THE IMPACT OF SEPTEMBER 11TH ON THE ARRIVAL OF MIDDLE EAST TOURISTS TO MALAYSIA

REDZUAN OTHMAN & NORLIDA HANIM MOHD SALLEH

ABSTRACT

One of the major factors that influencing traveling decision is related to the safely and security of tourists. This non economic factor such as natural disaster like earthquake and diseases or man made disasters like wars and political instability may greatly change traveling pattern and behavior. One of a good example was the 11th September 2001 tragedy had greatly altered the international tourism scenario. As a result many tourists from the Muslim countries especially the Middle East countries have shifted their traveling destinations from the United States to new destinations which are more secured and safe to them. Among their new destinations are several ASEAN countries including Malaysia. Statistic has shown that the arrival of the Middle East tourists to the United States had declined sharply before and after the incidence. For example in 2000 about 249,260 Middle East tourists visited the USA but in 2002 and 2005 the numbers had decreased sharply to 126,613 and 144,131 respectively. Whereas their arrivals to Malaysia have shown an increasing trend. For example in 1998 about 19,571 arrivals were recorded. By 2002 and 2005 the numbers had increased significantly to 126,239 and 145,861. This paper is trying to investigate statistically did the 11th September incidence is really a significant factor causing the increasing of their arrivals to Malaysia besides other economic factors such as tourist expenses in Malaysia, tourist income and traveling expenses at alternative tourism destinations. Due to lacking of time series data on tourist arrivals from the Middle East, panel analysis method will be utilized in estimating the importance of these factors. Empirical results have shown that the Fixed Effects method/model produced the best findings. Statistically the September 11th incidence is significant in shifting the arrival the West Asian tourists to Malaysia. Overall results are acceptable. They are consistent with tourism demand theory and satisfying the statistical requirements.

Keywords: economics of tourism; natural disaster; international tourism.

1. Introduction

A report by the World Tourism Organization (WTO, 2007) had confirmed that tourism is becoming one of the most important sources of foreign exchange earnings for many countries besides providing employment opportunities. In 2000, for instance, globally the tourism industry had generated about US$478 billion on tourism receipts from 698 million travelers. This figure increased to US$733 billion in 2006 with 846 million travelers. In terms of employment, it had generated about 234 million jobs in various sectors in 2006. These enormous tourism returns had encouraged many countries including Malaysia to develop their own tourism industry.

In Malaysia, tourism activities have been started since the early days when Malacca was then the major center of business port connecting the East and the West. At that time the major activities were trading and religious missionaries. After the falling of Malacca to the Portuguese, Dutch and British tourism was not properly developed. Most of the colonials...
were more interested in getting raw materials from Malaysia namely tin and rubber. Until after the independence Malaysian economy was very strongly depended on the primary commodities. The formal involvement of the Malaysia government in tourism industry was with the establishment of the Tourism Department in 1959. This department was upgraded and changed its name to Tourism Development Corporation (TDC) in 1974 with the main task to coordinate and promote all tourism programs. Since then, the tourism became an industry in the economic circle. However, serious attention by the Malaysian government to aggressively develop tourism industry was started in the mid 1980’s as the world suffered from the economic recession. Malaysia had to diversify its economic base and tourism was identified as the best choice. To accomplish this mission the government had established the Ministry of Culture, Arts and Culture in 1987. In 2004 the Ministry of Tourism was set up to look after the all matters in tourism. With the direct government involvement, various attractive development incentives, programs and strategies have been introduced especially to increase the individual and private sectors participation in this industry (Redzuan and Norlida Hanim, 2006). As a consequence, Malaysian tourism industry had an incredible rate of growth in terms of tourist arrivals as well as the tourist receipts.

Besides the roles of the government, there are various factors that have influenced the inflow of tourists to Malaysia. For instance, good infrastructure and various tourism products (Redzuan, 2002), together with the beautiful natural environment, the country with multi-racial and culture and the stability of economic and politics have given an additional positive factors to Malaysia as a popular tourist destination.

