# The Effect of Foreign Direct Investment on Wage in Malaysian Manufacturing Sector: New Evidence Using ARDL

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#### ABSTRACT

Foreign direct investment (FDI) is essential to each country because it can increase economic growth. However, political and economic instability can affect the FDI inflow into a country. This study investigated the effect of FDI on wages in the Malaysian manufacturing sector for the period 1985-2018 by using the Autoregressive Distributed Lag (ARDL) method. The unit root test result showed that all the variables were stationary at first obtained The difference. results showed significant positive relationships between FDI and wage in the long and short run. Besides, education and skilled labour also showed a significant and positive relationship with wages in the manufacturing sector in the short run. Therefore, this study suggests that the policy makers have to stimulate a new policy to attract more investors to invest in Malavsia, especially in the manufacturing sector, as it has a positive effect on wages and increases employment in the host country. Other than that, the FDI inflow can also bring technology and human capital spillover.

# **Keywords**: Education, Foreign Direct Investment, Manufacturing Sector, Wage

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# INTRODUCTION

Salary can be defined as the price or reward given to a worker because of his workforce to produce something or profitable services. In other words, salary is the price of energy, while energy is part of the main element of expenditure for a company. For most jobs, rapid changes in the labour market have led to a change in relative wages that indirectly affected the balance of demand and supply of labour. Wages, allowances, bonuses, overtime work and other ancillary benefits are some types of income earned by a household, and they refer to labour income. According to the Department of Statistics Malaysia (2017), the average monthly salary and wages of workers in the Malaysian manufacturing sector increased from RM2,657 (2016) to RM2,800 (2017) or 7.79 per cent to 8.10 per cent respectively.

The manufacturing sector is one of the second largest sectors contributing to the country's total exports and revenues after the services sector. The manufacturing sector is very important as it involves the production of goods and services that drive the economy. Besides that, the manufacturing sector also recorded RM159.1 billion of approved investments for the period of 2011–2014. From the said figure, 42.8 per cent were domestic direct investments (DDI), and 57.2 per cent were foreign direct investments (FDI). These investments had generated 348,495 job opportunities, and from these new job openings, 75 per cent are in the management, technical and supervision, and skilled worker categories.

Besides, in 2015, workers in this sector were estimated to be 2.5 million, i.e., 18 per cent of total employment. Consistent with the government's objectives of attracting new FDIs and creating job opportunities during the 1970s and 1980s, FDI inflows were concentrated more on labour-intensive manufacturing. Most jobs created by those FDIs were generated by low value-added industries requiring low-skilled workers, resulting in high dependency on foreign labour. This situation caused the utilisation of automation and demand for skilled workers to be low, such as the lower composition of skilled workers from 26.3 per cent (2011) to 24.7 per cent (2013) based on the Eleventh Malaysia Plan (11MP). This is because the FDI inflows, which are labour intensive, require more labour and indirectly increase wages. According to the Department of Statistics Malaysia (2017), total salaries and wages of workers in the manufacturing sector also

increased by 9.6 per cent (RM311.3 million) to RM3,541.7 million with average salaries and wages per employee of RM3,362 in October 2017.

In addition, FDI can be explained as the transfer of management resources across borders (Alvstam, 1993). FDI is usually measured through international capital transfers, although it also involves transferring human resources and financial capital. Most countries are highly dependent upon FDI for their economic growth. According to Norain and Nooriah (2012), capital investment is usually made by multinational companies or transnational companies involving FDI. In Malaysia, FDI has indirectly brought skilled human capital, physical capital, transfer of new technology, exports, research and development (R&D), and innovation and skill to Malaysian labour. FDI is also important in providing job opportunities to the locals and, subsequently, improving their living standards. Besides that, MNCs also improve the locals' standard of living through structured wages. The host country will provide various facilities and benefits for the foreign investors, such as MNCs if they invest in the country by providing cost benefits, facilities, tax incentives and monopoly power. These indirectly increase the host country's economic growth. The reasons for MNCs investing in a country are to search for natural resources, market, efficiency and strategic assets consistent with the OLI framework theory.

