



Estimating the foreign workers' effect of minimum wage in Malaysian manufacturing sector

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Abstract

The minimum wage policy in Malaysia was implemented in 2013 under the Minimum Wage Order 2012. The objective of the policy includes reducing the number of low-skilled foreign workers. Most of the employers have been highly dependent on low-skilled foreign workers since the 1990's due to the cheap labor that can be provided by them. The high dependency towards low-skilled foreigners has caused less productivity and high unemployment to locals. Hence, the minimum wage policy was implemented to address these issues. This paper sheds more light on the concept and rationale of minimum wage application in the case of manufacturing sector in Malaysia. The justifications for the effectiveness of the minimum wage implementation in reducing low-skilled foreign workers and increasing local workers in low-skilled jobs by previous studies were thoroughly reviewed. Additionally, the study also used the panel data of foreign workers in the manufacturing sector between 2008 and 2017 to partially explain the potency of the minimum wage in determining the impact on foreign workers. This will help many to understand the effectiveness of minimum wage in reducing the number of low-skilled foreign workers in the manufacturing sector in Malaysia.

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Introduction

The transformation of economic structure from agricultural to manufacturing service based in the early 1990s has shaped Malaysia into a country relying on foreign workers. The high inflow of foreign workers to the Malaysian labor market is further influenced by the implementation of World Trade Organization (WTO) rules on trade. The WTO rules on trade allow the countries to hire more foreign workers in order to

increase trade and generate foreign direct investment. Currently, most of the foreign workers in Malaysia come from the neighboring Asian countries particularly Indonesia, Bangladesh and Thailand. Table 1 presents the number of foreign workers in Malaysia by country of origin.

Table 1 Number of foreign workers in Malaysia by country of origin

Country of Origin	Year		
	1999	2008	2016
Indonesia	269,194	1,085,658	754,487
Bangladesh	110,788	316,401	252,365
Thailand	2,130	21,065	12,374
Philippines	7,299	26,713	58,366
Pakistan	2,605	21,780	62,745
Others	17,644	591,481	726,032
Total	409,660	2,063,098	1,866,369

Source: Ministry of Home Affairs (2017)

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For the past 20 years, most Malaysian firms have been highly dependent on low-skilled foreign workers (Ismail & Yuliyusman, 2014). Most native people are not keen on low-skilled jobs due to the low salary offered by employers. The interest and willingness of foreigners to work in low-skilled jobs with cheap labor have influenced the high dependency of Malaysian firms towards foreign workers (Kaur, 2014).

However, the high influx of foreign workers has led to higher unemployment of local people. Additionally, the high dependency towards low-skilled and low-wage foreign workers would slow the Government's efforts to increase productivity and create more high-skilled jobs (Bank Negara Malaysia, 2018). Hence, Malaysia introduced the minimum wage policy in 2012 as one of the ways to reduce foreign worker reliance.

Minimum Wage Across the World

Most countries today have a minimum wage policy. In Europe, at least part of the private sector in all European countries that are registered with the International Labour Organization (ILO) has a minimum wage (International Labour Organization [ILO], 2016). Meanwhile, 90 percent of countries in Asia have implemented minimum wage policy except for Bahrain, Brunei, Macau and Singapore. Among the developed countries that do not have a minimum wage are Denmark and Sweden. The main factor for them to not have a minimum wage is because these countries have a social contract in place in which the employers are required to pay reasonable wages to their workers.

New Zealand was the first country that implemented the minimum wage policy. According to Holt (1986), the country introduced the policy in 1894 through the Industrial Conciliation and Arbitration Act 1894. The Australian state of Victoria and United Kingdom (UK) were the next places implementing the minimum wage policies, where the policies have been in force since 1896 and 1909 respectively. United States (US) executed the minimum wage policy in 1938 through the Fair Labor Standards Act.

In Asia, Sri Lanka was one of first of the Asian countries to introduce the minimum wage. Sri Lanka implemented the minimum wage law in 1941 through the Wages Board of Ordinances of 1941 (ILO, 2016). This was followed by India, which implemented the minimum wage law after receiving independence from the British in 1947. The minimum wage law in India was governed under the Minimum Wages Act 1948. Meanwhile, the minimum wage law in the neighboring countries of Malaysia and Indonesia was stipulated under legislation in 2003.

Minimum Wage in Malaysia

The minimum wage can be regarded as a wage floor in which the employers must not pay their workers below the minimum wage rate. The National Wages Consultative Council (NWCC) was established in 2011, and is responsible for giving recommendations to the Government in determining the minimum wage rate in Malaysia. Representatives from the

employers and employees, the Government and independent experts are among the members of the NWCC. Based on the recommendations by NWCC, the Government decided to determine the minimum wage rate based on five crucial factors, namely, poverty line income, employer's ability to pay wages, consumer price index, real unemployment rate and productivity growth (Ministry of Human Resources, 2012).

