



Malaysia's Economic Growth: Evidence from Japan-Malaysia Bilateral Trade and Development Aid Relationships

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ABSTRACT

Look east policy (LEP) implemented in 1982 have a purpose to gain knowledge of best practices from Japan, South Korea, and Taiwan as the top rising East Asian countries for a nation-building exercise. Despite the bilateral relationship has existed between Malaysia and Japan since 1957, LEP helped nurture Malaysia's nation-building through a handful Japanese assistance initiatives, and Malaysia has remained one of Japan's closest counterparts in Southeast Asia in return. This research explores the impact of bilateral trade and development aid between country on Malaysia's economic growth from 1989 to 2020. Autoregressive distribution lag model (ARDL) reveals that Malaysia's exports to Japan is positive and significant on Malaysia's economic growth. Meanwhile, both Malaysia's import from Japan and Malaysia's development aid received from Japan are positive but insignificant on Malaysia's economic growth. It deduces that LEP implemented back 40 years ago boosts Malaysia's export activities to increase Malaysia's economic development.

Keywords: Look East Policy, Malaysia Import, Malaysia Export, Development aid, ARDL

JEL Classifications: F10, F14, F41, F43

1. INTRODUCTION

1.1. Look East Policy Background

Tun Dr. Mahathir Mohamad, Malaysia's fourth Prime Minister, re-oriented Malaysia's foreign policy from the West to the rising economic powerhouses of Japan, South Korea, and Taiwan through the Look East Policy (LEP) six months after taking office. The policy aims to decode the success of East Asian countries nation-building exercise in terms of labour ethics, good governance, technological enhancement, and human resources skills later to translate into Malaysia's development plan (Lai and Moorthy, 2022; Pandian et al., 2021). The government of Malaysia started to send Malaysian students to Japan for further education or skills training. Thousands of Malaysians have graduated from Japanese universities and other educational institutions as a consequence of this. As of 2021, over 26,000 promising Malaysia youth have come to Japan to study and train in Japan at universities, KOSEN (National Institute

of Technology), private companies, local governments, and the Japan International Cooperation Agency (JICA). They have been playing an important role as a bridge to connect the two countries (Embassy of Japan in Malaysia, 2022). In addition, it is also reported that 27 ministries and agencies in the Malaysia Government, the incumbent 13 Secretary General have studied or trained in Japan.

1.2. Malaysia-Japan Imports and Exports

It is important to highlight that, as of 2021, 1,500 Japanese companies are operating in Malaysia. The existence of Malaysians who have studied or trained in Japan is one of the major factors for Japan to invest in Malaysia. Not limited with that, these companies managed to employ 470,000 Malaysians in the manufacturing sector (Embassy of Japan in Malaysia, 2022).

It was not taken a long period of time for LEP to show its results. During the first decade after the policy was announced, about 300

Japanese multinational corporations invested nearly one billion Malaysian Ringgit, and Japan had become Malaysia's largest foreign investor, surpassing the United States (Iqbal et al., 2014). Malaysia and Japan engaged the Malaysia-Japan Economic Partnership Agreement (MJEPA) on December 13, 2005, under the auspices of the LEP, which saw Malaysia's named as Japan's 10th largest trading partners (Ministry of International Trade and Industry, 2015). The major exports to Japan consist of liquified natural gas electrical and electronic products, chemicals and chemical goods, wood products, and optical and scientific tools. Meanwhile, major imports from Japan are electrical and electronic products machinery, equipment and parts, transport equipment, chemicals and chemical products and metal fabrication (Ministry of International Trade and Industry, 2015). This bilateral strategic partnership agreement was Japan's first with any ASEAN member-state (Parameswaran, 2015).

In their "new strategic partnership" agreement by 2015, both nations placed additional emphasis on novel economic support sectors. These sectors encompassed advanced industrial technology, services, managerial expertise, technical and vocational training (TVET), and the development of top-tier infrastructure with an emphasis on quality (Parameswaran, 2015). Moreover, Japan has consistently proven itself as a dependable ally in Malaysia's endeavor to transform into a high-income and equitable nation, striving for continuous technological advancement in tandem with the aspirations of the Fourth Industrial Revolution (4IR) goal (Lai and Moorthy, 2022).

