

## The effect of financial liberalization on Malaysian economic growth

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**Abstract.** *This study aims at identifying the impact of financial liberalization on Malaysian Economic Growth during 1990-2019. So we selected the most important factors and financial determinants that represent the financial liberalization, which in turn impacts economic growth. These variables are represented in the rate of inflation and Kaopen Index, foreign direct investment inflows, trade openness and financial deepening, and all serve as means that reflect financial liberalization. The ADF (Dickey-Fuller) unit root test revealed that all of the time series do not contain a unit root. Especially at the first Defference, the Engle and Granger cointegration test demonstrated that there is a correlation between time series, therefore the Model was evaluated through the fully modified least-Squares Method (FMOLS), The Method demonstrated that all study variables have statistical significance and that financial liberalization has a positive impact on Malaysian Economic growth during the study period. Moreover, Granger's causality test showed that in the short term, there is no impact of the variables of the financial liberalization on the economic growth.*

**Keywords:** economic growth, financial liberalization, foreign direct investment inflows, trade openness, Fully Modified Least-Squares Method (FMOLS method).

**JEL Classification:** F43, F41, R15, O10.

## 1. Introduction

Financial liberalization is among the key elements of the new financial system and the most important economic features. As a result of the effects of the fiscal restraint policies of the late 70s, many countries conducted radical reforms on its financial and economic systems. It began to limit the state's intervention in its economic activity, and financial liberalization appeared after the collapse of the International Monetary System of Bruton Woods in 1971, and floating main exchange rate. The operations of financial liberalization began in advanced countries and expanded to reach developing countries (Jean and Pascal, 2007). Financial liberalization falls under economic liberalization and is considered among its main components, as it falls under the financial and banking developments that are based on the principle of breaking free from restrictions and obstacles imposed on the movement of capitals. Financial liberalization includes three main aspects that are: liberating the banking system (Liberating credit and interest rate, loan, and banking competition) liberating financial markets and capital account.

The term "financial liberalization" first appeared in the writings of "Mc Kinnon and Show" (1973) they defined financial liberalization as the finest solution to egress from the state of financial restraint, a simple and efficient means to expedite the rate of economic growth of developing countries. Murat Ucer (2000) defined it as a set of procedures that is applied in order to nullify imposed restraints on the financial and banking sectors, such as liberating interest rate, removing imposed sanctions on the expense of the capital, all in order to reform the internal and external financial sector (Murat, 2000).

King and living (1993), Loayza and Beck, Levine (2000), Prasad Wel and Kose, Rogoff (2003), Dhingra (2004) and others considered that: Financial development is a condition for the success of the application of the financial liberalization policy. They indicated that applying said policy in developing countries is an effective means of achieving high and positive economic growth rates, thanks to the development of a financial and banking system, which in turn induces savings and thus saves more money required to finance different economic activities that positively reflects economic growth rates of these countries. Therefore, the basis of the theory of the policy of financial liberalization is the financial development that is considered one of the main pillars of economic growth in developing countries.

Malaysia was interested in financial development and economic liberalization in order to develop its own economy. It has achieved, across the past four decades a leap in human and economy development and has become among the first industrial countries in the Islamic world, as well as in the field of exports and imports in south-east Asia. Ever since its independence. Malaysia incessantly built its country and transformed from an agricultural country by tin alteration to an industrial country, where 62% of its exports became manufactured products, which eventually lead to a drop in poverty rates from 52% in 1970 to 5% in 2002. The median income also increased from \$1,200 per year to \$10,000 in the same year of 2002, in addition to a notable decrease in unemployment in %3 (Barry, 2009).

Malaysia benefited from its external openness through its fusion in global economics by maintaining the pillars of developing its national economy. And the aspects of development that manifest through its transformation from a country that largely depends on agriculture to an exporting country of manufactured and technical goods, Especially in the field of electrical and electronic industry, as the percentage of manufacturing increased from 13.9% in 1970 to 24.4% in 2012, as well as services 36.2% to 50.4% of the same year (Jomo and Wee, 2014). In a short time, Malaysia transformed from a country that depends on the exportation of raw material to one of the biggest exporting countries of technical and industrial goods. Malaysia has become the fourth biggest economy in south-east Asia and occupied the 34th rank in 2007 in gross domestic product, and the 16<sup>th</sup> rank internationally from competition in foreign investment, and the 9th rank in international trade.