The minimum wage policy in Malaysia was implemented in 2013 under the Minimum Wage Order 2012. The policy has set a minimum wage rate of MYR900 per month in Peninsular Malaysia and MYR800 per month in East Malaysia. All workers, including foreigners, are entitled to a minimum wage except for domestic servants and apprentices who will undergo trainings for more than two years. In July 2016, the minimum wage rates were revised under the Minimum Wage Order 2016. The increase in the minimum wage rates is in line with Malaysia's goal of becoming a high-income country by 2020. Under the new policy, the minimum wage rates in Peninsular Malaysia and East Malaysia have been increased to MYR1,000 and MYR920. The revised minimum wage rates are necessary to reflect the increase in the cost of living.

There are various objectives of the minimum wage implementation in Malaysia. The obvious one is to transform the Malaysian economy into a high-income country (Ghee, Mooi, & Sang, 2015). The policy would also enhance the living standard of workers, especially the low-skilled workers, and would indirectly reduce poverty. Additionally, the minimum wage policy would promote technology development and attract local workers to join low-skilled jobs.

However, the current minimum wage rates of MYR920 and MYR1,000 are too low compared to the current cost of living, which is rapidly increasing due to economic development. Hence, local workers would not be attracted to low-skilled jobs and foreigners would still be hired to fill the shortages.

Based on the classical economic theory, loss of employment is predicted due to the minimum wage implementation. Labor supply would increase as more people would look forward to higher wages. However, the labor demand would decrease as the employers would incur higher labor cost. Hence, some employees would be laid off as employers would incur higher overheads. This paper focused on the potency of the minimum wage policy in reducing the low-skilled foreign workers in Malaysian manufacturing sector.

Literature Review

Most foreign workers are employed to do low-skilled jobs. The reasons for the preference of employers towards unskilled foreign workers are due to the cheap labor and unwillingness of local workers to do low-pay jobs. However, the high inflow of foreign workers has raised concerns to many people about the effect of foreign workers on the labor market in the host country including the wages and employment of local people. The implementation of minimum wage policy is one of the ways to control the flow of foreign workers to the host country. Nevertheless, there were different views from previous studies about the impact of minimum wage on foreign worker employment.

Northwood (2008) found mixed findings regarding the effect of minimum wage on the employment of immigrants in the US. Based on the data covering periods between 1994 and 2006 available from the Current Population Survey (CPS), the study revealed that the minimum wage increase would have different effects on the different groups of immigrants. The findings suggested that the increase in the minimum wage would increase the employment of adult immigrants but decrease the employment of teen immigrants. As the adult immigrants were more experienced and more productive compared to the teen immigrants, firms would replace the teen immigrants with adult immigrants. The study also found that firms still needed immigrant workers even after the minimum wage was implemented due to labor shortages. With higher labor cost due to the minimum wage implementation, firms would hire the more productive adult immigrants to replace the teen immigrants.

Additionally, Cadena (2014) suggested that wages would affect the decision of the immigrants to migrate. Based on the data from CPS for the period 1994–2007, the study used the model of labor elasticity to the changes of the minimum wage. Additionally, the immigrants and the native teenagers were considered as labor substitute in the model. The study suggested that the migrants would migrate from the states that have higher minimum wages if demand for low-skilled labor is elastic to the changes in minimum wage. On the other hand, the migrants would migrate to the states that have higher minimum wage if demand for low-skilled labor is less elastic or rigid. The results found that a 10 per cent increase in the state minimum wage would reduce the number of low-skilled immigrants by 8 per cent, meaning that the minimum wage increase would negatively affect the employment of low-skilled immigrants. Additionally, the result shows that the move out by the immigrants due to the higher minimum wage would mitigate the negative effect of the minimum wage increase towards the employment of native teenagers.

Meanwhile, Shimada (2004) used the two-country economic model for understanding the minimum wage effect of foreign workers. The study shows that the low-skilled foreign workers from a foreign country with a sizeable domestic labor force would migrate to a home country with small domestic labor force when there is no minimum wage. This is because the nominal wages in the home country with smaller domestic labor force is higher than the home country that has larger domestic labor force. However, when the minimum wage is introduced in the home country with the small domestic labor force, the number of low-skilled foreign workers in the country would be reduced. This is because the employment probability in the country would be reduced as the employers need to incur higher labor costs. Hence, the study suggested that the implementation of the minimum wage would reduce the number of low-skilled foreign workers in the home country.