With all the integrated efforts mentioned earlier and large scale promotions by the government such as the declaration of Visit Malaysia Year (VMY) in 1990, 1994 2000, 2004 and most recently in 2007-2008, total tourist arrivals had increased to 7.4 million in 1990, compared to 2.0 million and 4.8 million tourist arrivals in 1980 and 1989 respectively. Tourism receipts also recorded a positive increment from RM618.9 million in 1980 to RM2803 million in 1989 and RM4500 million in 1990. However, in 1991 the positive growth of tourism was affected. The total arrivals and total receipt dropped to 5.8 million and RM4300 million respectively. This negative growth was mainly due to the War Gulf and lack of aggressive promotion as compared to a year before. The growth of tourism recovered in 1992 and plotted positive growth between 2.9%-10.7%, and 6.9%-63.81% for tourist arrivals and tourism receipts respectively until 1995. In the real figures about 6.0 million tourist arrivals and RM459.5 million of tourism receipts was recorded in 1992 and 7.5 million tourist arrivals and RM9174.9 million of tourism receipts in 1995. The positive performance of tourism industry to some extent was caused by the Visit ASEAN Year in 1992 and VMY in 1994.

Again, in 1996 the number of tourist arrivals to Malaysia dropped to 7.1 million, but still recorded a positive growth in tourism receipts (RM10.354 million). There was no specific reason can be given to this situation but might be due to the lack of promotion. The decrease in total arrivals and receipts continued in 1997-98. The major reason for the declining was due to incidence of the Asian economic crisis. After 1999, the international tourist arrivals and tourism receipts recorded a positive growth rates except in 2003, which may be due to the outbreak of SARS. Information pertaining to the international tourist arrivals and receipts are given as Figure 1.
The Impact of September 11th on the Arrival of Middle East Tourists to Malaysia

Besides the above reason, in the real situation the increasing of tourist arrivals to any tourism destination including to Malaysia are cause by a lot of factors especially the economics factor. Besides, we can't deny the important of non-economic factors particularly safety and security of the tourists. International political instability and bombing incidence at various places around the globe have strong negative impact on tourist arrivals to those destinations. On the most significant incidents was the tragedy of September 11, 2001 that had considerably changed the pattern of international of tourist flow. Immediately after the disaster most of the Muslim tourists were facing somewhat restrictions to travel to the USA and European countries. Tourists from the Muslim countries which are mainly from the Middle East search for new and safer destinations. Malaysia with a strong Islamic image is one of the preferred destinations by these tourists.

According to World Tourism Organization the arrival of Middle East tourists to the United States had declined sharply after the September 11 incidence. For example in 2000 about 249,260 Middle East tourists had visited the USA but in 2002 the numbers had decreased sharply to 126,613 and started to increase to 144,131 in 2005. Similarly their arrivals to the UK, during the same period the numbers declined from 429,000 to 360,000 and 380,000 respectively. Their arrivals to Malaysia have shown a sharp positive growth. For instance in 1998 about 19,571 arrivals were recorded but by 2002 and 2005 the numbers had increased to 126,239 and 145,861. Besides the increase in their arrivals, tourists from the Middle East market have a tendency to spend more and stay longer during their visit to this country.

Based on this scenario this article is trying to identify and estimate whether the incidence of September 11 and few other economic determinants were significant factors causing Middle East tourists visiting Malaysia. Discussions of this paper are as follows; II) The importance of Middle East market to Malaysian tourism industry; III) Review of literature on the tourism demand; IV) Methodology; V) Empirical results and conclusion. The demand for tourism will be estimated utilizing the panel analysis.
2. The Importance Of Middle East Market To The Malaysian Tourism Industry

The World Tourism Organization has categorized the Middle East market as consisting of several countries namely Bahrain, Palestine, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, Egypt and Yemen. However, not all these countries are significant markets to Malaysia. Only seven dominant countries are considered in this analysis as tourist arrivals from these countries are quite sizeable. These countries are Jordan, Kuwait, Oman, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Egypt. The importance of the Middle East tourists to the Malaysian tourism industry can be viewed from several indicators such as number of tourist arrivals, tourism receipts, and the average length of stay and potential of future tourism market.

