



Faculty of Economics and Business

FACTORS INFLUENCING DEMAND FOR INTERNATIONAL TOURISM IN MALAYSIA BY SINGAPOREAN TOURISTS

Chong Boon Chiew

Bachelor of Economics with Honours
(Industrial Economics)
2009

Statement of Originality

The work described in this Final Year Project, entitled
**“Factors Influencing Demand for International Tourism in Malaysia by
Singaporean Tourists”**
is to the best of the author’s knowledge that of the author except
where due reference is made.

(Date submitted)

Chong Boon Chiew
16096

**FACTORS INFLUENCING DEMAND FOR INTERNATIONAL TOURISM
IN MALAYSIA BY SINGAPOREAN TOURISTS**

CHONG BOON CHIEW

This project is submitted in partial fulfillment of
the requirements for the degree of Bachelor of Economics with Honours
(Industrial Economics)

Faculty of Economics and Business
UNIVERSITI MALAYSIA SARAWAK
2009

ABSTRACT

FACTORS INFLUENCING DEMAND FOR INTERNATIONAL TOURISM IN MALAYSIA BY SINGAPOREAN TOURISTS

By

Chong Boon Chiew

After the recent economic crises, Malaysia tourism has become a major export industry. Tourists from Singapore represent more than 50 percent of international tourist arrivals to Malaysia from year 1998 to 2007 (Tourism Malaysia, 2008). Therefore, it is essential to consider the factors influencing international tourism demand for Malaysia by Singaporeans. The study sets out to investigate the causal relationships between the number of Singaporean arrivals with income, transportation cost, exchange rate, consumer price index and seasonality celebration using quarterly data from period of 1998 to 2006. The results show that exchange rate, transportation cost, consumer price index and Chinese New Year season are statistically significant. The influences are theoretically consistent. The additional purpose of the study is to estimate the elasticities for income, relative price, and price of inbound tourism from Singapore to Malaysia. The results show that tourism in Malaysia is price elastic, tourism products and services in Malaysia are considered as a substitute to tourism products in other countries in the ASEAN region, and it is a luxury good to the Singaporeans.

ABSTRAK

FAKTOR-FAKTOR YANG MEMPENGARUHI PERMINTAAN UNTUK PERLANCONGAN ANTARABANGSA DALAM MALAYSIA DARIPADA PELANCONG SINGAPURA

Oleh

Chong Boon Chiew

Selepas berlaku krisis ekonomi, pelancongan di Malaysia menjadi industri eksport utama. Pelancong-pelancong dari Singapura adalah melebihi 50 peratus daripada keseluruhan ketibaan pelancong antarabangsa ke Malaysia dari tahun 1998 hingga 2007 (Pelancongan Malaysia, 2008). Dengan ini, kajian tentang faktor-faktor yang mempengaruhi permintaan pelancongan antarabangsa dari Singapura ke Malaysia dijalankan. Kajian ini dibuat untuk menyelidik hubungan sebab akibat antara bilangan ketibaan pelancong dengan pendapatan, kos pengangkutan, kadar pertukaran, indek harga pengguna dan musim perayaan dengan menggunakan data suku tahunan dalam tempoh 1998 hingga 2006. Keputusan menunjukkan bahawa kadar pertukaran, kos pengangkutan, indek harga pengguna dan musim tahun baru cina mempunyai perangkaan yang penting. Secara teorinya, pengaruh-pengaruh adalah konsisten. Tujuan lain kajian ini dibuat adalah untuk menjangka keanjalan bagi pendapatan, harga relatif dan harga pelancongan dari Singapura ke Malaysia. Keputusan menunjukkan bahawa pelancongan di Malaysia adalah anjal harga, barangan dan perkhidmatan pelancongan di Malaysia dianggap sebagai pengganti bagi Negara-negara ASEAN, dan ia adalah barangan mewah bagi orang Singapura.

ACKNOWLEDGEMENT

First of all, I would like to express my sincere appreciation and thoughtful thanks to several people who have provided essential comments with valuable suggestion to the accomplishment of this study.

Special thanks to my supervisor, Professor Dr. Ahmad Bin Shuib, for his invaluable inputs and information, practical advises, clear guidance, steady support and helpful explanation throughout the course of this study. Beside that, I would like to grateful to my supervisor in patiently enlightenment about Statistical Package for the Social Sciences (SPSS) software and the helpful comments to complete my study.

