# ANALYSIS OF CONSUMPTION AND DEMAND OF INTERNATIONAL VISITORS TO INDONESIA (FROM SELECTED COUNTRIES)

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## INTRODUCTION

- The growth of international tourist
- Indonesia shows increasing growth in inbound tourist
- The natural and cultural rich of Indonesia
- The contribution of inbound/international tourist to Indonesia Economy
- The fluctuation of inbound tourist to Indonesia

### LITERATURE STUDY

Medlik (1980); main factors influence tourism demand:

Price, Income, Social Culture, Social and Politic, Intensity of Family, Price of substitution goods, price of competitor.

Jacson (1989); factors from origin country:

Population, dis-possible income, leisure time, transportation system, marketing system.

Adi Lumaksono (2012); tourism demand also influenced by the previous arrival.

### RELATED STUDY

M. Abbas M. Ali Ibrahim: The Determinant of International Tourism Demand for Egypt: Panel Data Evidence (2010), conclude that income, price, trade openness, and special factors as an independent variable in investigating the factors that influence the tourist arrival in Egypt

Fatema Tohidy Ardahaey, et all, in Factors Affecting the Development of Tourism Industry in Iran, including the security, citizen participation, media and tourism, and information technology and tourism, in examine the factor that support the development of Tourism Industry.

**Aswad Kusni**, et all; in *International Tourism Demand in Malaysia by Tourist from OECD countries: A Panel Data Econometrics Analysis* (2010); concluding that the relative price, substitution country, SARS epidemic, global economic crisis, as independent variables that influence the demand for tourism in Malaysia.

### **RELATED STUDY**

(continued)

Australian Government, Tourism Research Australia in Factors Affecting the Inbound Tourism Sector, the impact and implication of the Australia Dollar (2011); covering the income, relative price, and air capacity in analysing the factors that influence inbound tourism in Australia, particularly in investigating the volatility of exchange rate (Australian Dollar).

Moh. Hafidz M. Hanafiah, et all, in Tourism Demand in Malaysia: A Cross Sectional Pool Time Series Analysis (2010),; including the income, inflation, population rate, and short haul destination, economic crisis, as independent variables in analysing tourism demand in Malaysia

### **METHODOLOGY**

Descriptive analysis; Passenger Exit Survey (PES) 2013

Multiple Regression Analysis

$$InTA_t = \beta_0 + \beta_1 InTA_{t-1} + \beta_2 InGDP_t + \beta_3 InPOP_t + \beta_4 InTRP_t + D_1 + D_2$$

### Where:

 $TA_{t}$  = Number of tourism arrival to Indonesia in year t

 $\uparrow \uparrow -1$  = Number of tourism arrival to Indonesia in year t-1

 $GDP_{\dagger}$  = Real GDP of origin country in year t

 $POP_{\dagger}$  = Population of origin country in year t

 $TRP_{\dagger}$  = Relative price of tourism in year t

 $D_1$  = Dummy variable of Bali Bomb

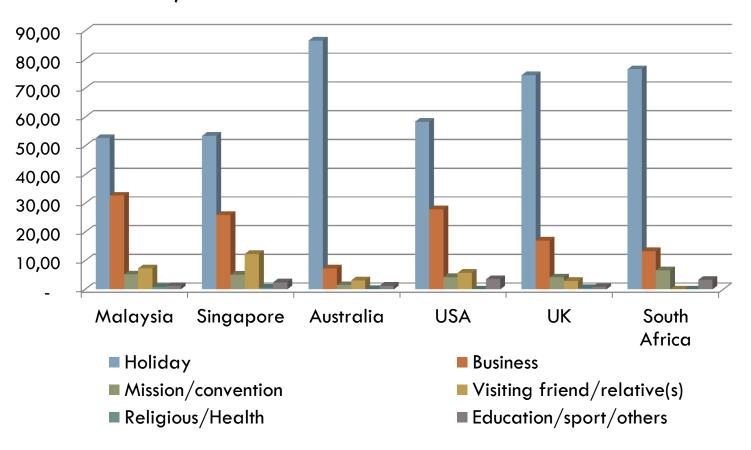
 $D_{2}$  = Dummy variable of economic crisis