Table 1: Tourist Arrivals from Middle East to Malaysia (Total and yearly percentage change) 1995-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Tourist Arrivals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Middle East</td>
<td>Growth (%)</td>
</tr>
<tr>
<td>1995</td>
<td>28,293</td>
<td>-</td>
</tr>
<tr>
<td>1996</td>
<td>27,580</td>
<td>-2.5</td>
</tr>
<tr>
<td>1997</td>
<td>16,460</td>
<td>40.3</td>
</tr>
<tr>
<td>1998</td>
<td>19,571</td>
<td>18.9</td>
</tr>
<tr>
<td>1999</td>
<td>19,128</td>
<td>-2.2</td>
</tr>
<tr>
<td>2000</td>
<td>44,346</td>
<td>131.9</td>
</tr>
<tr>
<td>2001</td>
<td>107,775</td>
<td>143.0</td>
</tr>
<tr>
<td>2002</td>
<td>126,239</td>
<td>17.1</td>
</tr>
<tr>
<td>2003</td>
<td>78,324</td>
<td>-37.9</td>
</tr>
<tr>
<td>2004</td>
<td>124,331</td>
<td>62.3</td>
</tr>
<tr>
<td>2005</td>
<td>145,861</td>
<td>17.3</td>
</tr>
<tr>
<td>2006</td>
<td>149,067</td>
<td>2.2</td>
</tr>
<tr>
<td>2007</td>
<td>245,203</td>
<td>64.5</td>
</tr>
<tr>
<td></td>
<td>Change</td>
<td></td>
</tr>
</tbody>
</table>

Source: World Tourism Organization & Tourism Malaysia (Website)

In the past 13 years the arrival of tourists from the Middle East has shown an increasing trend especially after the tragedy of September 11. The decreasing in their numbers at the end of 1990’s was mainly due to the world economic recession and natural calamity such haze. The same was true in 2003, the outbreak of SARS had caused the decreased in their arrivals. Although in terms of total numbers Middle Eastern tourists are not as significant as tourists from Singapore or Thailand. However, an interesting fact to be accepted is the rate of their growth. As indicates in Table 2, on the average increase in tourist arrivals from this region was very much higher than the national average. For instance from 1995-2007, tourist arrivals from Middle East was at 19.7 percent as compared to only 9 percent for national average. The different in these figures are very much higher if comparison is made between before and after the 11 September incidence. From 2000-2007 the average increase of arrivals from
Middle East market was at 27.7 percent as contrast to the national average at 10.8 percent. Given such development Middle East market is expected to be a major to Malaysian tourism in the future.

Other important indicators are the average length of stay (ALOS) and average spending of Middle tourists. The national ALOS was 7.2 and 6.0 in 2003 and 2004 respectively, whereas for the Middle East tourists their ALOS was 12.6 and 10.7 during the same period.

In terms of average spending/expenditure the Middle East tourists have a higher purchasing power than the overall tourists. In 2003 the average expenditure of Middle East tourists was RM3,503 as compared to RM2,013 for the overall tourists. In 2004 the number had slightly declined to RM2883 and RM1,888 respectively.

Given such indicators as mentioned above in 2006, the Ministry of Tourism had appointed Tuan Razali Tuan Omar to be the Malaysian Tourism Director in Middle East and Iran. His major task is to promote Malaysia as a potential tourist destination to the prospective Middle East tourists and also the intermediary to report the progress. The Ministry of Tourism would like to have more Arabian tourists to choose Malaysia as their major tourist destination in terms of their long-haul vacation. Back in Malaysia, the Ministry of Tourism was already on the track in preparing Malaysia to accept Middle East’s tourists. For example, the signage in Arabic has been placed at the Kuala Lumpur International Airport (KLIA) to guide travelers through various sections. Arabic-speaking staff has also been assigned at the airport to assist Arab travelers. Hotels and restaurants in Malaysia have been urged to have employees who are fluent in the Arabic language. Currently, Malaysia is promoting the health tourism, Malaysia My Second Home programs, Feel at Home campaign and education tourism to the Middle East tourists. Malaysia had also joined the Arabian Travel Market (ATM) to strengthen its partnership with more than the 240 tour agencies in the region.