Besides that, I also would like to thankfulness to my family members for their valuable recommendations and continuous moral support for this period. It is a pleasure to acknowledge the aid and encouragement I have received throughout the research of this study from my friends and classmates, Chang Tze Kuch, Phang Siew Mui, Lee Chee Moi, Pang Shwu Fen and Kon Thian Ling. In addition, special thanks to all the reviewers who read and offered suggestion about this study.

Finally, I would like to extend my thanks to all the lecturers and staffs of the Faculty of Economics and Business (FEB), UNIMAS, in the contribution to the success towards this study.

TABLE OF CONTENTS

List of Tables.....	x
List of Figures.....	xi

CHAPTER ONE: INTRODUCTION

1.0 Background.....	1
1.1 Theoretical Framework.....	4
1.2 Problem Statement.....	8
1.3 Objectives.....	10
1.4 Significance of the Study.....	10
1.5 Limitation of the Study.....	12

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction.....	13
2.1 Factors that Influence the Demand of International Tourism.....	14

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction.....	22
3.1 Model of Research.....	22
3.2 Research Design.....	24
3.2.1 Data Collection.....	25
3.2.2 Regression Analysis.....	26

3.2.3 Specification of the Model.....	27
3.3 Goodness of Fit.....	31
3.4 Hypothesis Testing.....	32
3.4.1 F-test.....	33
3.4.2 t-test.....	34
3.5 Spearman Correlation Analysis.....	35
 CHAPTER FOUR: RESULTS AND DISCUSSION	
4.0 Introduction.....	37
4.1 Descriptive Statistics.....	38
4.2 Multiple Regression Analysis.....	39
4.2.1 Multiple Coefficient of Determination (R^2).....	39
4.2.2 F-test.....	40
4.2.3 t-test.....	41
4.3 Spearman Correlation Analysis.....	48
 CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS	
5.0 Introduction.....	49
5.1 Summary of Study.....	49
5.2 Policy Recommendations.....	51
5.3 Limitations and Recommendations of the Study.....	52
 REFERENCES.....	 53

APPENDICES

Appendix A: Multiple Regression Result

Appendix B: Partial Regression Plot

- (i) Arrivals and Income
- (ii) Arrivals and Transportation cost
- (iii) Arrivals and Consumer Price Index
- (iv) Arrivals and Exchange rate
- (v) Arrivals and Chinese new year
- (vi) Arrivals and Hari Raya Puasa
- (vii) Arrivals and Christmas

Appendix C: Estimated Research Budget

Appendix D: Working Schedule

LIST OF TABLES

Table 1: Statistics on Tourist Arrivals to Malaysia from year 1998 to 2007.....	2
Table 2: Change in Tourist Arrivals and Tourist Receipts from Singapore to Malaysia from year 1998 to 2007.....	8
Table 3: Descriptive Statistics.....	38
Table 4: Correlation Matrix.....	48

LIST OF FIGURES

Figure 1: The Theoretical Framework of Demand for International Tourism in Malaysia.....	7
Figure 2: Model of the Study.....	22

CHAPTER ONE

INTRODUCTION

1.0 Background

International tourism is defined as activities involving persons travelling to and staying at places out of their usual permanent places of residence for less than one consecutive year for leisure, business or other purposes, which are not related to any exercise from which remuneration are received within the place visited (World Tourism Organisation, 1994). The tourism industry comprises of direct and indirect socio-economic activities involved in providing goods and services to tourists such as transportation, accommodation, recreation, business, education, leisure, food and beverages and others factors that constitute hospitality industry. Though tourism has existed since the ancient days, it has now become an extremely popular and global activity, and it is predicted to be in high potential growth in the future.

With the increased demand, this industry has potential to double up its contribution to the World Gross Domestic Product (GDP). Besides, the industry will indirectly increase visitors export, capital investment, and at the same time, it can also act as a receiver and a generator for governmental fund. According to the estimation of World Tourism Organizations (WTO), between the years of 1950 and 2004, the number of international arrivals has grown from 25 million to 760 million, corresponding to an average annual growth rate of 6.6 percent. The revenues generated by those tourists grew by 11 percent per annum over the same period (from US\$ 2 billion in 1950 to US\$ 623 billion in 2004). This rate of growth far

outstrips that of the world economy as a whole and makes international tourism one of the largest categories of international trade. For year 2007, the international arrivals reached a new record figure, close to 898 million, which is an expansion of around 6 percent in contrast to a 52 million increase in arrivals in 2006. The prospects for international arrivals in 2008 are positive and forecasted to reach over 1.5 billion in 2020.

