ECONOMIC IMPACT OF TOURIST EXPENDITURE ON TOURISM INDUSTRY IN PENANG

By

CHONG YEE LEE

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirement for the Degree of Doctor of Philosophy

July 2011
ECONOMIC IMPACT OF TOURIST EXPENDITURE ON TOURISM INDUSTRY IN PENANG

By

CHONG YEE LEE

July 2011

Chairman: Sridar a/l Ramachandran, PhD

Faculty: Economics and Management

Dubbed “The Pearl of the Orient,” Penang is a popular tourism destination in Malaysia since the colonial days. The situation has somewhat changed as it is now losing out to other destinations. The local government is aware of the economic contribution of tourism; the contribution composes of (1) direct effect – revenues generated from tourist expenditure and (2) indirect effect – creation of additional output sales and employment for the local community.

However, assessing the indirect economic benefit of tourism is difficult. The collection of the following data is not a simple task for researchers: the amount of tourist expenditure that is received and then spent by tourism establishments. This thesis aims to estimate the direct and indirect effects of tourist expenditure on the tourism sector in Penang. The thesis’s findings can provide policy implication to the local government and guidance to other tourism interests for the development of
tourism.

Most of the published data are not suitable for the analysis of tourism’s economic impact because these data do not segregate the sales of tourism establishments by tourists and local residents. Therefore, two surveys are undertaken: (1) questionnaires are distributed to estimate the tourist respondents’ spending that accrues to the host community. (2) On top of the distribution of questionnaires to selected tourism establishments, observation method is employed to cross-check the estimation of tourist count provided by the tourism establishment respondents. Both quantitative and qualitative data are used to construct two different Input-Output (I-O) tables.

I-O model is used to estimate the proportion of sale revenues of each tourism sector – including the accommodation, food, freight, shopping, entertainment, and miscellaneous sectors – that is used for the purchases of primary inputs (such as wages, dividend, profit, imports and taxes) and intermediate inputs. I-O multipliers are computed to measure the indirect effects generated by tourism establishments’ spending within the local economy. However, the total estimates of output sales and input purchases for each I-O sector are rarely equal. Jensen and McGaurr (henceforth J-M) have recommended the use of “reliability quotients” for the dual estimates. Sahal Lahiri (henceforth SL) suggests that analysts determine the reliability quotients endogenously so that the time costs can be reduced.

Each quantitative and qualitative I-O table is reconciled by both the J-M and SL
methods. The I-O multiplier values produced by quantitative and qualitative data are quite similar. However, the reconciliation methods produce different multiplier values for the same I-O tourism sector. This is because both techniques are using different formulae.

Some of the research empirical findings fit nicely into well-known literature and can be summarized under three empirical patterns: (1) the more developed a tourism destination is, the more tourism and supplies firms will be established within the region’s economy. (2) More tourist expenditure can take place within the region’s economy if the local economic structure is diversified. (3) Though seasonality – implying seasonal increase in labour – is much less of a problem in Penang, the domination by many small scale establishments operated by family members also means that not much job opportunities can be created. Consistent with the literature, the low technical coefficient values show that the linkages between tourism sectors are weak because the supply chain practice by tourism service firms is low in nature.

Expanding the tourism industry in Penang will increase the tourist expenditure within the region’s economy. Attempts should be made to broaden the area’s tourist attractions and to diversify the tourism businesses. As a result, more tourists may come and may also extend their length of stay and therefore spend more money within the local area. To reduce the dependency on imported goods, the shopping establishments need to introduce more locally produced crafts or souvenirs or agricultural products.
KESAN EKONOMI DARI PERBELANJAAN PELANCONG KE ATAS INDUSTRI PELANCONGAN DI PULAU PINANG

Oleh

CHONG YEE LEE

Julai 2011

Pengerusi: Sridar a/l Ramachandran, PhD

Fakulti: Ekonomi dan Pengurusan


Namun, pengukuran kesan faedah ekonomi secara tidak langsung tidak mudah dilakukan. Adalah sukar bagi pihak penyelidik untuk mengumpul data mengenai jumlah pendapatan yang diterima dari pihak pelancong dan kemudian dibelanjakan oleh syarikat pelancongan untuk pembelian input. Sehubungan itu, tesis ini berhasrat untuk mengukur kesan ekonomi secara langsung dan secara tidak langsung hasil dari
perbelanjaan pelancong keatas sektor perlancongan di Pulau Pinang. Penemuan tesis ini dapat memberikan implikasi kepada pihak berkuasa negeri dan sebagai garis panduan kepada pihak yang berminat membuat perancangan polisi bagi sektor perlancongan di Pulau Pinang.