3. Tourism Demand Analysis: Review Of Past Study And Data

Tourism demand analysis has been carried out since the 1960s. The early studies of demand have been utilized using the Ordinary Least Square (OLS) approach. Over the years other methods also had been applied such as the Cochrane Orcutt (CO), Almost Ideal Demand Function (AIDS), Generalized Least Square (GLS), and Cointegration techniques. The details are shown such as shown in Figure 2.

According Norlida Hanim and Redzuan Othman (2008), based on 107 reviewed of tourism demand since 1960 to 2006, most of them are using the time series data. There are many more methodologies that had been applied especially the estimation of tourism demand using panel data analysis such as being done in this study.

Most of time series analysis requires data set for a long period. The problems arise when annual data is required. In many countries especially the Less Developed Countries data collection was very poor and accessibility of such data very limited. Thus in this study panel data set will be used mainly due to unavailability of sufficient time series data in order to allow for time series analysis. Panel data analysis still can used to estimate variables in most of economic model. At the same time panel data approach until recently was not being applied widely. In Malaysia there is no research in tourism demand utilizing this analysis. This study can be regarded as the earlier research using this analysis. However, in other countries there are several research on tourism demand that utilized this analysis as being done by Sara and Soukiazis (2005); Kareem (2008); Naude and Saayman (2004); Sequeira and Nunes (2008); Munoz (2004); Eugenio-Martin, Morales and Scarpa (2004); Aslan, et. al (2008); and Soukiazis and Sara (2007).
Dependent Variables

Tourist arrivals have been used for many times as a dependent variable in tourism demand analysis. It has been supported by Witt and Witt (1995), Crouch et al. (1992), and Li (2004). Summary in Figure 2 shows that about 59 per cent of tourism demand model had used this variable. Other possible variables are tourist expenditure (32%), average length of stay (6%) and number of nights (3%).

Independent Variables

Lim (2004) has been reviewed about 100 empirical studies on tourism modeling and found that income and price were the most commonly used explanatory variable. Study by Norlida Hanim and Redzuan Othman (2008), has shown the importance of independent variables in tourism demand from the past 107 studies. For example the importance of income (81%) and tourism price (65%) in tourism demand model. This is followed by traveling cost (53%), exchange rate (39%), dummy (29), time trend (18%), lagged dependent variables (16%) and population (13%), tourism price at substitute destinations (12%), marketing/advertisement (10%) and traveling cost to substitute destinations (3%).

Data of this study

This study will also utilize some of the common variables as being used in the past studies. Detailed of the variables are illustrated as follows:

**Dependent variable:** Tourist arrivals will be applied as a proxy for the tourism demand. Annual data are used for the period from 1998-2005. Data on tourist arrivals were collected from the Malaysia Tourism Statistical Report and WTO Statistical Book.

**Independent variables:** The independent variables in this study are:

i) Tourism price refers to the price of all goods and services consumed by tourists at the destination. The calculation of tourism price is based on the consumer price index (CPI) of the visited country divided by the CPI of the origin country (Salman, 2003; Lim, 2004; Dritsakis, 2004; and Toh, Habibullah and Goh, 2006). It is expected that tourism price and arrivals will have a negative relationship.

ii) Tourism prices at the alternative tourism destinations are as substitute prices. Their calculations are similar to the estimating of tourism price, where the visiting destinations now refer to the alternative tourism destinations i.e. Indonesia, Singapore and Thailand. The important of substitute price has been proven in tourism study (see Martin and Witt, 1988; and Song et. al., 2003).

iii) The income variable refers to the per capita income (Inc). Income is the most popular variable included in the tourism demand function (Lim and McAleer, 2002; Dritsakis, 2004; and Muñoz, 2006). Normally, the higher income will increase the total arrivals.