1.3. Japan Development Aid

Official Development Assistance (ODA) is one of the most important external sources of monetary assistance that can help both developing and developed countries improve their wealth and raise their people's standard of life. Japan, as a committee for the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development's, has a long history of providing development assistance to Malaysia, dating back to 1960.

ODA is defined as monetary flows from DAC-member nations to ODA beneficiaries and multilateral development organisations. There are several methods for providing development aid. First, it was provided by official agencies, such as state and local governments, or their executive agencies; second, it was delivered in the form of flexible grants or soft loans, and it was governed with the primary purpose of encouraging the economic development and welfare of developing countries (Kovářová, 2021). Therefore, two recognized fundamental forms of ODA are grants and loans. Malaysia is one of the biggest recipients of Japanese ODA in Asia. However, Malaysia's reclassification as an upper middle-income nation (UMIC) in 1988 altered the pattern of Japanese aid to Malaysia (Huda, 2017). As a result, Japan decided to cut the amount of money in ODA supplied to Malaysia versus the sum provided to other Southeast Asian countries.

The first example of ODA is Japan's loan assistance to Malaysia. Following number of trips to Japan since taking government in 2018, Tun Dr. Mahathir Mohamad was successful in arranging

the issuance of samurai bonds valued 200 billion yen which equal to USD 2.4 billion. The loan help reflects the revitalization of Malaysia-Japan relations. Samurai bonds are bonds denominated in Japanese yen, which foreign organizations can issue within Japan to generate funds. The initial issuance of a samurai bond by Malaysia in three decades, marked as the largest sovereign bond guaranteed by the Japan Bank of International Cooperation (JBIC). Additionally, the Japanese government has committed to investing USD1.8 billion in these ten-year notes, projecting a coupon rate of approximately 0.3% (Kyodo, 2019).

Other types of development aid given to Malaysia throughout the year are, cultural grant aid with a purpose to promote culture and higher education, and preservation of cultural heritage, for example Higher Education Loan Fund Project (III) in 2005. Other than that, Grant assistance for Grassroots Human Security Projects, for example, The Project for Procurement of Medical Devices for the Negeri Sembilan Family Planning Association Clinic in Negeri Sembilan in 2022 (Embassy of Japan in Malaysia, 2023). In a nutshell, there are many continuous developments aid given from Japan to Malaysia in terms of loan aids or grant aid since 1957-2023.

This study is build up as follows. The first section of this paper clarifies the current study's issues and significance. Section 2 explores past literatures on the and distinguishes the knowledge gaps to be contributed by this paper. Section 3 introduces the methodology and data used in the study. Section 4 justifies the study's findings, supported by past studies and economic intuition. Section 5 discusses the conclusion and policy suggestions.

2. LITERATURE REVIEW

According to the neoclassical economic theory, foreign direct investment, imports, and exports can be used to transfer technical advancement from one nation to another to sustain an economy over the long term. A global network and an open economy have emerged because of this philosophy. Through trade agreements with industrialised nations, open economies have helped developing countries boost their Gross Domestic Product (GDP). Numerous amounts of literature have studied the foreign trade as the principal ways to generate revenue and holds a significant impact on the GDP growth of the nation. The state's export-import activities, particularly when local products are highly productive and competitive, have a positive influence on the country's GDP growth (Abramova et al., 2022). Vice versa to the open economy, closed economy that can be viewed during the implementation of Covid-19 containment measures, have caused in large short-term economic losses as per Deb et al., (2022) study.

Radulović (2020) examined the impact of public investment on commercial growth in South-East Europe using the panel autoregressive distributed lag (ARDL) approach. Public investment and economic growth were found to be closely related in the case of European Union (EU) member countries. Baxter and Kouparitsas (2006) discuss that economies of developing countries were affected by the bilateral trades with developed countries. The study conducted by Jawaid et al. (2020) proved the

positive and significance relationship linking real GDP with terms of trade growth rates of different commodity groups in Pakistan and its partner countries. It also can be supported by the findings from Fosu and Wahl (2020) that shows export price, machinery, and lagged exports impact encouragingly on the increasing of US exports of corn. Meanwhile, Le (2017) found that the economic expanse between Vietnam and its trading partners has a considerable favourable impact on the country's bilateral trade and FDI inflows.

