Analysis On the Relationship Between Tourist Arrival and Unemployment in Malaysia

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ABSTRACT

The tourism industry has an important role in Malaysia economic for the income sources, to create job opportunities and reduce the unemployment rate within the country. The main objective of this research is to investigate the relationship between tourist arrivals and unemployment in Malaysia from 1999 to 2018. The dependant variable for the study is unemployment while tourism arrival is known to be the independent variable. The data of tourist arrivals and unemployment from 1999 to 2018 were obtained from World Bank. The economics theoretical analysis is carried out by applying statistical model such as Ordinary Least Square to investigate the relationship between variables. In simple terms, the data is analyzed to determine the correlation coefficient and causal relationship between tourist arrivals and unemployment. The findings of the study showed that there is a significant negatively relationship between both variables which means when tourism arrival increases, unemployment issue will decrease in Malaysia. The major findings that relationship between tourist arrivals and unemployment is verified based on the correlation coefficient of determination results in this research.

Keyword: Malaysia, Tourism, Unemployment

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1.0 INTRODUCTION

In this era of globalization, tourism is considered as one of the most important economic and social sectors in the world as it plays a vital role in national development. Tourism activities are practised through its service units such as hotels, restaurants, transportation facilities which transforms it into a package of services sold to tourists. Tourism plays an essential role in the country's economy and occupies a prominent position which emphasizes that any country that has expanded the tourism sector is on the path to economic development and structural economic improvement. According to Spillane (1987), the researcher defines tourism as a journey from one place to another which is temporary and carried out whether as individual or in groups, as an attempt to find a balance or harmony with the environment or happiness in the social, cultural, and natural sciences. Moreover, Eugenio-Martin et al. (2004) suggests that tourism activity may impact income differently in nations that have low income such as developing nations than developed nations with high income. Tourism is also known to be a dynamic and competitive industry which requires the ability to constantly adapt to the changing needs and desires of customers, as the customer's happiness, enjoyment and safety are the focus of tourism businesses. Tourism is inevitably open to different interpretations, yet the accurately apply key tourism terms at the national, regional and local level is acceptable. Thereby, tourism planning and management are known to be partially successful when the various stakeholders involved have different conceptions of what tourism means

Generally, unemployment is known as one of the major dysfunction of the labor market. Unemployment, in the modern economy, does not always happen and has caused certain issues to be arisen. The key issues are their dimensions, their distribution to the entire population, their persistence in the case of individuals or groups, the number of unemployment benefits associated with pay and how long. In Malaysia, there is about 3.2 per cent of the country's unemployment rate or 510,000 people unemployed was recorded as of December 31, 2019. Malaysian planners find that most of them are unemployed for less than six months, likely to find a job, not yet looking for a suitable job or waiting for a reply from a prospective employer. Generally, unemployment is known as one of the major dysfunction of the labor market. Unemployment can also be defined as people who do not have a job yet they are actively looking for work and currently are available for a job. In simple terms, unemployment refers to individuals who are able to work but there are no job opportunities for them or they cannot obtain a job due to certain reasons, which eventually causing them to remain unemployable.

There are three main types of unemployment which include cycle, friction, and structure unemployment. When the economy entered into the recession, thus many citizens lost jobs and being unemployed is considered as cyclical unemployment. Meanwhile, the friction unemployment occurred primarily as the shift of the normal labour market and thereby those workers require a longer time to find new jobs. Structure unemployment refers to the absence of certain types of workers. This usually occurs when there is a mismatch between the skills requested by the employer and the skills owned by the employees. Significant advances in technology, as well as lower labour costs abroad, are the main reasons lead to such this kind of unemployment apart from other external factors.

In addition, unemployment is considered as a serious issue faced by most developed and developing countries and thus results in socio-economic problems within the country. In the United States, the high unemployment rate reflects the failure of the government to overcome the turmoil that hit the national economy because the country has relied heavily on foreign economic development. The mass media also broadcast a program that recounts the unemployment

experience to succeed in life as evidence that the country's unemployment polemic is also a political issue.