4. Methodology And Model Specification

This study is utilizing the panel data analysis approach which integrates the spatial and temporal dimension. Spatial dimension in this study is the various Middle East countries selected whereas the temporal dimension is a series of observations for a set of variables such
as tourist arrivals, income, tourism price and prices of alternative destinations that describing the cross-sectional units that are the countries selected in thus study for a certain time period.

Generally panel analytical models are divided into several methods/models. The most commonly used methods are constant coefficients models, fixed effect models and random effect models. In this paper estimation is made utilizing these three models.

In the constant coefficients models spatial and temporal effects are assumed to be insignificant. The significance of each variable in the model is considered the same in all the countries. Statistically their intercept and slope has similar coefficient for all countries. Since there is no spatial and temporal effects these data can be pooled and use the Ordinary Least Squares (OLS) to estimate the model. Thus, this model is also called the pooled regression model.

The Random Effects Model as discussed by Greene (Greene, 2003), is a regression with random constant term. It is assumed that the intercept is a random outcome variable. Because of this autocorrelation OLS will be inefficient, and more seriously the OLS standard errors will be invalid. The GLS estimator (also called the random effect estimator) involves estimating the following transformed model by OLS. This random outcome is a function of a mean value plus a random error. Error term of the cross sectional unit (in our case is countries selected) must be uncorrelated with the error of the variables used in the model.

The fixed effects model which also known as the Least Square Dummy Variable Model - LSDV refers to model that have a constant slope but different intercept based on cross sectional unit such as different years as being used in this study. In fixed effect model, the test will be used is Hausman test, which the Ho: Cov( \( \lambda \),X) = 0 is random effect and H1: Cov( \( \lambda \),X) \( \neq 0 \) is fixed effect. If the test of Hausman is significant and reject hypothesis no, so this study will be used the fixed effect model. The equation to be estimated in this model is in equation 1.

\[
LTA_t = \alpha_1 + \alpha_2 year_{98} + \alpha_3 year_{99} + \alpha_4 year_{00} + \alpha_5 year_{01} + \alpha_6 year_{02} + \alpha_7 year_{03} + \alpha_8 year_{04} + \alpha_9 year_{05} + \beta_1 LInc_t + \beta_2 LTP_t + \beta_3 LSPIn_t + \beta_4 LSPTH_t + \beta_5 LSPSing_t + \epsilon_t
\]

where:
- \( LTA_t \) - the log of tourist arrivals from the country of origin to Malaysia in year t;
- \( LTP_t \) - the log of tourism price from the country of origin to Malaysia in year t (also been called as tourism price in Malaysia);
- \( LSPIn_t \) - the log of substitute price of country of origin to alternative tourism destination which refers to Indonesia in year t (also been called as tourism price in Indonesia);
- \( LSPTH_t \) - the log of substitute price of country of origin to alternative tourism destination which refers to Thailand in year t (also been called as tourism price in Thailand);
- \( LSPSing_t \) - the log of substitute price of country of origin to alternative tourism destination which refers to Singapore in year t (also been called as tourism price in Singapore);
- \( LInc_t \) - the log of per capita income of country of origin in year t;
- \( \beta_1... \beta_5 \) - coefficient to be estimated;
- \( \alpha_1... \alpha_7 \) - year-specific effects respectively; and
- \( \epsilon_t \) - the error term

In this study a panel data set of the seven countries from the Middle East market were selected for Malaysian tourism demand namely Jordan, Kuwait, Oman, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Egypt. Selection of these countries was based on their importance to Malaysian tourism industry.
Panel data/analysis have been chosen since the pool time-series/cross-section data set with seven most important markets as the observational units increase the range variation of variables because there are differences across countries in demographical and income characteristic. Furthermore, it will increase the degrees of freedom (n=56) as compared to the time series or cross-sectional data only since the time periods of the study is limited from 1998-2005. It also can control for omitted variable bias, give more data information and reduce the multicollinearity effects and hence will lead to the accuracy coefficient estimations (Hsiao, 2003 and Munoz, 2006). Panel analysis also allows for dynamic specification.