In 2018, the ranking of FDI income in the manufacturing sector was the highest at 47.9 per cent compared to the services sector at 40.7 per cent, mining and quarrying (8.5 per cent), and others (2.9 per cent). In the Tenth Malaysia Plan (10MP), the manufacturing sector showed an impressive performance in view that most main subsectors recorded a positive growth through Gross National Product (GDP) and exports. This sector is the largest contributor to the nation's total exports and the second largest GDP. In 2015, the manufacturing sector recorded a positive growth of 4.8 per cent during the 10MP and contributed 23 per cent or RM243.9 billion. The FDI inflows into Malaysia also caused the increase in the number of factories, which indirectly created greater job opportunities for the locals. This is because economic growth that is based on manufacturing requires a great amount of workforce.

Many studies have discovered the impact of FDI inflows on an economy for the recipient country. One of the issues often associated with

FDI inflows is how it impacts employee income distribution in developing countries as it is very active in attracting multinational companies to invest in their country. Therefore, studies on FDI inclusion and wage levels are very interesting to discuss and have become a common phenomenon in almost every recipient country that wages earned are higher than wages paid by local companies. Usually, foreign investors will pay higher wages to the host country as they enjoy bigger business operations such as bigger capital, more sophisticated technology, and more skilled workers. The reason for the higher wage is to increase worker productivity, competition from local businesses and avoid high staff turnover. However, low wages can also attract FDI inflows into a country. The low wage can help to reduce costs that are borne by investors. This is one of the factors why foreign investors enter a country.

According to Lee and Wie (2015), Indonesia managed to attract many multinational companies due to its lower labour wage. Masron et al. (2012) also opined that FDI concentrates more on countries that offer cheaper labour. Besides that, high wages is seen as decreasing investors' profits and indirectly reducing the attractiveness of FDI into that country. In addition, labour cost may also influence the quality of labour. Furthermore, education is also essential to an employee because it can shed light on the skills and knowledge of the workers. Employees will be more efficient and able to produce better quality products and services if they have high skills and knowledge. Highly skilled workers will produce more quality products and services and thus increase productivity. It is noted that with the increase in the level of educational attainment, will indirectly increase wages. Based on the Department of Statistics Malaysia (2017), education can influence wages received by employees. The tertiary-educated workers received salaries and monthly wages double the secondary-educated employees in 2016 and 2017. The average salary and monthly wage of tertiary educated workers was RM4,320 compared to secondary education at RM2,055. This shows that education is very important in influencing the wages received by employees.

Based on the aforementioned discussion, the future looks promising. It is anticipated that this study will yield new results. Besides, policies to encourage more FDI is required if the wages in recipient economies improved in response to FDI inflow. This study also improves previous studies regarding the effect of FDI, education, and skilled labour on wages in the manufacturing sector, whereby previous researchers did not explore the topic much. There are five sections to be discussed in this article. The literature review will be discussed in the second section, followed by methodology. Next, it discusses the result and followed by the conclusion.

# LITERATURE REVIEW

FDI involves the inflow of real investments such as capital, technology, and expertise, which is typically done by multinational corporations (MNCs). The purpose of MNCs investing in a country is to find natural resources, find markets, find efficiencies, and find strategic assets that are in line with the John Dunning's OLI (Ownership, Location, Internalization) Framework Theory. Other goals or purposes of foreign direct investment include conquering international markets, creating secure connections with suppliers, and overcoming trade restrictions such as tariffs. Human capital refers to the economic value of labour talents and traits that influence productivity, such as education. According to the Human Capital Theory (Becker, 1964), workers with a greater level of education would earn higher wages, notwithstanding the fact that they are more productive than their less educated counterparts.