According to Wong et al. (2020), Malaysia's exports to Singapore have a positive and significant impact in fostering Malaysia's economic advancement. However, the outward foreign direct investment from Malaysia to Singapore has an adverse effect on Malaysia's economic growth. Moreover, the impact of Malaysia's imports from Singapore and the inflow of foreign direct investment from Singapore on Malaysia's economic development is found to be inconsequential. On the other hand, Rose Malefane and Odhiambo (2018) used the ARDL method to demonstrate that trade liberalization has a relatively beneficial impact on South Africa's economic growth. According to Okenna and Adesanya (2020), GDP has a positive relationship with imports and exports but a negative relationship with the exchange rate. They discovered that international trade is essential for the long-term economic development of underdeveloped countries. Nonetheless, specialised trading rules are necessary for developing countries to prosper in global trade. Meanwhile, Shahbaz and Rahman (2012) determines that when nations incorporate capital and transitional products into domestic production, they acquire advanced technologies to boost manufacture, exports, and subsequently economic growth. According to Maswana (2022), a country can readily foster technological transfer and learn from the available technical information through imports to boost domestic productivity growth. Iqbal et al. (2017) have carried out research to examine the effect of US imports on India's economic development. The regression model demonstrates that imports have a significant influence on GDP growth of India.

Official development aid has traditionally been viewed as a key external source to provide funding for investments in fixed capital necessary for sustainable development, as well as a strategy for supporting poor and least developed countries in breaking the vicious circle of poverty. Since its inception in 1961, the Organisation for Economic Co-operation and Development (OECD) development assistance committee has served as an eminent global platform based on the cooperation of major donor countries. One of the earliest studies to emphasize the relevance of external help in satisfying the capital needs of impoverished developing countries was released in 1967 (Chenery, 1967). Overall, the model believes that most impoverished developing countries have insufficient internal savings and that foreign aid, if directed to investment, has the ability to replenish them (Mallik and Girijasankar, 2008). Nowadays most aid assessments are organized in terms of the DAC criteria: relevance, effectiveness, efficiency, impact, and sustainability (Clements, 2020). Furthermore, ODA allocation was based on decision rule's application. Insight from 144 countries reveals nations that are getting a "fair share" of help based on the proportion of their country's population living

in poverty compared to the global poverty rate. This comparison is then made with the amount of aid each nation receives (McGillivray and Clarke, 2018).

As a results of bilateral trade and development aid from Japan, Malaysia successfully transitioned its economy from one that was entirely dependent on agriculture to one that exported industrial goods, with manufactured products making up more than 80% of all exports (Embassy of Japan in Malaysia, 2022). Further with this theory, this study employs data of Malaysia's import from Japan, Malaysia's export to Japan, and Japan's development aid to Malaysia as a variable to measure it empirical impacts towards the goal of LEP.

3. DATA AND METHODOLOGY

The framework that circumscribed all variables for this study has been adapted from Wong et al. (2020). This study occupies yearly data from year 1989 to year 2020 from various sources namely United Nation Statistic Division, World Integrated Trade Solution, and Organisation for Economic Co-operation and Development. Limitation of statistical data availability along period 1982 to 1988 is a major challenge for this study, hence the data start from 1989. Besides that, the Malaysia-Japan inward and outward foreign direct investment has been changed to Malaysia development aid received from Japan, this is because Malaysia's foreign direct investment data published only starts from 2008 (Wong et al., 2020). In addition, the substitute variable is the most related in terms of bilateral relationship, this is because, as argue by Abramova et al., (2022) given that the structure of most economic phenomena is heterogeneous, determining a connection between the factor and the effective evident that is either stable or unstable can result in incorrect inferences. Importantly, improper application of information evaluation methodologies will result in false conclusions even though identical methodology were used.