The arrival of tourists has opened a wider job opportunity in Malaysia. This is because, the ever-increasing of tourism arrival encourages greater workforce particularly in sectors such as hotel workers, tour guides, souvenir shops and handicraft workers. The growth of the tourism industry increases the demand for trained and experienced workers in the industry at the level of management and supervision of skilled and semi-skilled workers. In addition, the tourism industry provides various business opportunities to the community. The growth of the tourism industry has been a catalyst for the growth of other sectors such as trade, food and beverage, flowers, handicrafts, agriculture and livestock. It has helped to decrease the unemployment rate in our country. At the same time, the standard of living of the people will also increase. Thereby, it is necessary for the government to plan and implement exclusive strategies to attract ever-increasing tourism arrival to reduce the unemployment issues in the country.

The variables of the study refer to tourism arrival and unemployment issues in Malaysia from 1999 to 2018. The trend analysis was carried out each dataset to determine the pattern and obtain the information of each variable.

1.1 Trend On Tourism Arrival In Malaysia From 1999 To 2018
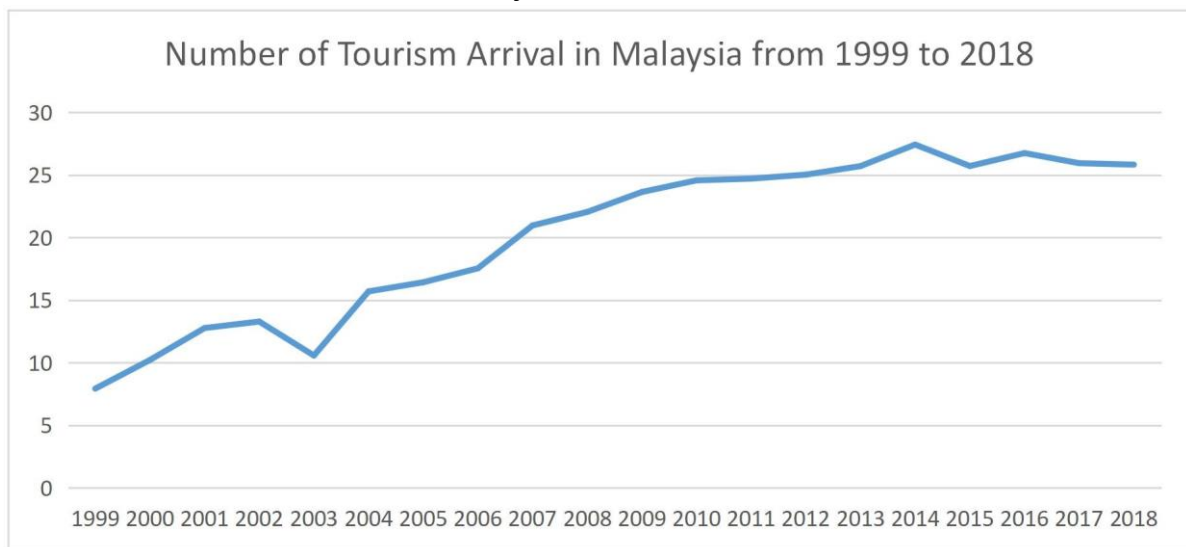

Figure 1.1 : Number Of Tourism Arrivals in Malaysia from 1999 to 2018

According to Figure 1.1 shows that the number of tourism arrivals in Malaysia from 1999 to 2018. Overall, it shows that Malaysia has an increasing tourism arrival over time from 1999 to 2018. However, the number of tourism arrival has decreased from 13,292.00 Million in 2002 to 10.577 Million in 2003. Moreover, the number of tourism arrival has dropped from 27.437 Million in 2014 to 25.721 Million in 2015. The highest number of tourist arrivals occurred in 2014 which there is a 27.437 Million. Meanwhile the lowest number of tourist arrivals happened in 1999 with a 7.931Million. From the figure above, it can be concluded that generally number of tourism arrival has increased by year.