Most researchers opined those high costs would cause foreign investors to lose their interests, which indirectly creates a negative relationship between relative wage rate and FDI inflow (Woodward & Rolfe, 1993). A study done by O'Sullivan (1993) showed that a low wage rate is not significant, but many MNCs emphasised skilled workers even though the expected wage rate is high. This indirectly causes many companies to shift to manufacturing activities and emphasise procuring skilled workers rather than total labour cost. Besides that, it is not a norm for developing countries to possess the ability to boost economic growth due to several hurdles such as the lack of capital, technology, expertise and knowledge. A study done by Ishak & Rahmah (2002) found that foreign investors are more inclined to invest in countries with cheaper labour costs. This is because investors emphasised more on labour cost and productivity before investing in a country.

Competition and external technology from MNCs indirectly affect the wage spillover in a country. Foreign wage spillover from different channels may increase or decrease the potential wage of workers in local firms, whereby it is an effect of net spillover (Chen et al., 2011)Macao and Taiwan (HMT. Foreign firms are also found to pay better wages to workers with higher education and of better quality than the wages paid by local firms. Besides that, the participation of FDI is also another factor that contributes to wage imbalance. The effect of FDI on wage imbalance occurred between skilled workers and unskilled workers, whereby skilled workers have higher education that causes them to earn a better wage (Figini & Gorg, 2006)"mendeley" : { "formattedCitation" : "(Figini, & Gorg 2006. Chen et al. (2011) conducted a study on FDI and wage imbalance in China in which FDI inflows caused a negative spillover effect towards wages in local companies.

According to Zulfiu and Adnett (2018), rising inward FDI as a percentage of GDP increased pay disparity in transition economies, while the total effect was minor. It was also backed up a study by Khan and Nawaz (2019), which revealed that when FDI is combined with the Gini-index, it has a considerable impact on income inequality. FDI and wage inequality have a nonlinear connection (Zhang et al., 2021). According to a study by Saucedo et al. (2020), a rise in FDI inflows into the manufacturing sector has a favourable effect on both low- and high-skilled employment. In the case of wages, it was discovered that FDI inflows by the manufacturing sector enhanced low-skilled wages somewhat while having no statistical effect on high-skilled wages.

Nonetheless, the study done by Tomohara and Takii (2011) opined that the wage gap occurred due to the difference in wages paid by multinational companies and local firms to workers. Wage spillover also happened as a result of skilled and unskilled workers. The entry of foreign investments has a significant impact on wage imbalance. The inflow of FDI also contributes to the increase in wage imbalance (Taylor & Driffield, 2005). In Indonesia, it was found that multinational companies were paid higher wages than local companies. It shows the assumption of wage imbalance due to the difference in the industry and the firm's features (Nguyen, 2015). The study done by Lipsey and Sjoholm (2004) also found that the FDI inflows into Indonesian manufacturing sector may increase workers' wages compared to the wages paid by local firms. Foreign companies paid higher wages to workers in order to reduce labour turnover, training costs and additional costs of the labour procurement process. MNCs pay better wages than the local firms because MNCs utilise better technology, and they also provide training to their workers; on the other hand, local firms attract quality workers to minimise their training costs (Eicher & Kalaitzidakis, 1997).

Goldberg and Pavnick (2007), in their study, found that there can be a positive or negative spillover effect on wage level. A positive wage spillover effect is caused by local investors who try to pursue foreign businesses. In contrast, the negative spillover effect occurs when there is a big wage gap among domestic and foreign businesses. A study conducted by Zhang and Yuk (1998) found that the important determinants of FDI inflow into a location are cheap labour, land, stable political environment, government incentives, good infrastructure and geographical factors. In their study, Liu et al. (2014) found that low wages may attract MNC investors into low-technology industries.