Malaysia's economic growth which is substituted by the growth of Gross Domestic Products (GDP) was set as dependent variable for this study. Meanwhile, the independent variables are Malaysia exports to Japan (EX), Malaysia imports from Japan (IM), and development aid received from Japan (BA). All data are exercised in the value of US Dollar in million and the data were transformed in natural logarithm form.

To examine the relationship between GDP, EX, IM and BA, generic long run model developed in the following form:

$$LGDP_t = \beta_0 + \beta_1 LEX_t + \beta_2 LIM_t + \beta_3 LBA_t + \varepsilon_t \quad (1)$$

The coefficient for β_1 and β_3 are expected to be positive since increase in export, and development aid will lead to increases in GDP as one of the LEP's economic objectives. Meanwhile, coefficient for β_2 is expected to be negative since increase in import subsequently will decrease GDP.

To construct this study's analysis, the relationships between the variables are assessed in stages. To finalise whether the variables are stationary or not, the unit root test is first carried out to check

for the presence of unit roots (Chan et al., 2019; Azlina et al., 2014). Unit root tests using Augmented Dickey Fuller (ADF) and Phillips Perron (PP) are used in this analysis. The PP test is meant to complement the ADF test to account for serial correlation in unit root testing because the ADF test has rationed the power to reject a unit root.

Secondly, the Autoregressive Distribution Lag model (ARDL) was set up to analyse the impact of long-term and short-term relationship among the variables. Granger (1988) argues that cointegration among variables is only feasible when there is long-run relationship between variables. This study uses ARDL model suggested by Pesaran et al. (2001) to estimate the model with integration of order 0 and order 1, the model is also notable in the sense that it approximates small dataset and provide unswerving outcomes. The bound testing model is written as follow:

$$\begin{aligned} \Delta LGDP_t = & c_1 + \sum_{i=1}^p \pi_{1i} \Delta LGDP_{t-i} + \sum_{i=0}^q \pi_{2i} \Delta LEX_{t-i} \\ & + \sum_{i=0}^r \pi_{3i} \Delta LIM_{t-i} + \sum_{i=0}^s \pi_{4i} \Delta LBA_{t-i} + \phi_1 LGDP_{t-1} \\ & + \phi_2 LEX_{t-1} + \phi_3 LIM_{t-1} + \phi_4 LBA_{t-1} + \varepsilon_t \end{aligned} \quad (2)$$

To examine if there is a cointegration among the variables, all coefficient at level form (ϕ_i) are being restricted such that the null hypothesis is $H_0: \phi_1 = \phi_2 = \phi_3 = \phi_4 = 0$ and alternative hypothesis is $H_a: \phi_1 \neq \phi_2 \neq \phi_3 \neq \phi_4 \neq 0$. The null hypothesis signifies the absence of long-term co-movement or cointegration among the variables being examined. The distribution of the F-test, which is used, departs from the standard distribution. This departure is influenced by three factors: (1) the integration order (I(0) or I(1)) of the ARDL variables, (2) the number of predictors, and (3) whether the ARDL model incorporates an intercept and/or trend. To make a determination about cointegration, two sets of critical values are provided: a minimum threshold (applicable when all predictors are I(0)) and a maximum threshold (applicable when all predictors are I(1)). Narayan and Narayan (2005) critical value more suitable to be imply in this study due to a small sample size of yearly data from 1989 to 2020, instead of Pesaran et al. (2001). A decision over the existence of cointegration between the variables can be made if the calculated F-statistics are higher than the upper bound. But if the F-statistics are between the lower than the upper bounds, cointegration cannot be determined with certainty (Azam et al., 2022). Additionally, if the computed F-statistics are lower than the lower bound critical value, there is no cointegration amid the variables. If there is ample proof to draw the conclusion that a long-term relationship exists, an ARDL (p, q, r, s) is determined. The level form that the ARDL measurements are built on is as follows:

$$\begin{aligned} LGDP_t = & c_2 + \sum_{i=1}^p \lambda_{1i} LGDP_{t-i} + \sum_{i=0}^q \lambda_{2i} LEX_{t-i} \\ & + \sum_{i=0}^r \lambda_{3i} LIM_{t-i} + \sum_{i=0}^s \lambda_{4i} LBA_{t-i} + \varepsilon_t \end{aligned} \quad (3)$$