Kebanyakan data yang telah diterbitkan oleh pihak lain adalah tidak sesuai digunakan untuk menganalisis kesan pertumbuhan ekonomi yang dijana oleh industri pelancongan. Ini adalah kerana data sekunder tidak mengasaskan pendapatan syarikat pelancongan yang diterima dari pelancong dan penduduk tempatan. Oleh sebab itu, dua tinjauan telah dijalankan: (1) borang soal selidik diagihkan untuk menghitung jumlah wang perbelanjaan responden pelancong yang telah diterima oleh masyarakat tempatan (2) disamping pengedaran borang soal selidik, kaedah pemerhatian juga dilakukan bagi menyemak anggaran bilangan pelancong berdasarkan maklumat dari responden syarikat pelancongan. Kedua-dua kuantitatif dan kualitatif data akan digunakan untuk membina dua jadual urus niaga Input-Output (I-O).

Jadual I-O menujukkan aliran pendapatan yang diterima daripada jualan output yang dihasilkan oleh setiap sektor pelancongan – iaitu, sektor penginapan, makanan, pengangkutan, perdagangan runcit dan borong, hiburan, dan lain-lain perkhidmatan pelancongan – untuk pembelian input primari (seperti gaji, dividen, keuntungan, import, dan cukai) dan input pertengahan dari sektor-sektor pelancongan. Nilai pengganda I-O dikira untuk mengukur kesan ekonomi secara tidak langsung hasil dari perbelanjaan syarikat pelancongan di Pulau Pinang. Namun, jumlah jualan

Setiap kuantitatif and kualitatif jadual I-O dikemaskini dengan menggunakan cadangan J-M dan SL. Tesis ini mendapati nilai pengganda I-O yang dihasilkan dari data kuantitatif dan kualitatif adalah tidak jauh berbeza. Namun, kedua-dua kaedah pengemaskini tersebut telah menghasilkan nilai pengganda yang berlainan bagi sektor perlancongan yang sama kerana kaedah-kaedah tersebut menggunakan formula yang berbeza.

Keputusan empirikal penyelidikan ini telah dibandingkan dengan sorotan karya melalui tiga aspek: (1) semakin berkembang maju sesebuah destinasi perlancongan, semakin banyak firma perlancongan dan pembekal akan ditubuhkan di dalam sesebuah kawasan ekonomi, (2) pelancong akan membelanjakan sebahagian besar wang mereka di dalam sesebuah kawasan jika struktur ekonomi di kawasan tersebut dapat dipelbagaikan, dan (3) Pulau Pinang dapat menyediakan perkhidmatan perlancongan sepanjang tahun tetapi kadar pertambahan peluang perkerjaan adalah tidak begitu mengalakkan. Ini kerana kebanyakan firma pelancongan di Pulau Pinang diusahakan secara kecil-kecilan dan dibantu oleh ahli keluarga pemilik. Sejajar dengan sorotan karya, sektor-sektor pelancongan di Pulau Penang tidak mempunyai hubung kait yang kuat kerana pada dasarnya, syarikat perkhidmatan tidak memerlukan rangkaian pembekalan input antara satu sama lain.
ACKNOWLEDGEMENTS

I have the utmost respect for the three members of my Supervisory Committee. They are Dr. Sridar Ramachandran, Dr. Mohd Rusli Yacob, and Dr. Mohhidin Othman. I must also acknowledge Dr. Ahmad Shuib. They assist me with their very broad and deep range of expertise and experience in my PhD study.

Special thanks to Professor Dr. Zakariah Abdul Rashid for teaching me the Input-Output modelling and to Professor Dr. Khalid Abdul Rahim, Dr. Zaiton Samdin, Associate Professor Dr. Alias Radam, Professor Dr. Muzafar Shah Habibullah, and Professor Dr. Mohd Shawahid Hj. Othman for their invaluable guidance and helpful comments during my process of completing this PhD thesis.

Last but not least, my highest regards go to my family for their valued supports and assistance in making my PhD study possible. I truly appreciate my lovely husband, Eng Heng, for editing my thesis, journals, and conference papers.
I certify that a Thesis Examination Committee has met on 13 July 2011 to conduct the final examination of Chong Yee Lee on her thesis entitled “Economic Impact of Tourist Expenditure on Tourism Industry in Penang” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The committee recommends that the student be awarded the Doctor of Philosophy.

Members of the Thesis Examination Committee were as follows:

**Alias Radam, PhD**
Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

**Khalid Abdul Rahim, PhD**
Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

**Zaiton Samdin, PhD**
Senior Lecturer
Faculty of Forestry
Universiti Putra Malaysia
(Internal Examiner)

**Tom Baum, PhD**
Professor
University of Strathclyde
United Kingdom
(External Examiner)

---

**NORITAH OMAR, PhD**
Associate Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 29 September 2011
This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

**Sridar Ramachandran, PhD**  
Senior Lecturer  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Chairman)

**Mohd Rusli Yacob, PhD**  
Senior Lecturer  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Member)

**Mohhidin Othman, PhD**  
Associate Professor  
Faculty of Food Science and Technology  
Universiti Putra Malaysia  
(Member)

---

**HASANAH MOHD GHAZALI, PhD**  
Professor and Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date:
DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.