Besides, Gabriela (2015) found that if employers face stiff competition and require cost savings, they will only require low-skilled workers with low wages. However, if the competition requires an increase in productivity, they will need skilled workers with high wages. Furthermore, Fu and Wu (2013) discovered that exporters paid higher wages than non-exporters in China. However, a study done by Bao et al. (2011), which analysed 456 firms in China's manufacturing industry for the period from 1998 to 2001, showed otherwise. The study found that firms' decisions to export did not affect the increase in the workers' wages during the period under study. In contrast, Lee and Wie (2015) showed that technological changes might contribute toward wage imbalance in Indonesia based on a census done from 1990 to 2009. Their findings also showed that high demand for skilled workers would cause technological transfer through FDI. This indirectly increases wage imbalance due to the higher demand for skilled workers. Foreign direct investment can also positively impact productivity growth through technology and management skills (Lee, 2011).

Furthermore, a recent study by Economou et al. (2017) identified that in 24 OECD countries and 22 developing countries over the period 1980– 2012, labour costs were one of the most important determinants of FDI.

The study by Gazaniol & Catherine (2015); Girma et al. (2016) found that FDI positively impacts wages. Besides, Saglam and Boke (2017) also found that the sectoral composition of FDI and the decomposition of labour costs played a significant role in investigating the dynamic association between labour costs and FDI. The study by Nguyen et al. (2019) using the GMM estimator found that FDI firms on average pay 2.25 times that of domestic firms; they put downward pressure on domestic firms' wages in Vietnam.

Other than that, there are many findings and evidence of empirical studies supporting the human capital theory by demonstrating that there is a positive relationship between earnings with education and training achievements (Schultz, 1989; Felli & Harris, 1996; Flabbi & Ichino, 2001; Psacharopoulos & Patrino, 2004). Besides that, Rahmah (2001) mentions that human capital factors, especially years of schooling, play an important role in determining labour income and labour income differentials in the manufacturing sector. Individuals with high levels of education tend to have high household incomes because educational standards directly impact their income and the tendency to get a good and secure job (Hanushek & Kimko, 2000). Individuals with low education levels tend to deal with economic problems (Imazeki & Reschovsky, 2003), and weak education will encourage individuals to live in poverty (Preston & Elo, 1996).

According to Becker (1964), education has a positive relationship with income or wages. Investment in education can increase productivity and increase revenue (Hawley, 2004; Garcia & Montuenga, 2005; Zulkifli et al., 2010; Rahmah et al., 2011). In addition, more educated and experienced workers gain higher profits (Becker, 1964; Mincer, 1974). According to Alsulami (2018), education qualifications and the sector (public or private) had a significant impact on Saudi wages for both men and women. The findings show that education has a considerable causal effect on salaries (Akay et al., 2019). This finding was in line with Ziegler's study (2021), which found that employment requiring a wide range of skills paid significantly more.

Contrary with study by Kenneth (2012) found that experience does not affect wage start-ups for low-grade employees, primary and secondary schools and vocational versus higher-level employees with a bachelor's degree and master's degree. However, Dustmann and Meghir (2005) found that work experience showed positive returns among skilled workers. In comparison, the return of non-skilled worker experience was small and approached zero. Rahmah and Zulridah (2005) found that the level of education had a significant and positive relationship with earnings. Employees with 13 and 16 years of schooling have a monthly medium turnover of 24.5 per cent and 61.8 per cent, respectively, higher than those with less than nine years of schooling. This was also supported by the findings of Moro-Egido and Budria (2008) on the improvement in educational attainment, which led to wider wage differentials.

Overall, studies on the effects of FDI and education on wages in the manufacturing sector have produced incompatible results. Most previous studies focussed on the relationship between FDI and wage. In addition, they also analysed wage imbalance paid amongst MNCs and domestic companies. Therefore, this study attempted to contribute to the existing literature in the different methods.

# METHODOLOGY

This study used the ARDL approach to examine the effect of Foreign Direct Investment on Wage in the Malaysia Manufacturing Sector. The data used in this study were foreign direct investment (FDI), education, and skilled labour collected and analysed from 1985–2018. The data on foreign direct investment (FDI) were based on FDI inflows into the manufacturing sector. The data were obtained in Ringgit Malaysia (RM million). In addition, the variable worker wage was measured using the data on salaries and wages paid by the manufacturing sector. The data were also obtained in Ringgit Malaysia (RM million). The data for labour skill refer to skilled labour. The variables' data were obtained from the Department of Statistics Malaysia. The variable of mean years of schooling (YOS) was a proxy to education. The YOS data were obtained from the Human Development Report.