Furthermore, we able to implement short-run dynamic owing to the Error Correction Model (ECM).

$$\begin{aligned} \Delta LGDP_t = & c_1 + \sum_{i=1}^p \pi_{1i} \Delta LGDP_{t-i} + \sum_{i=0}^q \pi_{2i} \Delta LEX_{t-i} \\ & + \sum_{i=0}^r \pi_{3i} \Delta LIM_{t-i} + \sum_{i=0}^s \pi_{4i} \Delta LBA_{t-i} + ECT_{t-1} + \varepsilon_t \end{aligned} \quad (4)$$

Short-run dynamic from independent variables towards dependent variable are assessed by restrict the coefficient of π_1 with 0.

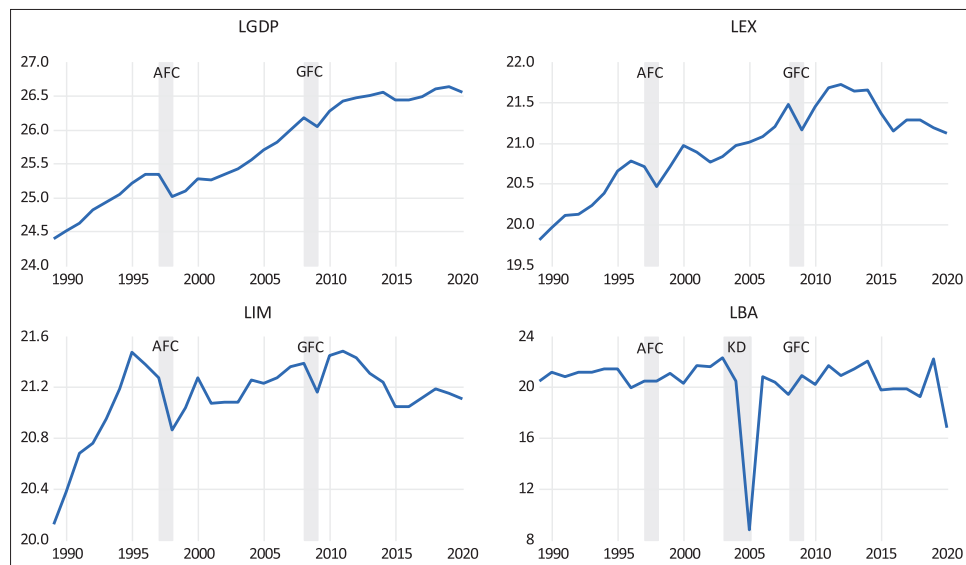
For instance, when examining the potential short-term causality from LIM to LEX, it's necessary to impose a constraint on the coefficient π_2 . This constraint is stated as the null hypothesis, $H_0: \pi_{11} = \pi_{12} = \dots = \pi_{1q} = 0$, wherein the null hypothesis indicates the absence of short-term causality from LIM to LEX. Furthermore, the information concerning the long-term relationship is gathered from the error correction term (ECT). The significance of the ECT coefficient (Ω) signifies the presence of a lasting relationship between the variables, thus supporting the conclusion drawn from cointegration analysis. The value of (Ω) within the equation indicates the speed of adjustment, and it should be negative. In other words, this value quantifies how rapidly the dependent variable responds to deviations in the short run, bringing equilibrium back in the long run.

4. RESULTS AND DISCUSSION

Prior to empirical estimations, this study analyses the trends for each variable used in the estimations as shown in Figure 1. Malaysia's GDP shows a significant increased trend from 1989 to 1997, however there is a decline from 1997 to 1998. This is not surprising as Malaysia was affected by the Asian financial crisis (AFC) during those years. Post AFC Malaysia's GDP continued to increase until 2008 there is a slight decrease in GDP as Malaysia's economy affected by the global financial crisis (GFC). It is also important to highlight that Malaysia export to Japan and Malaysia import from Japan also affected by AFC and GFC.