The arrivals of Middle East tourist to Malaysia have been collected from the Yearbook of Tourism Statistics, World Tourism Organization 2007 edition, while the other variables from International Financial Statistics (IFS), and World Bank (World Development Indicator, 2008).

5. Empirical Results And Policy Implication

For empirical results, equation 1 is estimated all three methods using the panel data analysis. Detailed results are reported in Table 3. From the table column 2 presents the pooled data using OLS method, column 4 reports the results of the Fixed Effects or LSDV estimation and each year to look the effect for arrival from Middle East to Malaysia in this study is used as individual dummies. Through this procedure the structural difference of the countries and year studied will be captured in the constant term. Column 3 shows the results of the random effects estimation utilizing GLS method which assumed difference in structure of the year to be stochastic.

Overall results are considered fairly good. All three alternative methods have similar signs and consistent with the demand theory and fulfill the statistical requirements. Utilizing Redundant test, Random Effects estimation is better than the OLS estimation or Pool effects estimation. Using the Hausman Test, Fixed Effects estimation is found to be better than Random Effects estimation. In Hausman test which the Chi² is significant at 95% confident level thus Ho is rejected and fixed effect model will be accept in this study. Thus the Fixed Effects model can be considered as the best model. Using the Bruesh Pagen (BG) test Random Effects estimation is free from problem of serial autocorrelation. However, its explanatory variable (R²) is slightly lower (R² = 0.53) than the Fixed Effects (LSDV) method (R² = 0.72).

Many variables in this study are important to explain the importance factors that influence the tourist arrivals from Middle East to Malaysia. The variables are used in this study are income per-capita, tourism price, substitutes price from Indonesia, Thailand and Singapore. All variables are consistent with the demand theory except tourism price which is has a positive sign.

The coefficients of income per-capita (LInc) and Substitute Price of Indonesia (LSpIn) variables in Fixed Effects model are statistically significant at 90 percent confident level. The sign of the coefficients are consistent with the demand theory. For example tourist’s income (LInc) has a positive effect to their arrival to Malaysia. In term of value, for every 10 percent increase in their income, total arrivals will be increased by 50.5 percent. Theoretically, Malaysian destination is regarded as a luxurious destination by the Middle East tourists. In this regards promotional efforts must be increased in order to expose to these tourists Malaysia as their alternative traveling destinations.

Expenses during their visiting in Malaysia (LTP) in the table show have positive sign. The LTP variables suppose to be having negative sign. But in this case, LTP is not important variables other than LInc and LSpIn variables.
Table 2: Estimation Results of Panel Data Analysis

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Pooled (OLS)</th>
<th>Random Effects (EGLS)</th>
<th>Fixed Effects (LSDV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-14.65</td>
<td>-15.21</td>
<td>-54.71</td>
</tr>
<tr>
<td></td>
<td>(-2.06)</td>
<td>(-2.43)</td>
<td>(-3.43)</td>
</tr>
<tr>
<td>D4-2001</td>
<td></td>
<td></td>
<td>1.74**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3.65)</td>
</tr>
<tr>
<td>D5-2002</td>
<td></td>
<td></td>
<td>1.52**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(4.72)</td>
</tr>
<tr>
<td>D6-2003</td>
<td></td>
<td></td>
<td>0.91**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.48)</td>
</tr>
<tr>
<td>D7-2004</td>
<td></td>
<td></td>
<td>0.69**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.82)</td>
</tr>
<tr>
<td>Linc</td>
<td>0.70**</td>
<td>0.36</td>
<td>5.05**</td>
</tr>
<tr>
<td></td>
<td>(3.99)</td>
<td>(0.82)</td>
<td>(2.23)</td>
</tr>
<tr>
<td>LTP</td>
<td>8.33</td>
<td>8.97**</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>(1.54)</td>
<td>(2.04)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>LSPIn</td>
<td>-0.97</td>
<td>-0.98</td>
<td>5.50*</td>
</tr>
<tr>
<td></td>
<td>(-0.37)</td>
<td>(-0.47)</td>
<td>(1.89)</td>
</tr>
<tr>
<td>LSTh</td>
<td>6.69</td>
<td>6.87</td>
<td>-9.22</td>
</tr>
<tr>
<td></td>
<td>(1.19)</td>
<td>(1.53)</td>
<td>(-1.39)</td>
</tr>
<tr>
<td>LSpSing</td>
<td>-14.49**</td>
<td>-14.90**</td>
<td>5.08</td>
</tr>
<tr>
<td></td>
<td>(-2.12)</td>
<td>(-2.69)</td>
<td>(0.73)</td>
</tr>
<tr>
<td>R²</td>
<td>0.58</td>
<td>0.53</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Note: Cross-section weights (PCSE) standard error & covariance corrected