In this study, the dependent variable was the wage of manufacturing sector workers (W), and the independent variable is Foreign Direct Investment (FDI), meaning years of schooling (YOS) and high skilled labour (HS). The model was constructed based on Lipsey and Sjoholm (2004). The model specifications are as follows:

$$W_{t} = \beta 0 + \beta 1 FDI_{t} + \beta 2 YOS_{t} + \beta 3 HS_{t} + \varepsilon_{t}$$
(1)

There are several variables in equation (1) that will then be logged to avoid false estimates. Thus, equation (2) will be formed as follows:

$$\ln W_{t} = \beta_{0} + \beta_{1} \ln FDI_{t} + \beta_{2} YOS_{t} + \beta_{3} HS_{t} + \varepsilon_{t}$$
(2)

lnW is wage in the Malaysian manufacturing sector, lnFDI is foreign direct investment, YOS is the mean year of schooling, and HS is the skilled labour. Next, the symbol  $\varepsilon$  is an error, and t refers to the year. This study also tested data stagnation using a unit root test based on Augmented Dickey-Fuller (ADF).

$$\Delta Y_t = \beta_1 + \delta Y_{t-1} + \alpha \sum_{t=1}^p \Delta Y_{t-1} + U_t$$
(3)

If the result indicates that it is insignificant ( $\delta = 0$ ), the null hypothesis is accepted. Therefore, it can be concluded that the data has a unit source or does not move. However, if the results showed that it was significant ( $\delta \neq 0$ ), this indicates that the alternative hypothesis is accepted. Therefore, it can be concluded that the data has no unit source or does not move. This approach shows the long-run response of the dependent variable to the change in the independent variable.

Moreover, this approach can still be used even with a small sample size compared to the Johansen cointegration approach, requiring a large sample size. In addition, the advantages of the ARDL approach can also produce long-term shaped estimates. Some combinations of tests performed in the ARDL test included bound test, cointegration test, error correction model (ECM), diagnostic test, cumulative residual recursive sum (CUSUM) and cumulative square residual sum (CUSUMSQ). Equation (4) shows a model for the impact of FDI, education and labour skills to wage in the manufacturing sector in the long run and the short run.

$$\Delta ln W_{t} = \beta_{0} + \omega_{i} ln W_{t,i} + \beta_{1}^{'} ln FDI_{t} + \beta_{2}^{'} YOS_{t} + \beta_{2}^{'} HS_{t} + \sum_{j=1}^{p-l} \lambda_{j} \Delta ln W_{t,j} + \sum_{j=0}^{q-l} \delta_{1,ij}^{'} \Delta ln FDI_{t,j} + \sum_{j=0}^{q-l} \delta_{2,ij}^{'} \Delta YOS_{t,j} + \sum_{j=0}^{q-l} \delta_{3,ij}^{'} \Delta HS_{t,j} + \varepsilon_{j}$$

$$(4)$$

Several diagnostic tests were performed, such as the Breusch-Godfrey serial correlation test, the Ramsey stability test, the Jarque-Bera test, and the heteroscedasticity test. If the diagnostic results showed insignificance, then it indicated that this model was the best. Next, the CUSUM and CUSUMSQ tests were performed. This test was used to confirm the stability of the model for equation (4). If the CUSUM and CUSUMSQ lines were within the 5 per cent critical line, this indicated that the model was stable.