### **HYPOTHESIS**

- The lag of number of tourist arrival, population, income (GDP), price, economic crisis and Bali Bomb are in together significantly influence the total arrival from those six countries in 1990-2012.
- Lag of number of tourist arrival, population, and income (GDP) of origin country are partially has positive influence and significant to the total arrival of tourist from those six countries during 1990-2012.
- 3. Price, crisis economic, and Bali Bomb are partially has negative influence and significant to total arrival of tourist from those six countries during 1990-2012.

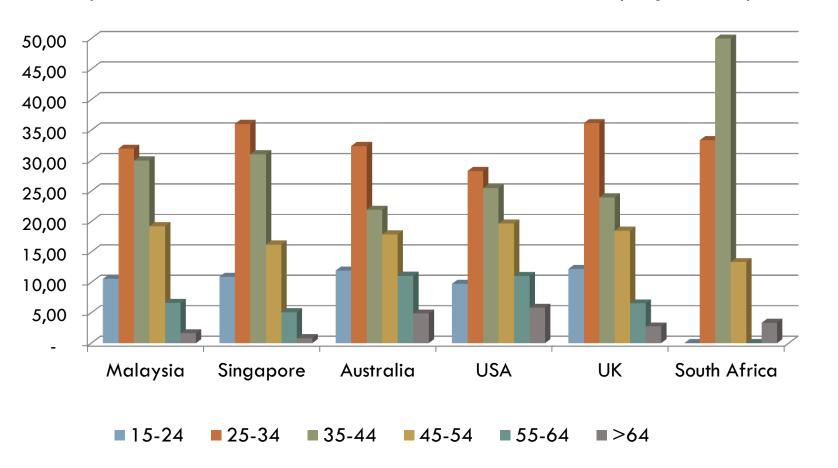
### 1. Profile of Inbound Tourist from Six Selected Countries (1)

Graph 1. Distribution of Inbound Tourist from Six Countries by Purpose of Visit, 2013



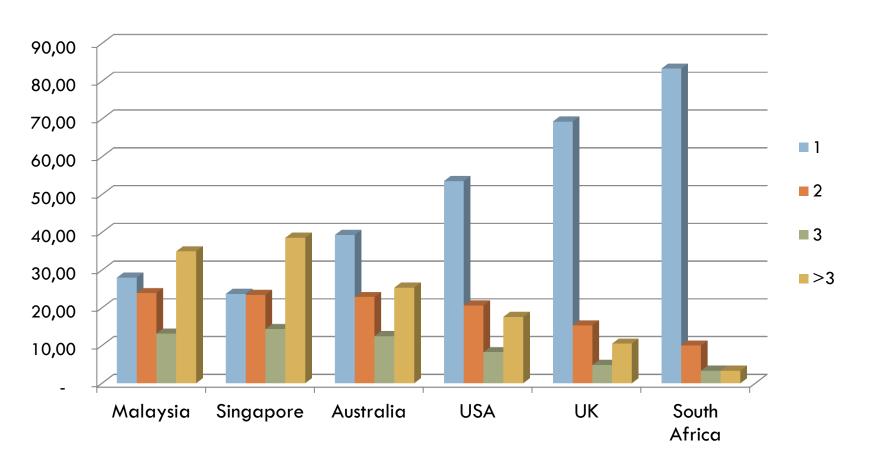
### 1. Profile of Inbound Tourist from Six Selected Countries (2)