The Malaysian economic experience was considered among the most successful experiences in economic development and liberalization, and on this basis, we form the research problematic: Does financial liberalization negatively or positively impact Malaysian economic growth? The study period extends from 1990 to 2019, and in order to answer this problematic, the research elements were divided as follows:

## 2. Literature review

The question of financial liberalization stirred much debate in theoretical and empirical literature. Many studies were conducted in order to identify whether or not financial liberalization has a positive or negative impact. The following are a selection of few of the previous studies that center around financial liberalization on some countries' economies:

Akpan (2004) empirically investigated the effect of financial liberalization with special focus on increasing real interest rates and financial deepening (M2/GDP ratio) on the rate of economic growth in Nigeria using the endogenous growth model. The study used time series annual data covering between 1970 and 2002. The Error Correction Model (ECM) was used to capture both the short and long run impact of the variables in the model. The results shows a low coefficient of the real deposit rate which implies that interest rate liberalization alone is unlikely to expedite economic growth. Overall, the finding shows that financial liberalization has a positive impact on the economy of Nigeria during the period 1970-2002.

Ozdemir and Erbril (2008) conducted a study to empirically explore the impact of financial liberalization on economic growth in 10 new European Union countries and Turkey during 1995 - 2007. The author's constructed different financial openness indicators using panel data for different types of financial flows such as portfolio investments, foreign direct investment, other investments, trade openness index as well as other control variables. Using the Ordinary Least Squares (OLS) method, estimates of static and dynamic static panel data indicate clear evidence between long-term growth and a number of indicators of financial liberalization that confirm expectations of the "new growth theory". Their findings take note of financial liberalization as a policy tool due to the potential to boost economic growth.

The study of Okpara (2010) also estimated the effect of financial liberalization on selected macroeconomic variables namely, Gross Domestic Product (GDP), savings, inflation rate, financial deepening, and flows of foreign direct investment, Nigeria case study. To analyze that, the author's employed three alternate methods the parametric paired sample statistic for t-test and the non parametric wilcoxon signed rank test to determine whether significant differences exists between pre/post liberalization macroeconomic variables. The third method, the discriminant analysis was meant to determine the direction as well as the magnitude of the discriminant variables.

The result shows that while real GDP recorded (highest) positive and significant contribution, foreign direct investment and national savings and made negative and significant contribution. Financial deepening and inflation rate did not discriminate significantly between non financial and financial liberalization. This implies that financial liberalization positively impacted the growth of the economy in Nigeria.

The Study of Sulaiman et al (2012) analyze too the impact of financial liberalization on economic growth, given the discrepancy and the gap in the literature, using a sample of 30 sub-Saharan African countries. The study applied a dynamic panel estimation to examine the special role of financial liberalization and banking crises on economic growth in SSA. The linear generalized method of moments is estimated according to the Arellano and Bover approach. The study also examined whether differences in income levels across countries in sub-Saharan Africa will affect the relative impact of financial liberalization in SSA.

The results indicate that the coefficient of the financial liberalization variable is positive and significant for SSA. However, the financial liberalization dummy sign changed to negative for low-income countries, even though it was statistically insignificant. The results also show that there is a negative relationship between a banking crisis and economic growth, showing that the period of a banking crisis can drastically affect economic growth in sub-Saharan Africa. Considering the crucial role played by most financial intermediaries in developing countries, the results have some implications for different African countries, especially countries whose economies are still undergoing financial reforms.

Qazi and Shahida (2013), they both tried to explore the link between the financial liberalization index (FLI) and economic growth in Pakistan, using annual data for 1971-2007. The Phillips Perron unit root test was performed to verify the integration level and Auto-Regressive Distributed Lag (ARDL) technique for obtaining long run and short-run coefficients. The empirical finding indicates that FLI and economic growth are both linked to the short run. On the other hand, FLI is not significant statistically in the long run, while the impact of real interest rate (RIR) on economic growth is negative and significant. It means that a one-unit increase in the RIR causes GDP to decline by Rs. 1.03 million. Our recommendations are as follows. SBP and the GOP should pursue financial liberalization policies that are consistent with economic growth.