__________________
CHONG YEE LEE

Date: 13th July, 2011
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ix</td>
</tr>
<tr>
<td>APPROVAL</td>
<td>x</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xx</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xxy</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td>xxvi</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xxvii</td>
</tr>
</tbody>
</table>

CHAPTER

1 INTRODUCTION

1.1 Research background                        1
1.2 Problem Statement                          4
1.3 Research Objectives                        7
1.4 Research Questions                         7
1.5 Contribution of the Research              8
  1.5.1 Contribution to Knowledge              8
  1.5.2 Contribution to Policy Makers, Businesses, and Community 10
1.6 Organization of the Thesis                 11

2 LITERATURE REVIEW – THEORETICAL PARADIGMS FOR TOURISM

2.1 Introduction                               13
2.2 Types of Economic Analyses                 14
2.3 An Overview of Theoretical Paradigms for Tourism Research 17
  2.3.1 Choosing the Right Paradigm for Tourism Research 25
  2.3.2 Suggestion for Post-Positivism Paradigm in Tourism’s Economic Impact Study 27
2.4 Summary of Theoretical Paradigms for Tourism 30

3 LITERATURE REVIEW – MODELLING FRAMEWORK OF TOURISM

3.1 Overview of Tourism’s Economic Impact Past Empirical Studies 31
3.2 Modelling a Framework of Tourism’s Economic Research Using Mixed Methods 35

xiii
3.2.1 Quantitative Technique

3.3 Rationale for Triangulating Quantitative Data and Qualitative Data for Tourism’s Economic Impact Analysis

3.3.1 The Quantitative and Qualitative Debate

3.3.2 Overview of Past Literature’s Data Collection Design for Tourism’s Economic Impact Analysis

3.3.3 Quality of Triangulation Data: Issues and Possible Answers

3.4 Overview of Past Studies’ Operationalisation Framework

3.4.1 The Approach Outline

3.4.2 Study Region

3.4.3 Types of Tourist

3.5 Summary of Literature Review for Tourism’s Modelling Framework

4 RESEARCH METHODOLOGY

4.1 Introduction

4.2 Rationale for Using I-O Model in Tourism Economic Impact Study

4.2.1 Comprehensiveness

4.2.2 Flexibility

4.2.3 Constant Returns to Scale in Production Is Not Seriously Violated

4.2.4 Small Region Resources Can Be Easily Mobile

4.2.5 I-O Analysis Is More Cost Effective

4.3 Modifications in the Present I-O Model

4.3.1 Multiplying Average Occupancy Rates with Accommodation Sector’s Technical Coefficients Values

4.3.2 Multiplying the Proportion of Tourists’ Contribution to Total Revenue with the Financial Data

4.3.3 Payment for Imported Goods to Non-residents is Considered as Economic Leakage

4.4 The Conceptual Framework of I-O Model for This Thesis

4.5 Definition of Target Population

4.5.1 Tourist

4.5.2 Tourism Establishment

4.6 Research Design for Quantitative Data

4.6.1 Data Elicitation

4.6.2 Data Analysis for Quantitative I-O Model

4.6.3 Representativeness of Data to the Population

xv
4.7 Research Design for Qualitative Data 138
  4.7.1 Data Elicitation 138
  4.7.2 Data Analysis 147
  4.7.3 Dealing with the Limitations of Observation Technique 148
  4.7.4 Contribution of Observational Technique 148
4.8 Research Design for Mixed Data 149
  4.8.1 Design Principle of Data Triangulation – Post positivism 150
  4.8.2 Rationale for Mixing the Quantitative and Qualitative Data 150
  4.8.3 Challenge of Triangulating the Quantitative and Qualitative Data 152
4.9 Present Research Operationalisation Framework 154
  4.9.1 The Approach Outline 154
  4.9.2 Study Region 156
  4.9.3 Types of Tourist 157
4.10 Summary of Present Research Methodology 159

5 DATA ANALYSIS AND DISCUSSION 160
  5.1 Introduction 161
  5.2 Descriptive Analysis of Tourists 161
    5.2.1 Respondents’ General Profile 161
    5.2.2 Respondents’ Expenditure Pattern 170
  5.3 Descriptive Analysis of I-O Tables - Regional Economic Impact 170
    5.3.1 Quantitative I-O Model Analysis 171
    5.3.2 Qualitative I-O Model Analysis 187
    5.3.3 Comparing the Quantitative and Qualitative I-O Models’ Results 202
    5.3.4 Mixing the Quantitative and Qualitative Data 203
  5.4 Comparison with Previous Empirical Studies 213
    5.4.1 The Stage of Development of the Local Tourism Industry 213
    5.4.2 Economic Interdependency of Local Tourism Industry 215
    5.4.3 The Dominating Kinds of Tourist Attractions 216
  5.5 Summary of Present Research’s Data Analysis 219

6 CONCLUSION
6.1 Summary and Conclusion 222
6.2 Significance of Study 225
6.3 Public Policy Implications 226
6.4 Private Business Implications 229
6.5 Limitations 230
6.6 Recommendations for Future Research 233

BIBLIOGRAPHY 235
APPENDICES 247
BIODATA OF STUDENT 278
LIST OF PUBLICATIONS 279