Graph 2.Distribution of Inbound Tourist from Six Countries by Aged Group, 2013



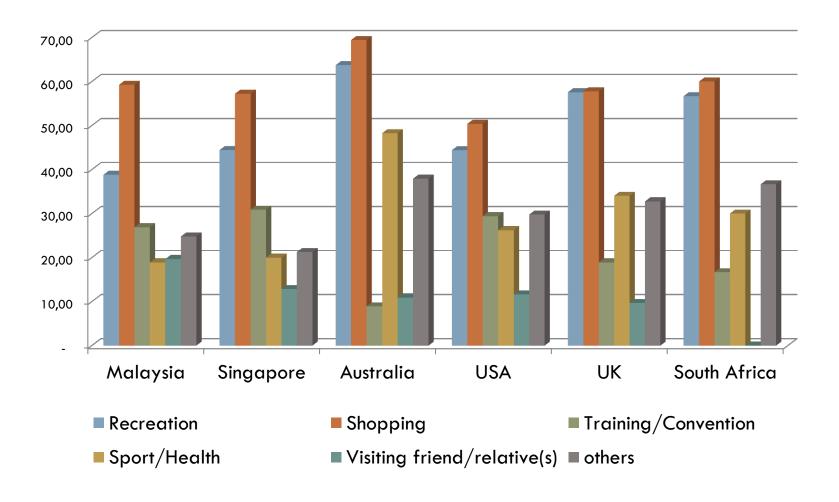
### 1. Profile of Inbound Tourist from Six Selected Countries (3)

Graph 3. Distribution of Inbound Tourist from Six Countries by Frequency of Visit, 2013



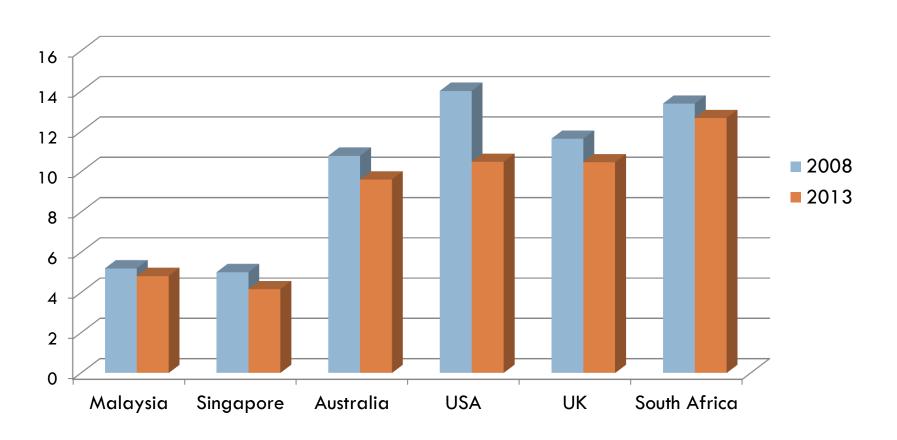
### 1. Profile of Inbound Tourist from Six Selected Countries (4)

Graph 4. Distribution of Inbound Tourist from Six Countries by Activity, 2013



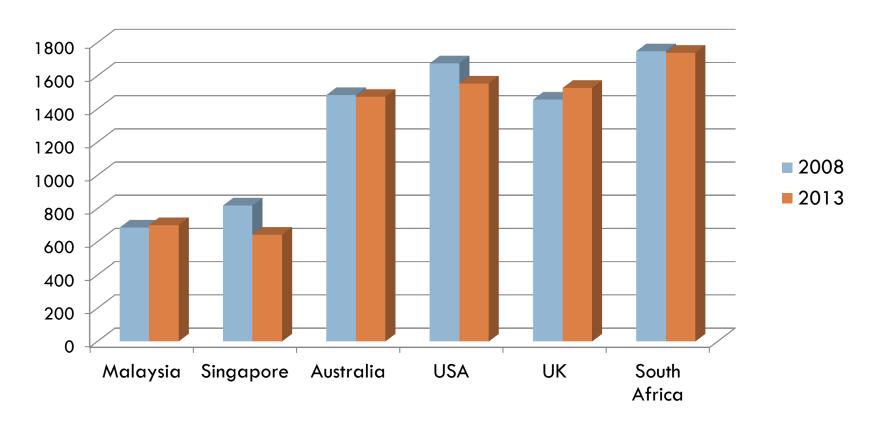
### 1. Profile of Inbound Tourist from Six Selected Countries (5)