The study of Anthony et al (2015) constructed an index of financial liberalization between 1981 to 2012 to investigate its impact on economic growth in Nigeria using the McKinnon-Shaw framework. The ordinary least squares methodology and cointegration analysis are

used in the study. The result reveals that financial liberalization (FINDEX) and private investment (PINV) have significant positive impact on economic growth in Nigeria. However, real lending rate (LDR) proved to be negatively related to economic growth in Nigeria within the period under review. The authors conclude that the monetary authorities and policy makers in Nigeria need to support the liberalization process by formulating complementary policies and financial sector reform measures that will help in strengthening the impact of the liberalization process on the economy and also ensure that the benefits of the liberalization exercise is maximized.

### 3. Model and econometric methodology

Based on the theories and theoretical research that studied the subject of financial liberalization and economic growth, the most important factors and financial limitations that represent financial liberalization, have been addressed, and has an impact on economic growth. These variables have been selected according to economic and empirical literature theories published on the subject of study, and according to the extent of the availability of the data, during the period 1990-2019.

The rate of inflation, Kaopen index, foreign direct investment inflows, trade openness, and financial deepening, were used in order to express financial liberalization. These data were retrieved from the World Bank and Bursa Malaysia in addition to the annual reports of the Malaysia Bank Negara.

#### 3.1. Model variables

The model of the study consists of a dependent and independent variable as follows:

##### 3.1.1. Economic growth

Economic growth include changes in material production and during a relative short period of time, usually one year. In economic theory, under the concept of economic growth implies an annual increase of material production expressed in value, the rate of growth of GDP or national income, Economic growth is the dependent variable of this study and is represented with the Gross Domestic Product (GDP) growth rate in Malaysia during the period of 1990 to 2019 (Mladen, 2015).

The inflation rate, foreign direct investment inflows, Kaopen index, trade openness and financial deepening are considered to be the independent variable of the study.

##### 3.1.2. Inflation

Inflation is considered the main problem that hinders economic growth, as this phenomenon has become the main center of attention for many countries. The impact of inflation on economic growth, is an important and complex matter, whether for the state or investors or even lenders, because it distorts the work of the price systems and leads to incompetence in providing resources, (Mohammed et al, 2014). As it decreases the trust of individuals in the currency. The continuous drop of money value leads to the loss of its occupation being the warehouse of value.

### 3.1.3. The Chinn-Ito index Kaopen

The Kaopen index represents the liberalization of the capital which is defined by the density and amount of restraint imposed on transactions related to the capital, it is the result of the works of Chinn and Ito (2002) (Menzie and Hiro, 2006).

### 3.1.4. Foreign Direct Investment

Foreign direct investment inflows are considered among the most important variables that explain the change in economic growth. The foreign capital looks for investment opportunities in economies that have the necessary components for growth. Additionally, it seeks a financial system that eases gain transfer or reinvestment. Therefore, foreign investment expedites the economic growth pace and increases the size of the financial market, which in turn leads to economic growth.

### 3.1.5. Trade openness

Trade openness expresses the extent of trade openness on the external world. It is of big importance as it measures the level of the economy's sensitivity to external fluctuations and to the extent of which it is impacted. Trade openness is usually calculated using the following equation:

$$\frac{\text{Exports} + \text{Imports of goods and services}}{\text{GDP}}$$

### 3.1.6. Financial Deepening

Financial deepening is called financial intermediation and is calculated by dividing the sum of monetary mass (time deposits, current deposits, and liquidity) by the Gross Domestic Product (M2/GDP). This ratio measures the degree of "cash" used in the economy, and thus show the financial sector' size in economy and therefore the level of financial deepening through the size of the market. An increase in this ratio means the development of the volume of financial intermediation (Nwadiubu et al., 2014). It was used by King and Leving in 1993, it reflects the depth of the financial market relative to the overall economy (Onwumere et al., 2012).

