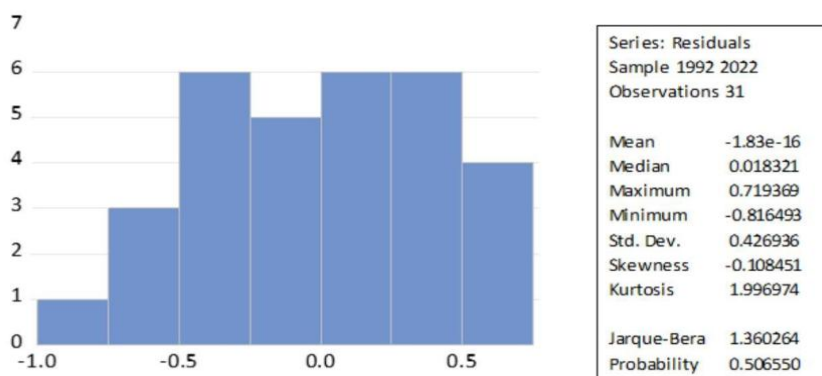


Table 3: Normality Test

Notes: The dependent variable is exchanging rate (ER). The independent variables are foreign direct investment (FDI), gross domestic product (GDP), inflation rate (IR) and unemployment rate (UR).

Null hypothesis (H<sub>0</sub>): Error term is normally distributed

Alternate hypothesis (H<sub>1</sub>): Error term is not normally distributed

The normality test is performed to determine if the data collected are normally distributed or not. The Jarque-Bera test determines if sample data contain skewness and kurtosis that are similar to a normal distribution. Based on the figure, the Jarque-Bera value is 1.360264 (136.0264 %), the probability obtained was 0.506550 (50.6550 %). As a result, the null hypothesis cannot be rejected as the value is more than a 5 percent significance level. This shows that the data is normally distributed. Skewness can be used to define the overall shape of a distribution. The skewness values obtained were -0.108451 which is negative skewness. As a result, it indicates the long tail on the left side rather than the right side. Furthermore, kurtosis is used to compare the distribution against the normal distribution. It can be classified as a normal distribution when the value is equal to 3. The normality test reveals that the kurtosis value for this study is 1.996974 which is less than 3 which is a platykurtic kurtosis indicates that the tail of the distribution is light and low degree of peak. Since the p-value is greater than 0.05, H<sub>0</sub> cannot be rejected (no significant). Therefore, it must accept the null hypothesis, indicating that the error term is normally distributed.

### Regression Analysis

Dependent Variable: EXCHANGE_RATE				
Method: Least Squares				
Date: 11/28/24 Time: 10:43				
Sample: 1992 2022				
Included observations: 31				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.767294	0.737819	3.750642	0.0009
FDI	-0.175916	0.075981	-2.315274	0.0288
GDP	-0.007552	0.029708	-0.254225	0.8013
INFLATION	0.002645	0.074885	0.035318	0.9721
UNEMPLOYMENT_RATE	0.429153	0.202910	2.114987	0.0442
R-squared	0.457064	Mean dependent var	3.520332	
Adjusted R-squared	0.373535	S.D. dependent var	0.579413	
S.E. of regression	0.458602	Akaike info criterion	1.425424	
Sum squared resid	5.468220	Schwarz criterion	1.656712	
Log likelihood	-17.09407	Hannan-Quinn criter	1.500818	
F-statistic	5.471944	Durbin-Watson stat	0.835390	
Prob(F-statistic)	0.002473			

Table 4: Regression Analysis

Notes: The dependent variable is the exchange rate (ER). The independent variables are foreign direct investment (FDI), gross domestic product (GDP), inflation rate (IR) and unemployment rate (UR).

### T-statistics

#### i) Foreign Direct Investment (FDI)

The regression analysis in Table 4 shows that the coefficient for FDI is -0.175916 or -17.5916%. It indicates that if FDI increases by 1%, the ER will decrease by -0.175916 or -17.5916% resulting from the negative relationship obtained between the variables. Moreover, the p-value for FDI is significant since the value is less than a significant level at 0.0288 or 2.88%. It can be concluded that FDI has a significant relationship with the ER in Malaysia.



## ii) Gross Domestic Product (GDP)

Table 4 reveals that the coefficient of GDP is -0.007552 or -0.7552%. It indicates that if GDP increases by a 1% increase, the ER will decrease by -0.7552% resulting from the negative relationship between the variables. Furthermore, the p-value for GDP is not significant since the value is more than a 5% significant level at 0.8013 or 80.13%. It can be concluded that GDP has no significant relationship with the ER in Malaysia.

## iii) Inflation Rate (IR)

The regression analysis in Table 4 shows that the coefficient for IR is 0.002645 or 0.2645%. It indicates that if IR increases by 1%, the ER will increase by 0.2645% resulting from the positive relationship obtained between the variables. Moreover, the p-value for IR is not significant since the value is more than a 5% significant level at 0.9721 or 97.21%. It can be concluded that IR has no significant relationship with the ER in Malaysia.