On the other hand, a study done by Boffy-Ramirez (2013) found a positive relationship between minimum wage and foreign workers. The study focused on the migration effect of minimum wage for two classes of immigrants in the US, namely, immigrants with less than four years stay and

immigrants with more than six years stay. By using the CPS panel data between periods of 1994 to 2007, the study found that the minimum wage would affect positively to the immigrants that had been in the US for less than four years but had an adverse effect towards the immigrants who had been in the US for more than six years. This implies that employers would hire more newly arrived immigrants compared to the immigrants who had stayed longer in the country when there was implementation or increase in the minimum wage. This would happen as the newly arrived immigrants are treated as a close substitute for the immigrants who have stayed longer in the country. Hence, the study suggested that the minimum wage would have various effects on the different types of foreign workers.

Additionally, studies done on 15 OECD countries during 1980–2006 by Cicagna and Sulis (2015) found a significant relationship between minimum wage and immigration flows in some countries. By using the OLS techniques, the study found that the minimum wage would increase the immigrants in the Czech Republic and the UK. The increase in the earnings and a better living standard encouraged the immigrants to migrate to these countries. Meanwhile, the immigration flows in France and Spain only increased in the early years of minimum wage implementation. However, the later impact of minimum wage would reduce the immigration flow in these countries as the employers faced difficulties from taking immigrant workers. While most of the immigrants, especially from the low-skilled groups, are chasing for higher wages, the employers on the other hand would reduce their labor demand due to the increase in labor cost.

In Malaysia, there are limited studies on the minimum wage effect on the employment of foreign workers in the manufacturing sector. Most of the studies were focused on the effects of foreign workers on the labor market. Ismail & Yuliyusman (2014) analyzed the effect of foreign workers on the economic growth. The study focused on the three dominant sectors namely services, manufacturing and construction. Based on the panel data covering periods from 1990 to 2010, the study used the autoregressive distributed lag (ARDL) approach to estimate the effect. The findings revealed that the skilled and semi-skilled foreign workers would increase the output growth of all sectors. The skills and experiences would trigger the productivity of those workers thus boost the performance of the sectors. However, the study found that the unskilled foreign workers would affect negatively the output growth in both the short run and the long run. This would happen as the unskilled foreign workers have minimum experience and would have least impact on the productivity. Even though these workers would reduce the output growth of the sectors, they were still hired due to the labor shortages, particularly in low-pay jobs.

There were contradictory findings in the previous studies on the effects of minimum wage on foreign workers. These findings could be merely explained by the different time periods and different methodologies used in the studies. Additionally, since there were scarce studies on the minimum wage effect of foreign workers in Malaysia, this study would contribute to the Malaysian literature.

Methodology

This paper analyzed the trend of the number of foreign workers in manufacturing sector in Malaysia for the ten-year period between 2008 and 2017. The secondary data regarding the number of foreign workers were available and accessed from the Ministry of Home Affairs in order to analyze the changes in the number of foreign workers before and after the minimum wage implementation. As the minimum wage policy was implemented in 2013, the impact of minimum wage on foreign workers can be assessed by the difference in the number of foreign workers before and after the minimum wage.

Result and Discussion

Figure 1 presented the number of foreign and local workers in Malaysian manufacturing sector from 2008 until 2017. The number of foreign workers decreased from 728,867 persons in 2008 to 663,667 persons in 2009 due to the global financial crisis that hit the world. Most of the employers were profoundly affected and had to decrease their labor size (Chodorow-Reich, 2013). However, the numbers increased in 2010 before rebounding in 2011. The inflow of foreign workers started to rise in 2012 and 2013. From 580,820 persons in 2011, the number of foreign workers in the manufacturing sector rose to 751,772 persons in 2013. The rapid increase of more than 29 per cent was mainly due to the economic expansion and labor shortages in low-skilled jobs. The high production recorded by the manufacturing sector in 2012 required more workers, especially for low-skilled jobs (Bank Negara Malaysia, 2012). However, the unwillingness of the locals to work in low-skilled jobs due to the low salaries caused employers to hire more foreign workers to fill the shortages. Nevertheless, the high dependency of the manufacturing employers towards the low-skilled foreign workers could lower productivity and increase unemployment of the locals. Hence, the Government implemented the minimum wage policy in 2013 as one of the ways to reduce the number of foreign workers (Saari, Rahman, Hassan, & Habibullah, 2016).

The number of foreign workers started to decrease after the implementation of the minimum wage policy. From a decrease of 3,906 persons in 2014, the number of foreign workers continued to decline to 450,364 persons in 2015. The minimum wage was revised in July 2016 under the Minimum Wage Order 2016. The new minimum wage rates increased the labor costs of employers. With the higher minimum wage rates and labor costs, employers had to reduce their labor demand in order to remain competitive in the labor market. Hence, the new minimum wage rates caused further decrease in the number of foreign workers in manufacturing. From 387,934 foreign workers in 2016, the number decreased to 330,521 in 2017.