Table 1 demonstrates the statistical description of the study variables annually during the study period extending from 1990 to 2019. Whether internal variables or variables that helped calculate the variables of the model. The arithmetic mean, median, largest, and smallest value, and the standard deviation of each variable are shown as follows:

**Table 1.** *Descriptive statistics*

Variables (Annual) 1990-2019		Mean	Median	Max	Min	Std.dev.	Obs.
Billion US D	Gross Domestic Product	178,8	134,1	364,7	44,0	109,7	30
	Exports	149,0	149,0	249,5	32,8	72,5	30
	Imports	151,1543	135,7525	380,9	35,486	82,3395611	30
	M <sub>2</sub>	782201,2	579491,0	1950567,4	83902,9	609375,5	30
Economic Growth		5,8	5,8	10,0	-7,4	3,6	30
Inflation		2,61	2,66	5,44	0,58	1,39	30
Kaopen		-0,01	-0,15	2,33	-1,50	1,19	29
Foreign Direct Investment		4,07	3,77	8,76	0,06	1,91	30

Variables (Annual) 1990-2019	Mean	Median	Max	Min	Std.dev.	Obs.
Trade Openness = $\frac{Ex+Im}{GDP}$	149,93	149,88	250,19	33,59	72,46	30
Financial Deepening = $\frac{M_2}{GDP}$	3855,47	4112,67	5468,02	1905,84	1136,80	30

**Source:** Author's computation.

### 3.2. Model specification

The model is specified as follows

$$EG = f(INF, KAO, FDI, TO, FD) \quad (1)$$

Where:

EG: Economic Growth

INF: Inflation

KAO: The Chinn-Ito index – Kaopen

FDI: Foreign Direct Investment

TO: Trade Openness

FD: Financial Deepening (M2/GDP)

f = functional relationship

The econometric form of equation (1) is represented as:

$$EG = B_0 + B_1INF + B_2KAO + B_3FDI + B_4TO + B_5FD + e \quad (2)$$

Where:

$B_0$  = Intercept of relationship in the model/constant.

$B_1, B_2, B_3, B_4, B_5$  = Coefficients of each independent or explanatory variable.

e = Stochastic or error term.

### 3.3. Econometrics methodology

Before building the model and understanding how the variables of financial liberalization impact economic growth during 1990 - 2019, we must first and foremost be sure of the Stationarity and Cointegration of time series:

#### 3.3.1. Stationarity test of time series

Concept of non-Stationarity of time series appeared first as in 1970 (John and Sons, 2013) If the time series of model are non-stationary, we obtain a spurious or nonsense regressions, which the value of  $R^2$  is quite high, which would result in a false description of the model. There are many tests to identify whether the time series is stationary or not. Among which are the unit root test of Dickey Fuller test.

#### 3.3.2. Cointegration Test

According to the Angle and Granger methodology Since the variables are integrated of the same degree, meaning stationary at the same level, whether at the first level or first difference, The stationary of the residuals  $e_t$  is tested for the original model (after evaluating the model through ordinary least squares). If the residuals are stationary then the null hypothesis is rejected, meaning that the variables are fully integrated.

The fully modified least squares model is selected in order to identify the impact of the financial liberalization variables on economic growth in the long term. As for the short term, it is identified using the Granger Causality test between variables.

#### 4. Financial liberalization in Malaysia

The Malaysian experience in economic development is considered to be one of the most successful international experiences in the field of economic development. This experience has been through many experiences: The first phase aims to improve the standard of living of the population which has somehow succeeded. As for the second phase 1971-1975 and the third phase in 1976-1980. This phase focused on electronic industry and some products for exportation, which has increased the level of employers and decreased the level of unemployment. The fourth phase 1981-1985 Was led by Mahathir Mohamad (the former prime minister). The development operations focused on heavy industries and the concentration of industrial production before launching into exports and then eventually, reach the phase of economic liberalization.

##### 4.1. Phase of Economic Liberalization

This phase extends between 1986 and 2000 and is characterized by three stages, the fifth stage from 1986-1990, the sixth stage 1991-1995 and the seventh 1996-2000. In the fifth and sixth stages appeared the project of Mahatir Mohamad in economic development revealed to the outside world, in addition to revitalizing the processes of industrial growth and moving towards exportation in production operations, without neglecting the national economic pillars. This phase is characterized by making way for the private sector, encourage it, and offer more incentives and actively participate in growth. In addition, foreign direct capital is allowed to invest in the Malaysian economy.