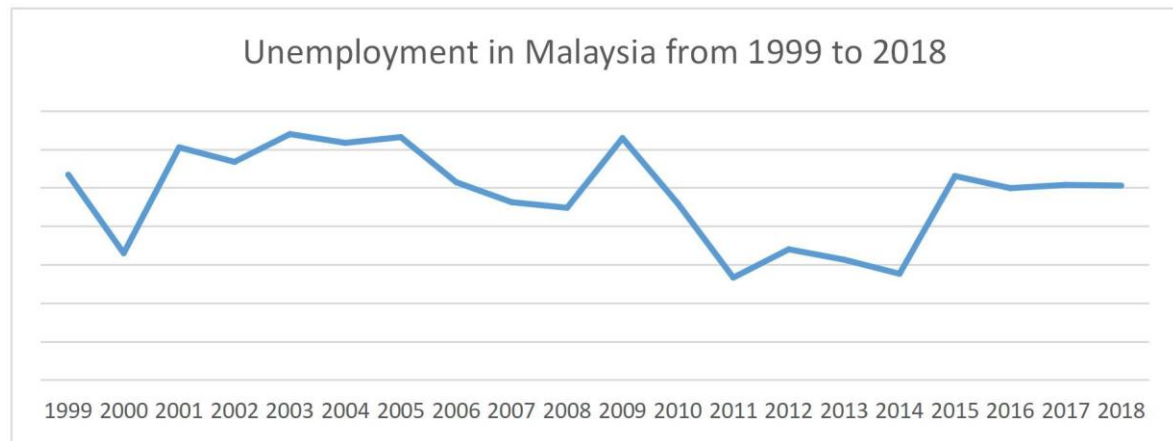**1.2 Trend On Unemployment In Malaysia From 1999 To 2018**

Figure 1.2 : Unemployment in Malaysia from 1999 to 2018

Based on Figure 1.2 shows that unemployment in Malaysia from 1999 to 2018. It is shows that the unemployment has decrease typically for 20 years. However, the uneven data occurred due to unstable declines and increases in the unemployment rate over time. For example, the highest decline of unemployment happened in 2009 by 323.67 Million while the lowest unemployment rate occurred in 2011 by 279.92 Million.

From the results shows that the tourism arrival has a negative impact on unemployment in Malaysia. The tourism arrival increases, helps to provide wider job opportunities and thereby the unemployment rate decreases. It clearly shows that tourism arrival is a vital industry to decrease the unemployment rate for a country in the short and long term. For example, the number of tourism arrival in 2004 has been increased from 10.577.00 Million in 2003 to 27,437,000 Million in 2014 and thus the unemployment rate occurred in 2004, 286.72 Million is considered a relatively low.

Despite many challenges and difficulties faced by government tourism, tourism undeniably requires a labour force that increases the supply of job and eventually contributes to reducing the unemployment rate within the country.

2.0 LITERATURE REVIEW

Tourism industry plays a vital role to drive a rapid growth in the country's economy, which then create ever more job opportunities and eventually reduce the unemployment in the country. If tourism arrival increases within a country, typically will lead to a reduction in the unemployment. It is mainly because of the increasing tourism industry drives rapid growth in job opportunities. This means that there will be greater job opportunities being offered particularly in the service industry such as booking and reservation, accommodation, food or beverages, hospitality and transportation industry. For instance, the continued growth in the tourism arrival encourages business operation in service industry such as hotels, restaurants, taxis, and souvenir sales that indirectly through the supply of goods and services needed by tourism-related businesses.

An increase in tourism and consequently in the demand for goods and services designed for tourists lead to a reduction in the unemployment. Based on the previous research conducted by López(2019), the research shows that tourism sector has influenced the growth rate of the unemployment, which means when the tourism sector decreases, the unemployment rate will increase in Mexico. Moreover, the results also show that the relationship between the tourism sector and the unemployment rate becomes stronger during an economic crisis yet weaker during the expansion period.

According to Brojeh (2012), Arab countries have recognized the importance of the tourism sector in the reduction of unemployment and thus, the country has placed tourism competitiveness at the forefront. This is primarily because of the tourism activities strongly contributes to job opportunities and eventually stimulate the growth of the economy in the country. Based on the previous research by Alsarayreh (2017), the study has proved that the impact of tourism reduces the number of the unemployment rate. From the research result, it is mainly because of the financial incentive available in touristic will decrease the number of unemployment. The researcher claims that there is a statistically significant impact of tourism in reducing the unemployment rate. Thus, it is proved that there is a negative relationship between two variables, whereby the higher the tourism arrival then the lower the unemployment rate.

In addition, Schubert (2012) has claimed that an increase in tourism demand is because of the higher advertising fee has been spent, then the overall unemployment regardless of economic unemployment or sectoral unemployment would be decreased significantly. Therefore, it could be concluded that the relationship between tourism arrival and unemployment issue is significantly negative. Last but not the least, the hypothesis for this study was developed based on previous studies:

3.0 METHODOLOGY

In methodology section, the researchers employ a quantitative method to measure how the tourist arrival affects the unemployment in Malaysia. Several sources of data such as the data from electronics have been applied to collect the data about tourist arrival and the unemployment rate in Malaysia. As mentioned, all the data of tourism arrival and unemployment rate are obtained from the World Bank because the data from World Bank is more accurate than another other indicators.