Another important variables are the alternative destinations like Indonesia (LSPIn), Singapore (LSPSing) and Thailand (LSPTh). In this research Indonesia is a substitute destination to Malaysia and thus can be considered as a rival destination to Malaysia. The result has shown that Indonesia is found to be a strong competitor market to Malaysian tourism. For every 10 percent decrease in cost of visiting to Indonesia, Malaysia will be losing about 55.0 percent of total tourist arrivals from Middle East. To these tourists, Malaysia and Indonesia are substitute destinations. The same with Singapore, for every 10 percent increase in cost of visiting to Singapore, Malaysia will be gaining about 50.8 percent of total tourist arrival from Middle East. Thailand and Malaysia are found to be supplementary destinations because Thailand near with Malaysia. However, substitute prices for Singapore and Thailand are not statistically significant.

The importance of all dummies from 1998 to 2005 had been tested but only year 2001 until 2004 are significant in this study. One of the interesting results in this study is the effect of September 11 incidence. The dummies show the effect of September 11 is dummy 4 and dummy 5. As expected this incidence did give a positive impact on the flow of Middle East tourists to Malaysia. The result is statistically significant at 5% significant level. In this study all dummies are significant in 5% significant level and have the positive sign. Thus this study
has one way effect because only dummies year significant in 95% confident level. Join test in Table 2 shows that the dummies year are significant and reject Ho in 95% confident level.

With regard to policy implications this study would suggest that all the stakeholders in tourism industry whether the government or private sectors must work hand in hand to ensure that cost of visiting Malaysia must be reasonable and competitive with its neighborhood destinations particularly Indonesia. Therefore, the government must always monitor the pricing system in related sectors that provide services to tourists. Since the income elasticity of tourism demand is elastic, service providers must provide excellent service and diversify tourism products especially Islamic products to attract more Middle East tourist as we know when their income increase more Middle East tourists will be coming to this country. Because of Indonesia and Malaysia are substitute destinations, any price increases in Malaysia or price decreases in Indonesia would penalize heavily Malaysia in terms of receiving less inbound tourists especially from the Middle East.

6. Conclusion

The major purpose of the study is to identify and estimate factors that influencing tourists from the Middle East to visit Malaysia. This study has to employ the panel data analysis in order to avoid the problem of getting sufficient time series data besides it has several advantages. In general the estimated results are quite good which is consistent with the demand theory and satisfying the statistical requirements. Among the important findings are the tragedy of September 11 is an important variable that promote the incoming of Middle East tourist to Malaysia. Changes in cost of traveling in Malaysia would have significant impact on the inbound tourists to this country. The Middle East tourists consider Malaysia and Indonesia as substitute destinations. In order to make Middle East market as a dominant contributor to the inbound tourists to Malaysia, measures must be taken to make Malaysia is worth for money and a safe tourist destination.

References


The Impact of September 11th on the Arrival of Middle East Tourists to Malaysia