# **RESULTS AND DISCUSSION**

#### Unit Root Stationarity Test

Based on the analysis performed in Table 1, the unit root test results for the ADF showed that all variables such as wage, FDI, years of schooling and skilled labour were stationary at first differentiation I (1) for intercept and intercept and trend, i.e., significant at the 5 per cent significance level. This indirectly allowed false regression estimates to be avoided because all variables were stationary at the first differentiation. The time-series data used in this study were not stationary on level differentiation I (0) but stationary at the first differentiation. This indicated that there was a long-run relationship between the time series data.

Variable	Tre	nd	Trend with	Trend with Intercept	
_	l(0)	l(1)	l(0)	l(1)	
InW	-3.22**	-3.64**	-1.29	-4.71**	
	(0.03)	(0.01)	(0.87)	(0.00)	
InFDI	-3.68**	-4.82**	-3.90**	-4.80**	
	(0.01)	(0.00)	(0.02)	(0.00)	
YOS	-1.44	-4.09**	-3.77**	-4.09**	
	(0.55)	(0.00)	(0.03)	(0.02)	
HS	-2.31	-5.41**	-3.52**	-5.68**	
	(0.18)	(0.00)	(0.05)	(0.00)	

Table 1: Unit Root Test

Note: \*\* denotes significance level at 5%

#### **Cointegration Test**

ARDL boundary testing was performed before performing ARDL estimation. This aimed to determine whether there was a cointegration relationship between the dependent and independent variables. Table 2 shows the boundary test results. The results of the cointegration analysis showed that there was a cointegration relationship between wages and the independent variables in the long run. This can be evidenced by the F-statistic value of 37.36, which was greater than the lower and upper boundary of the critical value. Thus, with this, the null hypothesis was rejected at the 1 per cent significance level. This analysis can be continued with regression analysis using the ARDL model when a long-run relationship existed.

Table 2: Bound Test				
F-statistic				
37.36**				
Critical Value				
Significant Level	Lower Bound	Upper Bound		
10%	2.52	3.56		
5%	3.06	4.22		
1%	4.28	5.84		

# **ARDL Model Estimation**

The ARDL long-term estimation test is a model for studying the impact of FDI on wages in the manufacturing sector. The results of the ARDL model in the long and short term is shown in Table 3 and Table 4. The results of the study in the estimation model use the ARDL (4,4,4,4).

Table 5. ANDE Long-Null Estimation Result				
Variables	Coefficient	Standard Error	Probability	
InFDI	0.796**	0.302	0.046	
YOS	0.598**	0.081	0.001	
HS	-7.449	6.993	0.335	
С	0.964	0.5810	0.554	

## Table 3: ARDL Long-Run Estimation Result

Note: \*\* denote significant level at 5 per cent

Based on Table 3, foreign direct investment (lnFDI) showed a significant and positive relationship to wage in the Malaysian manufacturing sector in the long run. This can be demonstrated when a 1 per cent increase in FDI increased the wage by 0.79 per cent. This is because the inflow of FDI can lead to knowledge spillover as well as technology spillover. This can increase the wages of workers in the manufacturing sector. The results of this study are consistent with the findings of the study by Gazaniol & Catherine (2015), Girma et al. (2016) and Saucedo et al. (2020). Besides, years of schooling also showed a significant and positive relationship to wages in the manufacturing sector. This indicated that a rise of one year of schooling will increase the wage by 0.59 per cent. When more workers have a higher mean year of schooling, it can indirectly contribute to ideas, innovation, or even lead to creating Technology in a country. It also can raise their wage. The results of this study are consistent with the findings of the study by Rahmah et al. (2011), Alsulami (2018) and Akay et al. (2019).