In this study, tourist arrival refers to the independent variable, meanwhile unemployment rate is dependent variable of this study. Generally, the objective of this study is to investigate the relationship between tourist arrival and unemployment in Malaysia from 1999 to 2018. EViews software has been applied to analyse the data of both variables through Regression Analysis. The model specification for this study is shown as below:

$$lnLNU_t = \alpha_1 + \alpha_2 lnTA_t + \varepsilon_t$$

Where,
$InLNU_t$ = the In of unemployment in year $_t$
$InTA_t$ = the In of tourist arrivals in year $_t$ ε_t
= random value of error

The simple model specification shown as above is used to explain the relationship between the two variables. The model includes merely both dependant and independent variables to produce more reliable estimation and result. Higher allocation to tourist arrival ($InTA_t$) from government means that the contribution of government to the development of tourism industry such as hotels, conference centers, educational, medical, agrotourism facilities or food and beverages that could help to increase job opportunities and thereby, leads to an reduction in unemployment ($InLNU$). From applying the model specification, it is proved that tourist arrival correlates to unemployment.

The study also used the Ordinary Least Squares (OLS) which is known as a the statistical method to further estimate the relationship between tourist arrivals and the unemployment in Malaysia from 1999 to 2018. However, Adjusted R-squared is much better than R-squared because it measures the predictive strength of regression models containing varying predictor numbers. Meanwhile, R-Squared only works as expected with one explanatory variable on a simple linear

regression model. Moreover, the researchers have used the information that was taken from the other related journals title that published in national and international to support the justification for the research.

3.1 Research Framework

Figure 3.1 shows the Statistic Model Specification

Figure above clearly shows the research framework of variables, where the dependable variable refers to number of tourism arrival while unemployment is independent variable in this study.

4.0 RESULTS AND FINDINGS

Table 4.1 present the results of mean, median, maximum and minimum value of unemployment and tourism, that have been used to calculate the standard deviation for both variables.

Table 4.1 : Descriptive Statistic

	UNEMPLOYMENT	TOURISM
Mean	295139816	20144150
Median	290608070	22849000
Maximum	352331937	27437000
Minimum	234401161	7931000
Std. Dev.	28378062	6434958
Observations	20	20

Since the data has been collected for each variable, therefore, each variable has different means and standard deviations. The dependent variable which is unemployment has a certain mean and standard deviation where it has been based on the dataset of tourism arrival. Standard deviation is defined as a number used to tell how measurements for a group are spread out from the average (mean), or expected value. A high standard deviation indicates the values in the data collected set are spread out and farther away from the mean or expected value on average.

Table 4.2 present the estimate models to examine the relationship between tourism arrival and unemployment in Malaysia. The results indicate that the value of probability is significant at 1 % which means that the null hypothesis is rejected and the alternative hypothesis is accepted. From Table 2, we can derive the equation below as:

$$\ln LNU_t = 16.33947 - 0.188517 \ln TA_t$$

Based on the equation above, we can infer that a 1% increase in tourism arrival will cause the unemployment rate to be decreased by 0.188517%. The coefficient of tourism arrival, -0.188517 is significant for the P-value of obtaining a t-value for this coefficient as much as about -4.664192 with 1% significant level. It means that tourism arrival has a negative relationship with unemployment. Thus we can say that higher of tourism arrival can contribute to a decrease in unemployment in Malaysia.

Table 4.2: Model Estimation for Ordinary Least Squares

Variable	Coefficient	Std. Error	t-Statistics	Prob.
LN_TOURISM	-0.188517***	0.040418***	-4.664192***	0.0002***
C	16.33947***	0.677464***	24.11859***	0.0000***
R-squared	0.547223	Mean dependent var		19.49852
Adjusted R-squared	0.522069	S.D. dependent var		0.097089
S.E. of regression	0.067120	Akaike info criterion		-2.470029
Sum squared resid	0.081092	Schwarz criterion		-2.370456
Log likelihood	26.70029	Hannan-Quinn criter.		-2.450591
F-statistic	21.75469	Durbin-Watson stat		1.072645
Prob(F-statistic)	0.000193			

Notes: ***, ** and* indicates the rejection of the null hypothesis of nonstationarity at 1%,5% and 10% significance level.