## iv) Unemployment Rate (UR)

The regression analysis in Table 4 shows that the coefficient for UR is 0.429153 or 42.9153%. It indicates that if UR increases by 1%, the ER will increase by 42.9153% resulting from the positive relationship obtained between the variables. Moreover, the p-value for UR is a significant value since the value is less than a 5% significant level at 0.0442 or 4.42%. It can be concluded that UR has a significant relationship with the ER in Malaysia.

## CONCLUSION

The study reveals a significant negative relationship between foreign direct investment (FDI) and exchange rates, indicating that increased FDI leads to a long-term currency decline. This aligns with prior research, such as Hamood et al. (2018), who noted that currency depreciation attracts FDI by lowering production costs, making the host country more appealing to foreign investors. Similarly, Lily et al. (2014) highlighted that currency depreciation in Asia boosted FDI in export-driven sectors like chemicals and electrical machinery. Japanese investments in the electrical machinery sector were particularly export-focused, with over 70% of sales designated for exports during 1997–1998. This depreciation enhanced product competitiveness in international markets, driving FDI in nations serving as export production hubs. Furthermore, to strengthen the fundamentals of the economy, the government should work on diversifying by decreasing dependence on certain sectors such as oil and gas, while also promoting the growth of high-value industries like technology, renewable energy, and services. This diversification can enhance Malaysia's resilience to external shocks and make it more appealing to FDI (World Bank, 2020). Regarding exchange rate volatility, the government could implement a floating exchange rate system, which allows Malaysia to reduce excessive fluctuations while ensuring competitiveness. This strategy can help prevent drastic currency devaluations that might discourage long-term FDI (Frankel, 2019).

Next, the unemployment rate shows a significant positive relationship with exchange rates, indicating that higher unemployment often leads to currency depreciation. While unemployment has generally declined, the complex relationship between labor market conditions and currency value is evident. This aligns with findings from Pillay and En (2021) and Mohsin et al. (2018). Pillay and En (2021) used LASSO regression to identify factors influencing Malaysia's unemployment rate, concluding that inflation and FDI inversely affect unemployment, while population growth and exchange rates are positively correlated. Mohsin et al. (2018) highlighted that exchange rate fluctuations impact unemployment by influencing exports and trade balances. In Pakistan, while a weaker currency may boost exports and create jobs, challenges like political instability and mismatched job opportunities complicate the unemployment-exchange rate dynamic in developing countries.

Subsequently, the analysis finds no significant relationship between the inflation rate (IR) and exchange rates, consistent with studies by Ng and Geetha (2020) and Achsani (2010). Ng and Geetha's (2020) research highlight that inflation rate variations do not notably impact exchange rates, with earlier studies documenting mixed findings which range from direct relationships to moderate or minimal links. While the influence is considered

insignificant, inflation remains a critical factor in economic processes, affecting market demand and consumer spending. Achsani (2010) adds that inflation rates, though indirectly related, often show a typically negative correlation with exchange rates, underscoring the need for effective regulation and oversight. Another factor that could clarify the insignificant relationship between inflation and exchange rates is the use of monetary policy strategies to control inflation, including interest rate changes and quantitative easing. These measures can lessen the effects of inflation on exchange rate values. For instance, when a country faces high inflation, its central bank might increase interest rates to stabilize the currency, effectively countering the inflationary effects on exchange rates (Taylor, 2001).

Ultimately, the study finds no significant relationship between Gross Domestic Product (GDP) and exchange rates, aligning with previous research by Wesseh & Lin (2018) and Chiadikobi et al. (2022). Wesseh & Lin (2018) observed a weak connection in Liberia, where high import dependency (over 75% of trade) limited the impact of exchange rate variations on GDP. Similarly, Chiadikobi et al. (2022) found no statistical significance between exchange rates and GDP growth in Nigeria. While exchange rates showed a positive long-term coefficient, they lacked causality with GDP and had only short-term negative effects. While, in developing economies, external debt and capital flows frequently have a greater impact on exchange rates than GDP does. For instance, when a country possesses significant external debt in foreign currency, fluctuations in the exchange rate may be influenced more by the need to service that debt than by the growth of its GDP (Reinhart & Rogoff, 2009). Based on those findings, it shows that the influence of exchange rates on GDP is limited and constrained by unique trade structures and external factors.

Overall, further research could be sector-specific analyses to ascertain how the various industries in Malaysia respond to fluctuations in the exchange rate. Different sectors may react differently; for example, export-oriented sectors may benefit from a weakened Ringgit, as that would enhance their competitiveness abroad, while import-dependent industries could face rising costs. But, in certain industries like tourism and services, a declining Ringgit makes Malaysia a more budget-friendly choice for foreign visitors, thereby benefiting the tourism and hospitality sector. This was highlighted following the Ringgit's depreciation in 2015, which led to an uptick in tourist arrivals (Bank Negara Malaysia, 2017). While regarding the policy implications, it will improve tourism infrastructure by positioning Malaysia as a cost-effective destination and relaxing visa requirements can further leverage the benefits of exchange rate fluctuations. This will help policymakers and businesses develop specific policies that reduce risks and build resilience within the most vulnerable sectors. The focused approach provides an effective inroad into showing how exchange rate fluctuations affect economic performance across various sectors.

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