Table 1: Statistics on Tourist arrivals to Malaysia from year 1998 to 2007

Year	Total Tourist Arrivals (million)	Tourist Arrivals from Singapore	Percentages of Singapore tourist arrivals compare to total tourist arrivals (%)	Total Receipts (RM million)	Total Receipts for tourist arrivals from Singapore (RM million)
1998	5.5	3,007,666	54.7	8,580.5	4,692.23
1999	7.9	4,900,084	62.0	12,321.2	7,642.39
2000	10.2	5,420,200	53.2	17,335.4	9,211.90
2001	12.7	6,951,594	54.7	24,221.5	13,258.11
2002	13.2	7,547,761	57.2	25,781.1	14,741.64
2003	10.5	5,922,306	56.4	21,291.1	12,008.80
2004	15.7	9,520,306	60.6	29,651.4	17,980.28
2005	16.4	9,634,506	58.7	31,954.1	18,772.07
2006	17.5	9,656,251	55.2	36,271.1	20,013.88
2007	20.9	10,492,692	50.2	46,070.0	23,129.11

Source: Tourism Malaysia (2008).

In Malaysia, the international arrivals increased about 20 percent from year 2000 and currently tourism in Malaysia accounts for 7 percent of Malaysia's economy (Multilingual GPS Tours & Tourism Marketing Blog, 2008). From Table 1, it is clear that the total tourist arrivals to Malaysia increase from 5.5 million in year 1998 to 20.9 million in years 2007. On the other hand, the total receipts from

the tourist arrivals increased about RM 37,489.5 million from year 1998 (RM 8,580.5 million) to 2007 (RM 46,070 million). However, the total arrivals and receipts are not rising in continuous stage. In year 2003, the arrivals and receipts had decreased following the United States - Iraq war, the Severe Acute Respiratory Syndrome (SARS) and natural disasters that happened. According to Table 1, after the 2003 crisis, the number of tourist arrivals is increasing. In accordance with Tourism Malaysia, Singaporeans were the highest contributors to Malaysia tourism industry. It accounts for about half of the total tourist arrivals to Malaysia.

The factors that influence international tourists to visit Malaysia can be divided into three parts consisting of emission factors, attraction factors and resistance factors. The emission factors include per capita income, distribution of income, educational distribution, age distribution and time destined for leisure. Special events, climate, marketing programs and promotion of the destination and habits comprise the attraction factors. As for the resistance factors, they consist of prices, trip time, wars, terrorism, crime (insecurity) and possibility of natural disasters (Cruz & Rolim, 2006).

The increasing number of tourists visiting Malaysia has resulted in strong development of resorts and other tourist facilities. Apart from that, the tourism industry has allowed the economy to diversify its sources of foreign exchange while increasing domestic employment and generating foreign direct investment. The growth of tourism has also assisted in improving the standard of living for many Malaysian citizens and also generating a favourable image of Malaysia as a tourist destination but also as a secure and sound investment opportunity. Other than that, the tourism industry in Malaysia has created employment opportunities,

entrepreneurship, and regional development, generates foreign exchange, and integrates a culturally divided nation (Chon *et al.*, 1997). From the Singaporean and Malaysian perspectives, tourism has increased the number of collaborative tourist packages by Singapore and Malaysia through the establishment of the Malaysia-Singapore Tourism Council. As a whole, tourism has impacted the economy, the natural and built environment, the local population in Malaysia, and also the visitors themselves. Therefore, it is necessary to have good marketing strategies and inter-institutional relationship, efficiency and effectiveness of management decisions, and the measurement of tourism throughout the national economy.