Table 4.2 shows the adjusted R-squared of 0.522069, which means that the variation of unemployment (dependent variable) can be explained by 52.21% of tourism arrival (independent variable). The probability of F-statistics, 0.000193 shows that regression is significant which means at the tourism arrival gives a significant impact on unemployment. In addition, the value of Durbin-Watson statistic, 1.072645 shows a positive autocorrelation since the value obtained less than 2. Based on the results obtained in table 3, it reports that the value of R-squared at 0.547223 indicates that approximately half proportion of variation in unemployment (dependent variable) can be attributed to the tourism arrival (independent variable). In simple terms, there are approximately 55% of unemployment can be explained by the tourism arrival. The R-squared value obtained for this model is generally considered a moderate effect size since the value of R-squared value is in between 0.5 to 0.7. However, adjusted R-squared is much better than R-squared because it measures the predictive strength of regression models containing varying predictor numbers. Meanwhile, R-Squared only works as expected with one explanatory variable on a simple linear regression model. As for Durbin Watson statistic, the positive autocorrelation occurs because of a given error sign tends to be followed by the same error sign which means positive errors are typically followed by positive errors.

As conclusion, our results clearly show that the relationship between tourism arrival and unemployment is negative and significant. This results are deemed to be good based on the value obtained for R-square and Adjusted R-square, however, if according to the value of Durbin Watson statistic indicates the existence of autocorrelation problems for this model. Based on this result, we can conclude that there is a cointegration between the between tourism arrival and unemployment.

5.0 CONCLUSION

The research has explored the relationship between tourism arrival and unemployment rate in Malaysia from 1999 to 2018. The results show that there is a significant negatively relationship between both variables. In simple terms, 1% increase in tourism arrival will cause the unemployment to be decreased by 0.188517%. Thereby, it can be concluded that higher tourism arrival will lead to lower unemployment in the country.

The main purpose of this research is to determine the relationship between tourism arrival and unemployment. From the research's results, it has proven that the relationship between tourism arrival and unemployment is significant negatively. For instance, it is found that the unemployment rate in Malaysia has been decreased as the increase in the tourism arrival encourages ever more service industry to open up more job opportunities for Malaysian. The

results obtained is deemed to be concise and accurate provided with strongly evidences. In addition, the research's results are reliable because previous related studies has been referred while conducting this research. Thus, this research can be considered as a further research or reference for other researchers to in-depth investigate the relationship between tourism arrival and unemployment.

The design of the current study is subject to limitations as with the majority of studies. The primary limitation refers to the lack of prior research studies on the relevant topic. It is difficult and challenging for the researchers to find relevant journal, not to mention to obtain journals with the exact similar findings as this research. For example, the related journals might include several factors such as dynamic relationship between tourism arrival and inflation and unemployment with crime rate in Malaysia. If we refer to the journals that involved several variables, it will affect the accuracy of our research. Thus, a limited journal to be referred hardly to obtain factual information to support our results. In addition,

In 2019, the unemployment rate was approximately at 3.4 percent in Malaysia. The unemployment rate in Malaysia is known to be relatively low and stable at around three percent, which means the population experienced close to full employment. However, after exploring the relationship between tourism arrival and unemployment, the researchers realized that how significant the tourism arrival causes an impact towards the unemployment in a country. Therefore, the researchers would like to provide recommendation to increase tourism arrival so the unemployment issues in Malaysia will be reduced to ever-lower and stable.

First of all, the government should reinforce security level since security of the country is known as the most vital element to attract ever-more tourist. This is because the frequent threats of violence can cause a bad reputation for the country that people more likely to feel risky to visit the country. Thus, government should control the threat of terrorism by examining suspicious persons, and controlling the country's borders for prevent illegal entry of immigrants to reduce criminals from entering the country easily. In addition, the country should concentrate on marketing efforts without media coverage through digital influences. For example, a famous worldwide badminton player like Dato' Lee Chong Wei as an influencer, if he advertises interesting places in Malaysia will more likely to promote the country widely through social media effectively.

Apart from reducing the unemployment in Malaysia, the presence of foreign tourists also provides an opportunity for the tourism sector to expand its market. As a result, higher tourism arrival lead to a reduction in the unemployment issue if cooperation from all parties is made to make the country more globally known.

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