Besides that, different from GDP, EX shows a fluctuating but upwards trends from 1989 to 2020, Malaysia's export to Japan hit the highest record in 2012 with the USD 2.69 Billion. Product groups that received high demand during that year are, refined petroleum manufactured goods, crude petroleum, optical and scientific apparatus mainly camera markedly invented for submarine use, electrics, and electronics (E&E) product such as hybrid and other electronic integrated circuits, electronic transistor, as well as cellular and wireless telephone sets (Department of Statistic, 2013).

Furthermore, in IM graph, we can see that there is significant increase in Malaysia's import from Japan during 1990s and exceeding the growth of exports to Japan. This is the results of Malaysia avoiding protective trade policies during these periods, the tariff reductions and other liberalization measures had increased Malaysia's import (World Trade Organization, 1997).

Figure 1: Variables trends from 1989 to 2020

Therefore, dummy variable was introduced from 1989 to 1994 to test the shock of Malaysia action in avoiding protective trade policies during these periods. Furthermore, as a constituent of the Association of Southeast Asian Nations (ASEAN) and the Asia Pacific Economic Cooperation (APEC), Malaysia was committed in the ASEAN Free Trade Area Agreement (AFTA) to significantly reduce levies on imports from its AFTA unites (World Trade Organization, 1997).

With regards to the BA graph, it shows that Japan's development aid to Malaysia slightly indifference during AFC as the amount at USD 777 million and USD 753 million in 1997 and 1998 respectively. Meanwhile during the GFC the development aid show a significant increase from USD 258 million to USD 1.15 billion. Nonetheless, it is interesting to discuss the significant drop in development aid from 2004 to 2005 as shown in KD shades area. KD represents one of the Malaysia-Japan bilateral aid projects which is Kelau Dam project. Kelau Dam project received backlash from local people as it was argued that the constructions would seriously impact the Kelau river ecosystem. The Japanese government was aware with the issues and temporarily stop funding the project during that period until the issue was rectified by the Malaysian government. (Furuoka et al., 2004). Therefore, the second dummy variable (Dummy_2) was introduced in 2005 to test the effect of KD. As discussed by (Huda, 2017), Malaysia's action of not intreating for a yen loan in the third quartile of 1990 after the announcement of the Sixth Malaysian Plan has result to the major drop during that period. This scenario arose as a result of the government policy of cutting infrastructure spending for the private sector in order to limit public expenses in order to sustain the bloated budget for a five-year period from 1993 to 1997. From 1995 through 2000, Japan gave yen loans to Malaysia as bilateral grants, or non-repayable aid. During the same era, Malaysia's restitution of loans credit to Japan outweighed the amount of Japanese aid received. (Furuoka et al., 2004).

First, unit root analysis was performed. Table 1 shows Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) test results, the tests

indicate that IM and BA stationary at level, meanwhile GDP and EX stationary at first difference. The null hypothesis of unit root is being rejected at 5% or 1% significance level for these variables. Therefore, all the four variables have mixed stationarity, $I(0)$ and $I(1)$ for both test. The second dummy variable was introduced in 2005 to assess Malaysia's repayment of debts to Japan to the test, which exceeded the amount of financial support received from Japan from 2001 to 2005.

We move on to the next step of empirical estimation which is bound testing, since there is certainly no $I(2)$ variable in the unit root test. Table 2 reported results for ARDL bound test cointegration which shows that the null hypothesis of no cointegration can be rejected at 5% significant level. Hence, the bound test results prove the existence of long-run cointegration relationship between the variables under study. Next, this study proceeds with the short run and long run estimations by exercising the ARDL method.

Empirical result from Table 3 demonstrates that export has a positive and significant relationship with gross domestic product in the long run. The results shows that 1% increase in export will increase 1.8% in GDP on average. The increase in exports due to every year demands of goods from Japan especially on Liquefied Natural Gas (LNG) resources. Japan highly dependent on Malaysia's LNG and other natural resources due to the Japan's policy after Tsunami hits back in 2011 to find alternative energy resources rather that depends only on nuclear technology capacity (Huda, 2017).