1.1 Theoretical framework

The purpose of this research is to investigate the demand of international tourism from Singapore to Malaysia and provide empirical evidence about the factors influencing the tourists on deciding where to travel. The demand theory uses the situational approach to explore in-depth demand of international tourism from Singapore to Malaysia. This framework provides the means of relating tourism to the total economy from the national and international point of view. Other than that, the framework also provides in depth understanding by which the economic aspects can be analyzed separately within the structure such as the individual personality, perceptual bias for an individual, transportation cost, information about tourism package, population growth and inhibitors to travelling as shown in Figure 1.

When deciding which place to travel to, individual personality is influenced by elements such as intention, attitudes, attention and comprehension (Mill & Marrison, 1992). Intention means tourists plan on desired places to travel to. This behaviour can help them to decide on the final place that he or she wants to travel to. Attitude is the way that tourists think and feel towards the place where they decide to have their vacation while attention shows the interest of tourists in travelling. The last element is comprehension, which is the ability of tourists to understand the package offered. This factor is related with the perceptual bias of an individual by the sensitivity of the tourist when deciding places to travel to.

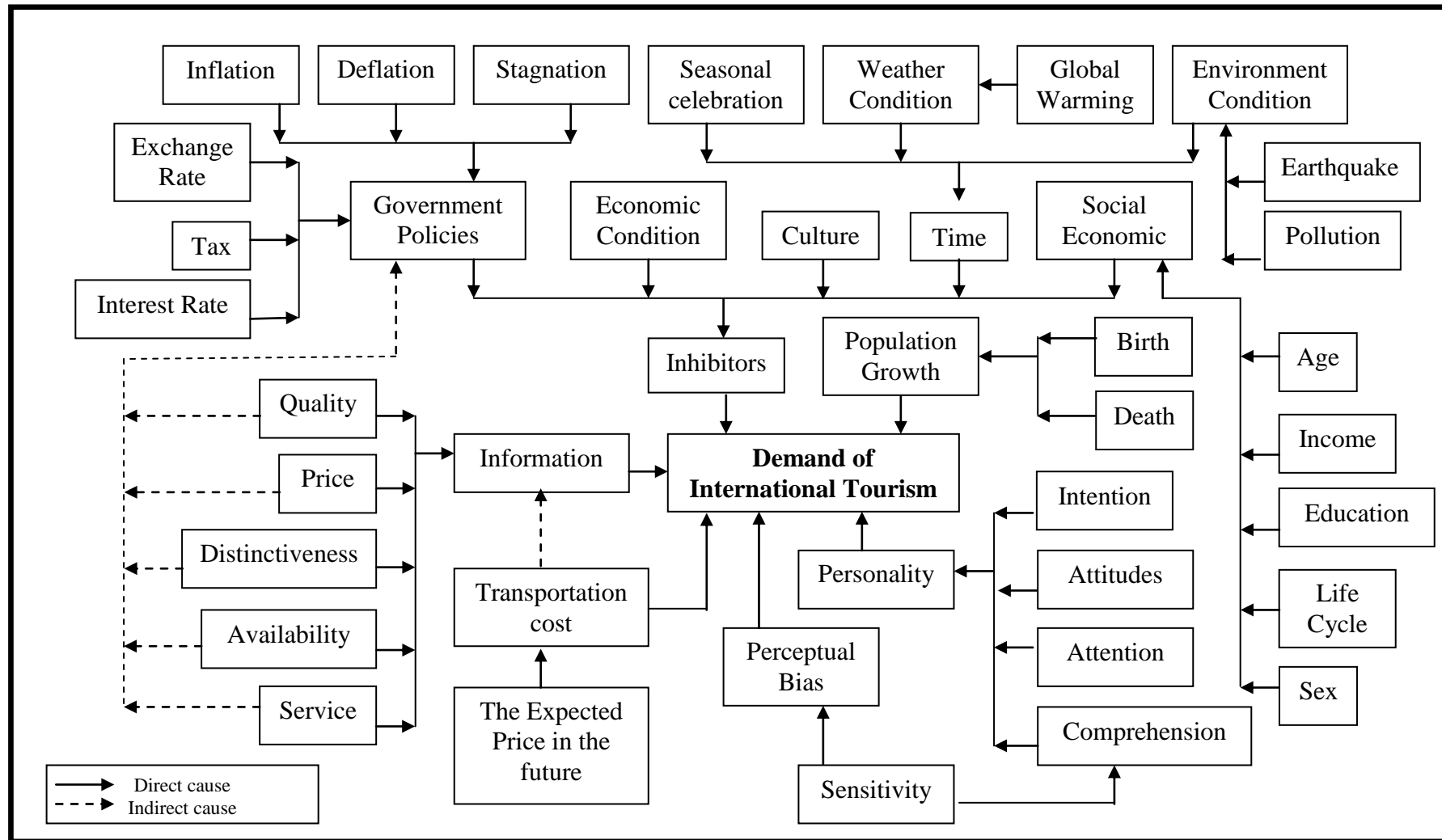
Information about tourism package is important for tourists to determine which destination that is suitable for them to travel to. The components of the information generally include quality, price, distinctiveness, availability and service offered. Quality means the standard of the tourism package for a country compared with other countries, either it is high or low. Price refers to the monetary amount needed to be paid in the travelling activity, and distinctiveness means the uniqueness of the package offered to the tourists. Ability and service point to the availability of the packages and, tangible and intangible facilities provided to tourists. Transportation cost is also an important factor as when tourists have full information on transportation cost; tourists are able to forecast the expected price of tickets in the future.