Minimum wage could be considered successful in attracting local people to work in low-skilled jobs. This is evidenced by the increasing number of local workers in the manufacturing sector while the number of foreign workers was decreasing since the minimum wage policy was implemented in 2013. From 1.6 million local workers in 2012, the number of local workers in the manufacturing sector increased to more than 2.1 million workers.

Additionally, Pearson correlation test was conducted by using the software of Statistical Package for Social Sciences (SPSS) to determine the correlation between the number of foreign workers and local workers. From the output produced in Table 2, the correlation coefficient between the variables is $r = -.832$ with $n = 10$ and $p = .003$. Hence, it could be concluded that there was a strong negative correlation between the number of foreign workers and local workers. Decrease in the number of foreign workers was correlated with the increase in the number of local workers.

Table 2 Correlation between the number of Foreign Workers and Local Workers

		Foreign Workers	Local Workers
Foreign Workers	Pearson Correlation	1	-.832**
	Sig. (2-tailed)		.003
	N	10	10
Local Workers	Pearson Correlation	-.832**	1
	Sig. (2-tailed)	.003	
	N	10	10

** $p < .01$ (2-tailed).



Figure 1 Number of foreign and local workers in Malaysian manufacturing sector, 2008–2017
 Source: Ministry of Home Affairs (2018)

As the data showed a decreasing trend of the number of foreign workers as well as the negative correlation between the number of foreign workers and local workers based on the correlation analysis, further studies should be done to confirm the relationship between minimum wage and foreign workers. This study proposed that the implementation of minimum wage would reduce the number of low-skilled foreign workers and attract more local workers to join low-skilled jobs.

As previous studies revealed the various effects of low-skilled foreign workers towards the labor market, the initiatives by the Government to control the inflow of these workers is a must. Borjas (2003) viewed that low-skilled foreign workers would affect the employment and wages of local workers. The cheap labor that can be provided by the foreign workers would decrease the employment of local workers. On the side of employers, they would favor the low-wage foreign workers in order to have minimum labor cost and maximum profit.

In the case of Malaysia, most companies are highly dependent on foreign workers, especially in the services and manufacturing sector. The labor shortages in low-skilled jobs have caused most employers to employ foreigners. Additionally, the willingness of foreign workers to work with low wages has created unemployment for local people. However, the high inflow of low-skilled foreign workers would result in low productivity and high unemployment in the labor market.

The high dependency of manufacturing employers towards low-skilled foreign workers led the government to introduce the minimum wage policy in 2012. Governed under the minimum wage order 2012, the policy aims to reduce low-pay foreign workers and to induce the productivity of the workers. Additionally, the implementation of the minimum wage aims to attract local workers to take up low-skilled jobs. While previous studies revealed mixed findings on the effects of minimum wage on foreign workers, this research would lead to the analysis of minimum wage effects of foreign workers in the manufacturing sector in Malaysia.

Conclusion and Recommendation

This paper has discussed the minimum wage implementation in Malaysia and its possible effects on the labor market, especially on low-skilled foreign workers. The development of heavy industries and shortage of employees in low-skilled jobs have caused most manufacturing companies to hire foreign workers. The cheap labor that can be provided by foreign workers has triggered the inflow of foreign workers in Malaysia. However, the high inflow of foreign workers has led to the unemployment of local people and would slow down the Government's efforts to increase productivity as indicated by Bank Negara Malaysia (2018). Hence, the Government introduced the minimum wage policy in 2012 to reduce the number of low-skilled foreign workers. Additionally, the paper also has discussed the foreign worker effect of minimum wage in other countries in order to have better understanding on the policy role in controlling the inflow of foreign workers.

This study has also used the data of foreign workers in the manufacturing sector from 2008 until 2017 to explain the potency of minimum wage in reducing the dependency of employers towards low-skilled foreign workers. Data from the Ministry of Home Affairs revealed a downward trend of the number of foreign workers in the manufacturing sector since the minimum wage was implemented. The number of registered foreign workers was maintained at around 600,000 to 700,000 people from 2008 to 2014. However, since the minimum wage was implemented in 2013, the number of foreign workers decreased between the periods of 2013-2017. From 750,000 foreign workers in 2013, the number was reduced to around 390,000 in 2016. As the number of foreign workers was reduced since the minimum wage was implemented, the minimum wage was assumed to be an effective policy in reducing the dependency of Malaysian employers towards foreign workers. Nevertheless, as this study only refers to the data of the number of foreign workers covering periods of 2008 to 2017, further empirical studies should be conducted to confirm the effect of minimum wage on foreign workers.

Conflict of Interest

There is no conflict of interest.

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