Graph 5. Average length of Stay of Inbound Tourist from Six Countries (days),



### 1. Profile of Inbound Tourist from Six Selected Countries (6)

Graph 6. Average Expenditure per Visit of Inbound Tourist from Six Countries (US\$)



2. Factors influence demand of international/inbound tourist (Multiple Regression Analysis)



$$ln(TA_t) = 2.517 + 0.824 lnTA_{(t-1)} -0.104 ln (PR_t)$$
  
 $R^2 = 0.90$  DW = 2.39

the demand of tourist arrival from Singapore is significantly influenced by the arrival<sub>(t-1)</sub> and the price. The interpretation of the result is: the increasing of 1 percent of the arrival<sub>(t-1)</sub>, it will increase the tourist arrival by 0.82 percent. And the increase of 1 percent in price, it will decrease the arrival by 0.1 percent (by using  $\alpha = 10$  %). However, if we use  $\alpha = 5$  %, that usually statistician recommended, the tourist arrival from Singapore is only influenced by the arrival in year before.

# B. Malaysia



$$ln (TA_t) = 0.09 - 0.55 ln TA_{(t-1)} - 0.24 ln (PR_t)$$
  
 $R^2 = 0.43$  DW = 2.059

the tourist arrival from Malaysia is also influenced by the arrival (t-1) and price. The  $R^2$ in this equation is quite small, but it can be used in this model because  $R^2$  doesn't always reflect the best model. The economic sense is also influence the model. For variable lag of total arrival, the sign is negative, which is not fit with the hypothesis

### C. Australia



In 
$$(TA_t) = 0.20 - 0.51 D_1(Bali Bomb)$$
  
 $R^2 = 0.43$  DW = 2.05

Australia tourist is also the potential market for Indonesia. Most of them are visiting Bali every year. And the number of them keep increasing in the last five years. From the model, it can be said that during the period, the demand of Australia tourist is much influenced by Bali Bomb. The tragedy of Bali bomb, in October 2002 and October 2005, was very shocked Australian. The number of visitor decreased significantly after that.

# D. United State of America (USA)

 $Ln(TA_t) = 5.33 + 0.56 ln TA_{(t-1)} - 0.27 D_1 (Bali Bomb)$ 



Almost similar to Australian, the model for demand of America tourist is influenced by lag of arrival and tragedy Bali Bomb. The tragedy was really made a deep hurtful to their memory. The America visitors arrival decreased significantly after the bomb, due to their traumatic after their experienced of Wall Trade Center Street Bomb tragedy in America in 2001.

# E. United Kingdom



Interestingly it is found that for UK visitor model, Bali Bomb tragedy is the only variable that significantly influence their demand. The other variables like lag of visitors, price, and number of population do not significantly influence their demand.

### F. South Africa



Ln (TA<sub>t</sub>)= 
$$0.665 + 0.665 \ln TA_{(t-1)} + 0.622 \ln (PR)$$
  
 $R^2 = 0.74$  DW = 1.99

For African, particularly them from South Africa, the lag arrival and price are variables that influenced their demand to visit Indonesia. The long distance from Indonesia makes them should prepare well in advanced before leaving, particularly for the money they have to spend.

### CONCLUSION

- Most of the tourist from those six countries came for holiday, followed by business.
- The distance of the country affect the length of stay and average expenditure of the tourist.
- Visitors from those countries were dominated by 25-34 aged group.
- The variables influence the demand for each country are vary among them.
- The arrival in year before and price are variables that influence demand of Singapore, Malaysia and South Africa demand for visiting Indonesia.
- For Australia, America, and United Kingdom, the political and safety were the main variables that influence their demand.