The population growth of the origin country or targeted destination country is also an important effect on the demand of international tourism. Population is a function of birth and death of the citizens of a country. There are many inhibitors for tourists to travel to a destination such as government policies, economic conditions,

culture, time and social economic factors. Government policies that may affect tourism include regulation, exchange rate, tax and interest rates; and economic condition such as inflation, deflation and stagnation may also affect the industry.

Culture is the way of life such as the customs and belief, art and social organization of a particular country or group. The time factor is also important as seasonal celebrations, weather conditions and environmental conditions are important elements for tourists to put in their consideration. For example, if a country is facing global warming or threats of an earthquake, tourists demand will decrease because tourists are worried about their safety. Socio-economic conditions have also important implications in tourists' decision of destination as travel pattern will also be affected by age, income, education, life cycle and sex.

Figure 1: The theoretical framework of demand for international tourism in Malaysia



Source: Adapted from Mill and Marrison (1992)

1.2 Problem Statement

Since Tourist Development Corporation of Malaysia (TDC) established in year 1972, Malaysia experienced a full-fledged effort in tourism industry. Malaysia tourism industry has grown importance and spreading its wing to the international level under the efforts of TDC. Over the years, the patterns of tourist flow into Malaysia have had a huge impact on its economy and Gross Domestic Product (GDP). Table 2 below shows the evidence of inconsistent tourist arrivals from Singapore to Malaysia from year 1998 to 2007.

Table 2: Change in tourist arrivals and tourist receipts from Singapore to Malaysia, 1998-2007.

Year	Total Tourist Arrivals from Singapore	The Changes of Tourist Arrivals from Singapore	Total Receipts for tourist arrivals from Singapore (RM million)	The Changes of Receipts from Singapore (RM million)
1998	3,007,666	-	4,692.23	-
1999	4,900,084	1,892,418	7,642.39	2,950.16
2000	5,420,200	520,116	9,211.90	1,569.51
2001	6,951,594	1,531,394	13,258.11	4,046.21
2002	7,547,761	596,167	14,741.64	1,483.53
2003	5,922,306	-1,625,455	12,008.80	-2,732.84
2004	9,520,306	359,800	17,980.28	5,971.48
2005	9,634,506	114,200	18,772.07	791.79
2006	9,656,251	21,745	20,013.88	1,241.81
2007	10,492,692	836,441	23,129.11	3,115.23

Source: Tourism Malaysia (2008).

Table 2 indicates that arrivals of Singaporeans shown an increased trend. Only in year 2003, the total tourist arrivals reduced by around 1,625,455 people and this reduced the total receipts of Malaysia from the Singaporean tourists to about RM 2,732.84 million. This is due to the safety concerns of tourists following the

emerging of United States - Iraq war, Severe Acute Respiratory Syndrome (SARS) and natural disasters. Therefore, the tourist arrivals and receipts from Singapore from year 1998 to 2007 were unstable.