Table 4: ARDL Short-Run Estimation Result				
Variables	Coefficient	Standard Error	Probability	
InFDI	0.2598**	0.0736	0.0168	
InYOS	0.2279*	0.1010	0.0738	
HS	0.1973*	0.0958	0.0948	
С	-2.0360	2.4788	0.4488	
ECT	-0.0994**	0.0087	0.0001	

Note: \* and \*\* denote significant level at 10 per cent and 5 per cent respectively

Table 4 also shows that the value of ECT in the ARDL regression for Malaysia was negative and significant, which is -0.0994. The ECT value reflects the speed of adjustment for the model, and a negative value means that the variables in the model will accumulate in the long run. For example, more than 9.94 per cent of adjustments were completed in less than a year for Malaysia. In the short term, FDI variables, years of schooling, and skilled labour showed a significant and positive relationship to wages in the Malaysian manufacturing sector. This can be demonstrated when a 1 per cent increase in FDI increased wages by 0.26 per cent. Next, when there is a one year of schooling increase, it will boost wages by 0.23 per cent. In addition, one skilled labour increases wages by 19.73 per cent in the short run. It can be concluded that FDI inflow, education, and labour skills are very important for a country in enhancing wages in the Malaysian manufacturing sector. This finding is also consistent with study by Ziegler's (2021).

#### **Diagnostic Tests**

Table 5 shows the diagnostic tests results. The tests performed were as Jarque-Bera normal test, Breusch-Godfrey Serial Correlation test, Breusch-Pagan test for Heteroskedasticity, and Ramsey RESET stability test to test the data obtained to avoid any problems encountered. Based on Table 5, the Jarque-Bera normality test, the Breusch-Godfrey serial correlation, the Heteroskedasticity test, and the Ramsey RESET stability test showed insignificant values. Since the p-value of each test exceeded 10 per cent of the significance level, the model did not experience any economic problems.

Table 5: Diagnostic Test Result			
Statistic Test	F-Statistic		
Jarque-Bera Normality Test	0.9250 (0.6297)		
Breusch-Godfrey Serial Correlation	1.7788 (0.5049)		
Heteroscedasticity test	0.8845 (0.6284)		
Ramsey RESET Stability test	0.2234 (0.6611)		

## **Stability Test**

In addition to the four diagnostic tests, the stability of the model is guaranteed through the Cumulative Total Cumulative Waste (CUSUM) and the Cumulative Total Cumulative Waste Fracture (CUSUMSQ) (Figure 1). The state of stability is only reached when both the CUSUM and CUSUMSQ (blue) lines are in the 5 per cent critical level, represented by two dotted red lines. The model in this study was in a stable state. With diagnostic validation and stability testing, it can be concluded that the economic model introduced in this study can produce the best results from its main analysis.

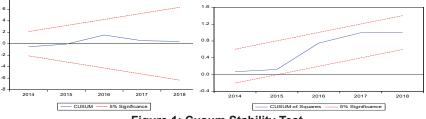


Figure 1: Cusum Stability Test

# CONCLUSION

In conclusion, this study found a long-run relationship between FDI and the years of schooling with the wages of workers in the manufacturing sector in Malaysia. The study also showed that all variables showed a positive and significant relationship to the wages of workers in the manufacturing sector in the short term. The results of this study are also in line with the findings of previous studies by Alsulami (2018); Akay et al. (2019); and Ziegler's (2021) that FDI, education and labour skills can affect the wages of workers in the manufacturing sector.

Therefore, the influx of foreign investors, education and quality labour skills are very important in increasing the productivity and wages of workers, especially in the manufacturing sector in Malaysia. The government should offer more incentives and tax reductions to attract investors to Malaysia, especially in the manufacturing sector. This will create employment opportunities for local workers and increase the country's economic growth and development. However, its overall beneficial effects on labour markets in these country suggest that rather than restricting FDI, governments should target increasing the supply of skilled labour (Saucedo et al., 2020).

In addition, the government also needs to increase spending on education and training to help the underprivileged obtain higher education. In addition, the government should also provide more scholarships to students who want to continue their studies to a higher level; and the employers' role in providing training to employees to improve existing skills further. In addition, employers need to provide more training to enhance employees' skills in the manufacturing sector. This can indirectly lead to an increase in workers' wages. Increased investment in public education and improved human capital should be the emphasis of policy, which will not only lower income inequality but also attract more FDI inflows (Le et al., 2021).

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