##### 4.2. Interest rates liberalization

Interest rates were first liberated in 1978, as banking companies were allowed to freely determine the rates of loans. In 1985 a set of reforms that increased the liberalization and expansion of the financial and banking system. It also allowed most financial and banking companies to provide services and Islamic banking products according to banking transactions without interest.

In early 1991, basic rest rate was liberalized, allowing each commercial bank and financing company to freely set its base rate. During the period 1990-1992 several reforms were introduced that included the establishment of a credit rating agency, and the removal of several restrictions related to the activities of financial enterprises and investment banks, and several other measures to develop financial markets.

##### 4.3. Financial Intermediation

Among the most important changes that affected financial and banking system in Malaysia is working following the Islamic banking system next to the conventional banking system. Malaysia is thus one of the first Islamic countries that paid attention to Islamic banking, as financial liberalization in Malaysia witnessed the first Islamic Bank in 1983, under the new



Islamic banking law, which is a set of laws that determine some of the conditions that the bank must commit to. Today, the number of Islamic Banks in Malaysia reached around 17 bank (Isham, 2011).

In order to attract foreign investors, the Malaysian government has reduced restrictions imposed on foreigners who want to enter the financial sector, as it has equally reduced restrictions on stocks owned by foreigners in crediting and bank investment.

## 5. Results

We first check stationary of time series using Unit Root Test (Dickey-Fuller). Through the following table we demonstrate all economic growth variables, inflation, Kaopen Index, direct foreign investment inflows, trade openness and are all stationary at the level except of the variable of financial deepening, it is non-stationary at the level, whereas all variables are stationary in the first difference, i.e., it does not contain unit root.

**Table 2.** Unit root results

Variables	Level		First Defference	
	Augmented Dickey-Fuller test statistics	Result	Augmented Dickey-Fuller test statistics	Result
EG	-4.021568*	Stationary	-4.885564*	Stationary
INF	-5.215185*	Stationary	-6.864799	Stationary
Kao	-1.763633***	Stationary	-5.097037*	Stationary
FDI	-5.171898*	Stationary	-6.694711*	Stationary
TO	-3.115749**	Stationary	-5.948995*	Stationary
FD	-2.606883	Non-Stationary	-5.891883*	Stationary

**Note:** \* Significant at 1%, \*\* Significant at 5%, \*\*\* Significant at 10%. Also the model is run using in intercept and deterministic trend.

**Source:** Author's computation.

According to the methodology of Angle and Granger, since all variables are integrated of the same degree, meaning that it is stationary on the same level, whether at the level or first different, we will test the stationary of the residuals  $e_t$  of the original model.

$H_0 \rightarrow \beta = 0 \rightarrow$  Null Hypothesis Has a Unit Root  $e_t$

From Table 3, we conclude that the series of residuals of the model is stationary at the level, meaning that variables are integral.

**Table 3.** Residual Unit Root test results

Level		
	Augmented Dickey-Fuller test statistics	Result
Intercept	-4.845802*	Stationary
Trend and Intercept	-4.757453*	Stationary
None	-4.938456*	Stationary

**Note:** \* represent 1% level of Significance, \*\* represent 5% level of Significance.

**Source:** Author's computation.

The following table shows the estimate the long run coefficients using Fully Modified Least Squares Method

**Table 4.** *Estimated regression*

Variable		Coefficients	Standard Error	T- Statistics	Probability Value	R-squared
Independent Variables	INF	-1.629999	0.382624	-4.260054	0.0003*	0.688788
	Kao	2.249376	0.955250	2.354750	0.0283**	
	FDI	1.528662	0.307478	4.971616	0.0001*	
	TO	0.020488	0.009171	2.233915	0.0365**	
	FD	-0.001893	0.000688	-2.752721	0.0119*	
constant	B <sub>0</sub>	8.488352	3.072092	2.763053	0.0117*	
Simple period		1990 - 2019				