However, Malaysia's import from Japan was positive but insignificant towards GDP. This indicates that, aligned with the increase in GDP, Malaysia's have more purchasing power in importing goods and supplies from Japan, however imports from Japan's does not constitute to increase in Malaysia's GDP. Moreover, development aid received from Japan depicts as positive and insignificant long run relationship towards the Malaysia's GDP. Despite the positive results towards GDP, the development aid received from Japan since 1957-2010 still managed to enhance

Figure 2: Plot of CUSUM test CUSUM squared test

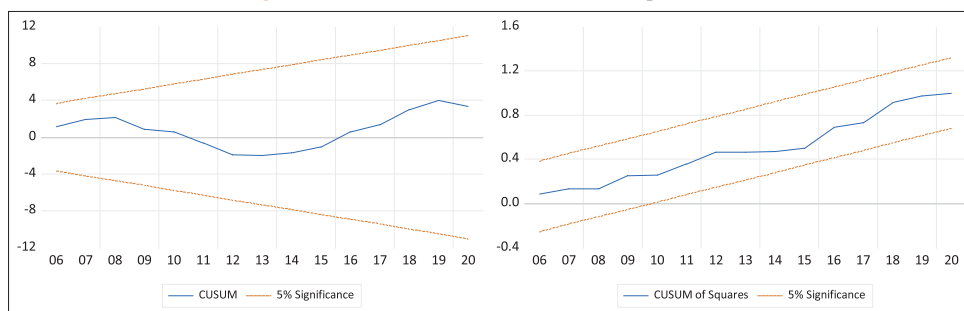


Table 1: Unit root results

Variable	Augmented Dickey Fuller (ADF)		Phillips Perron (PP)	
	Constant without trend	Constant with trend	Constant without trend	Constant with trend
LGDP	-1.6471	-1.6949	-1.6141	-1.8566
LEX	-2.3266	-1.3811	-2.4550	-1.1901
LIM	-4.1312***	-3.3401*	-5.5637***	-4.1507**
LBA	-5.3531***	-5.3729***	-5.3525***	-5.3647***
First Difference				
LGDP	-4.5648***	-4.6901***	-4.5723***	-4.6462***
LEX	-4.9750***	-5.4189**	-4.9503***	-8.7874***
LIM	-	-	-	-
LBA	-	-	-	-

***, **, * denotes significant at 1%, 5%, and 10% significance level, respectively

Table 2: Bound test results

ARDL (1,0,1,0)	Significant level	Lower bound	Upper bound
F-statistic=6.148**	1%	5.333	7.063
k=3	5%	3.710	5.018
n=31	10%	3.008	4.150

***, **, * denotes significant at 1%, 5%, and 10% significance level, respectively. k is the number of independent variable while n is the number of observations. The lower and upper bound F-statistics is based on Narayan and Narayan (2005) case III

Table 3: Long-run ARDL results

Dependent variables: ΔLGD		
Variables	Coefficient	P-value
LEX	1.8092	0.0004
LIM	2.0538	0.2363
LBA	0.0487	0.7263

***, **, * denotes significant at 1%, 5%, and 10% significance level, respectively. Number in parentheses is P value

Table 4: Error correction model results

Dependent variables: ΔLGD		
Variables	Coefficient	P-value
Constant	-4.494***	0.000
ΔLIM	0.609 ***	0.000
Dummy_1	0.1303***	0.016
Dummy_2	0.1172***	0.008
ECT _{t-1}	-0.0799***	0.000
Diagnostic		
R-squared	0.8411	
LM	$\chi^2 [2]=0.3143$	0.8546
Reset	$\chi^2 [1]=0.0175$	0.8957
JB	$\chi^2 [2]=0.8533$	0.6528
ARCH	$\chi^2 [2]=0.0083$	0.9959

***, **, * denotes significant at 1%, 5%, and 10% significance level, respectively. LM signifies the Lagrange Multiplier test used to detect autocorrelation. RESET refers to the Ramsey RESET test employed to assess functional form. JB represents the Jarque-Bera test utilized to examine normality. ARCH stands for Autoregressive Conditional Heteroskedasticity test for heteroskedasticity. Dummy 1 = (1 for 1989 to 1994; 0 otherwise). Dummy 2: (1 for 2005; 0 otherwise)

nation socioeconomic growth by the successful completion of all long-term projects, such as electric and gas, transportation, and communication projects, which have had a significant impact on various collaborative efforts and the mushrooming of Japanese firms in Malaysia (Huda, 2017).