Factors that may influence the flow of Singaporean tourists into Malaysia may include high oil price and global economic situation. As most Singaporean tourists arrive in Malaysia by buses, cars as well as planes; these vehicles require large amounts of fuel especially plane. Therefore, Singaporeans may be affected by the high transportation costs due to the rise in oil price. This condition may cause the contribution of the tourism sector towards Malaysian Economy to reduce. Global economic situation is also an important factor that determines the number of tourists to Malaysia. The global economic situation will affect exchange rates between Singapore and Malaysia which have a direct effect on the currency rate of the Singapore dollar.

In terms of the demand of tourism, factors that may influence the demand of international tourism from Singapore to Malaysia need to be studied especially the inhibiting factors that may have negative impacts on the industry. Therefore, by carrying out the study using a demand model, it will provide greater insights to the public about the factors that may affect the demand of international tourism from Singapore to Malaysia.

The data for the research come from a few sources such as Tourism Malaysia, Department of statistics Malaysia, MAS: Financial Database, Singapore Department of Statistics, wangsamajuformalaysia.blogspot.com and ASIATravelTips.com. The dependent variable of demand for Singaporean tourists is

represented by arrivals and independent variables for international tourism demand include the income, transportation costs, tourism price, exchange rate and seasonality celebration. The data will be analysed using Ordinary Least Square regression model.

1.3 Objectives

The general objective of this study is to determine the demand of international tourism from Singapore to Malaysia.

Specific objectives of this study are:

- a. to identify the factors that influence the demand of international tourism by Singaporeans
- b. to determine the elasticity of demand for tourism by Singaporeans

1.4 Significance of study

The issue on the demand of international tourism nexus has been debated extensively over the world on its contribution to the economic growth of countries. Malaysia is one of the countries which is involved heavily in international tourism, thus by studying tourist flow from largest tourist arrivals, which is Singaporean tourist flow into Malaysia, Malaysia will have clearer view of the importance of the

tourism industry to its Gross Domestic Product (GDP). Based on the statistics, the tourism industry in Malaysia has contributed about 7 percent of the total economy.

The findings of this study will be valuable in assisting the government, public and also the private sectors to have better understandings in the direction of causal relationship between the determinants of demand for international tourism. This could be used to support the policymakers to formulate better policies and also provide guidance on the choice of preventive or corrective measures which will result in higher levels of economic growth.

Other than that, this study would also improve and provide a clearer view in identifying the direction of the relationship by providing empirical basis to explain the development of the public sector. It would also add a new point of view to the existing studies on relationships of demand in international tourism.

Besides that, the basic exploratory research that is done based on intensive literature review has brought the idea of exploring the possibility to Malaysia to be profoundly developing tourism industry. This study aimed at providing a basic understanding of the composition of international tourism with the intention to provide a comprehensive and a practical result.

This study can be used to overcome the present models for measuring the demand of international tourism and also to generate more accurate results in quantifying tourism as a whole. This would generate an invaluable contribution to the knowledge of the tourism sector to future researchers.

1.5 Limitation of study

This study will use the nine year quarterly data of total tourist arrivals from Singapore to Malaysia ranging from 1998 to 2006. All data are obtained from Tourism Malaysia, Department of statistics Malaysia, MAS: Financial Database, Singapore Department of Statistics, wangsamajuformalaysia.blogspot.com and ASIATravelTips.com. The use of nine years quarterly data is due to the budget constraints. Since the resources used in the study are limited, the sample size or sampling area of country reduced to one country which is Singapore, which provides the highest tourist arrivals into Malaysia. Furthermore, the limitations of time for study also affect the choices of method used to conduct the research, which further influence the finding of the research. The period available to conduct the research is 12 months and all measure of collecting data and analysis are also done during this period.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The demand of international tourism is an interesting and growing issue nowadays in the world. It would be beneficial to everyone in the world if the demand of international tourism can be forecasted. There exist numerous models in the tourism demand literature which employ a variety of methods for estimating and forecasting the demand. Hence, the economic literature on tourism demand shall be briefly reviewed in order to gain new approach or method for future benefit. In addition, the previous study would also help to build up the step for identifying the factors that influence the demand of international tourism and determine its elasticity of demand.

There is a wide variety of models in the tourism literature for estimating tourism demand and forecasting some determinants of tourism demand in the destination country. Advanced econometric techniques have recently been applied but the most important thing before conducting the research is the variables that need to be studied. Therefore, the tourism literature in this chapter is focus on the variables used in the model.