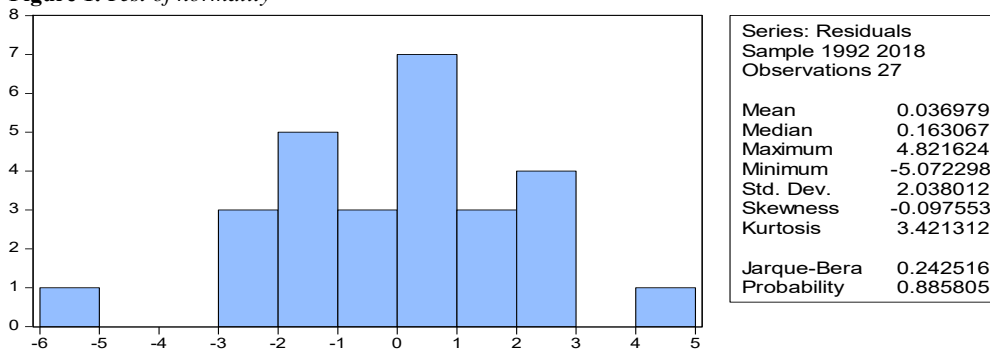
0.688788

Note: \* represent 1% level of Significance, \*\* represent 5% level of Significance.

Dependent Variable = EG.

Source: Author's computation.

After evaluating the model and before analyzing, we must first make sure that residuals are naturally distributed which is shown in the following figure and through a probability 5%, therefore there is no standard problem of the model.

**Figure 1.** *Test of normality*

Source: Eviews Output for Normality.

Through Table 3 the model was evaluated as follows:

$$EG = 8.5 - 1.6 INF + 2.2 KAO + 1.5 FDI + 0.02 TO - 0.001 FD$$

Table 4 displays the regression (using the Fully Modified Least Squares Method) results which exhibits that the value of overall  $R^2$  of the estimated model is 0.68 which is quite high and it reflects the regression model is successful. The variables explain 68.87% of the change in Malaysian economic growth during 1990-2019 at a significance level of 5%. It is noteworthy that all financial liberalization variables affect Malaysian economic growth, because all variables have a statistical significance at a significant level of 1% or 5%.

Through the equation we notice that there is an inverse relationship between Malaysian economic growth, inflation, and financial deepening, i.e. Meaning variables have a negative impact on Malaysian economic growth. As the increase of one of these indexes leads to a decrease in Malaysian economic growth during the study, whereas there is a relation of proportionality between economic growth and Kao Index and foreign direct investment inflows and trade openness during the study period.

The equation results show that every time the inflation rate increases with 1, the economic growth decreases with (-1.6). Whenever financial deepening increases with (1), economic

growth decreases with (-0.001). If the Kaopen index, foreign direct investment inflows and trade openness, it will increase economic Malaysian growth at a rate of (2.2), (1.5) and (0.02) respectively. It is notable that among financial liberalization indexes the most impacting on economic growth is the Kao index, and then inflation and foreign investment inflows and then trade openness and then financial deepening.

Reducing restrictions and canceling barriers on foreign capitals, such as being exempted from taxes and fees, have a positive impact on economic growth in Malaysia. Which is shown by the equation, that there is a proportionality relationship between direct foreign investment inflows and trade openness and Kaopen index and Malaysian economic growth. Since direct foreign investment inflows and trade openness has a positive impact on economic growth, it is only natural that inflation negatively impacts on economic growth. Which is the result of deterioration of money value, which leads to a decrease in the value of foreign inflows as well as exports which negatively impacts economic growth.

The study period extends from 1990 to 2019 in Malaysia, through this stage three crises took place, in which the first one is the Asian financial crisis in 1997. However, the Malaysian central banks issued a set of measures that played a major role in achieving foreign capital inflows. In 2001 the second crisis hit where a recession in global trade as a result of the crisis resulting from the dot com bubble, which greatly affected economy sectors around the world and led to a state of economic recession. And the third is the global financial crisis of 2008, or as it is called the mortgage crisis, and all these crises may explain the negative impact of financial Deepening or financial intermediation on Malaysian economic growth, but it is a small effect whose equivalent capacity is only (-0.001).

After estimating the long run coefficients using FMOLS, we have applied Granger Causality test to find if there is any causality between the variables in the short-run. The results of causality are produced in the following table.