Table 4 below shows error correction model and the significant of the ECT_{t-1} support the continuation of long-run relationship between the variables as shown by the bound testing earlier. Although Malaysia's import from Japan is not significant in the long-run, it is evident that there is Granger causality from the Import towards Malaysia's economic progress. The significant of Dummy_1 and Dummy_2 proves the impact of the shock of Malaysia action in avoiding protective trade policies and the

cessation of Kelau Dam (KD) funding, as discussed earlier. The insertion of dummy variables also facilitates to address the heteroscedasticity problem that we encountered when we did not include the model with dummy variables. The adjusted R-squared of 0.8411 shows that the 84% GDP can be explained by the independent variable. The outcomes indicate that the error correction model is correctly identified, as the P-values exceed 0.10. This means that there are no issues observed with serial correlation, functional form, or heteroscedasticity in the model.

Figure 2 depicts the error correction model's reliability. Because the blue line be positioned between the bounds at the 5% significant

level, both plots of CUSUM and CUSUM-SQ demonstrate that the model is dynamically unwavering over the study period.

5. CONCLUSION

In conclusion, this study investigates the impact of LEP implementation towards Malaysia economic growth. In general, it is a common understanding that LEP beneficial towards socioeconomic growths in Malaysia. This is because, LEP has been employed to accomplish various things over the years, even beyond its original conception of abilities, work ethics, attitudes, and loyalties. It now encompasses a variety of fields, including business, education, and employment-related fields.

In this analysis, Autoregressive Distribution Lag (ARDL) method were used to examine the long run and short run relationship between Malaysia's export to Japan (EX), Malaysia's import from Japan (IM), and development aid received from Japan (BA) towards Malaysia's GDP has been examined with the annual data covering 1989 to 2020. The study found that, Malaysia's import from Japan has positives impact on Malaysia's GDP in the short run. Malaysia imports from Japan where it needs 14 months to adjust into the long run relationship after experiencing short run shock. Nevertheless, findings illustrate that, Malaysia import from Japan is positive but not significant towards GDP growth and Japan development aid to Malaysia positive and does not show significant affinity with Malaysia's GDP.

Hence, the Malaysia's Ministry of International Trade and Industry (MITI) may strengthen the provision of private industry and service sector needs to engage in trading operations with Japan to promote more investment in Malaysia. Because this study assessed the relationship and degree of impact of international trade on economic growth, the study's findings constructive for MITI to identify crucial indicators that need to be prioritised or monitored in the country's public trade sector. Albeit this paper did not investigate in depth the influence of trading on domestic firms or trends relating specifically to firm output, the findings of the study could still be used by private industry in evaluating the economic trends of Malaysia export to Japan and Malaysia import from Japan in relation to their business decree, particularly for firms that are engaged in a foreign market.

Malaysia and Japan have had great bilateral relations for decades. The two countries have strong diplomatic ties, broad cultural exchange, and significant economic ties. Japan is a key source of foreign direct investment in Malaysia and provides economic aid through innumerable critical projects. However, the study's findings do not represent the desired outcome. As a result, upcoming studies should examine development aid data dating back to 1957, the first year it was adopted. This would imply that the outcome has a favourable and considerable impact on Malaysia's economic growth over time.

Finally, Malaysia's 1982 reorientation of its foreign policy towards East Asia reflected shifting external-structural subtleties that were moderated by inland political factors and Mahathir's ascendancy, resulting in Malaysia and Japan have the benefit from each other

over an unremitting years of a bilateral relationship that was mutually beneficial and primarily based on economic issues.

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