**Table 5.** Granger causality test

Null Hypothesis:	T-Statistics	Probability
FDI does not Granger Cause EG	0.16664	0.6873
EG does not Granger Cause FDI	0.11638	0.7364
INF does not Granger Cause EG	0.48524	0.4925
EG does not Granger Cause INF	0.00754	0.9315
Kao does not Granger Cause EG	2.19914	0.1511
EG does not Granger Cause Kao	0.66437	0.4230
FD does not Granger Cause EG	2.73545	0.1106
EG does not Granger Cause FD	1.24038	0.2760
TO does not Granger Cause EG	0.67525	0.4190
EG does not Granger Cause TO	0.18749	0.6687
INF does not Granger Cause FDI	0.13564	0.7163
FDI does not Granger Cause INF	0.37293	0.5480
Kao does not Granger Cause FDI	3.20390	0.0879
FDI does not Granger Cause Kao	0.22475	0.6403
FD does not Granger Cause FDI	0.98804	0.3315
FDI does not Granger Cause FD	2.8E-05	0.9959
TO does not Granger Cause FDI	0.43204	0.5181
FDI does not Granger Cause TO	0.30036	0.5894
Kao does not Granger Cause INF	0.93870	0.3423
INF does not Granger Cause Kao	0.00067	0.9796
FD does not Granger Cause INF	0.34217	0.5638
INF does not Granger Cause FD	4.94102	0.0355*

Null Hypothesis:	T-Statistics	Probability
TO does not Granger Cause INFL	0.13468	0.7167
INF does not Granger Cause TO	0.51712	0.4787
FD does not Granger Cause Kao	2.18301	0.1525
Kao does not Granger Cause FD	4.61360	0.0420*
TO does not Granger Cause Kao	0.87125	0.3599
Kao does not Granger Cause TO	0.12824	0.7234
TO does not Granger Cause FD	0.24197	0.6271
FD does not Granger Cause TO	0.19906	0.6593

**Note:** \* represent 1% level of Significance, \*\* represent 5% level of Significance.

Through Granger's causality test it is shown that there is no causality between variables on the short term except on financial deepening. as the test showed that inflation and Kaopen index impact, in the short term financial deepening at a significance level of 5%, which can explain the inversive relationship between financial deepening and Malaysian economic growth during the study period 1990-2019.

## 6. Conclusion

In the early 90s Malaysia became a destination for investment and portfolio flows. Several factors contributed to this matter, including adopted reforms and financial liberalization policies adopted by the state and the success of its experience in economic development, which reflected on investors' confidence and led to an increase in foreign investments and foreign trade. The economic openness improved productivity by encouraging competition, transfer of technology and focusing on export-oriented industry.

Despite the fact that three crises hit during the 1990-2019 period, among which are the Financial Asian Crisis in 1997, which led to severe losses in Foreign Exchange Market, and in Stock exchange Market as well as the financial crisis of 2008. However, The Malaysian government was able to lift its economy without the need of the International Monetary Fund's help, as it has released a series of initiatives including the economic transformation program. Which aimed to focus on the public policy measures to improve the competitive ability in 12 economic regions in Malaysia, in order to expedite growth and surpass the crisis impact of 2008. Through this program the government was able to encourage foreign and local investments in several sectors including: electricity, electronics, medical devises, gas and oil equipment, which targeted growth in several other sectors. It resulted in the construction of major investment projects especially in 2001, which was in turn what contributed in the high increase of direct foreign investment in Malaysia in that year.

The study concluded that financial liberalization positively impacted economic growth in Malaysia during the study period 1990-2001, which is through the positive impact of direct foreign investment inflows, Kaopen index and trade openness on Malaysian economic growth. Despite the negative impact on financial deepening on economic growth. However, this impact is simple compared to the percentage of impact on the remaining variables. The most important study results can be concluded as follows:

- Financial liberalization has a positive impact on Malaysian economic growth during the study period of 1990-2019

- The increase in inflation rates negatively impact Malaysian economic growth.
- Kaopen Chinn-Ito index demonstrate that financial liberalization has a positive impact on Malaysian Economic growth.
- The increase in direct foreign investment flows increase the rate of Malaysian economic growth.
- Trade openness has a positive impact on Malaysian economic growth.
- Financial deepening and brokerage have a slight negative impact on Malaysian economic growth in the long term and impacts inflation and financial liberalization on financial deepening in the short term.
- Financial liberalization impacts economic growth on the long term instead of the short term.
- Inflation and Kaopen index impacts financial deepening on the short term.

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