AN APPLICATION OF GRAVITY MODEL IN EDUCATION TOURISM: A CASE OF PUBLIC HIGHER EDUCATION INSTITUTIONS IN MALAYSIA

PREPARED BY:

FADLI FIZARI BIN ABU HASSAN ASARI ASMA' RASHIDAH BINTI IDRIS

SEPTEMBER 2010

ACKNOWLEDGEMENT

We are grateful to The Almighty Allah, without the blessing and grace, none of all these would have been possible.

We would like to express our utmost gratitude to the following people who have directly or indirectly contributed to the completion of research.

- Professor Dr. Abu Bakar Abdul Majeed
 Assistant Vice Chancellor (Research) UiTM
- ii. Associate Professor Dr. Sabarinah Sh. AhmadHead of Research (Social Science and Management) UiTM
- iii. Associate Professor Dr. Azemi Che Hamid
 Deputy Director (Research and Industrial Linkage) UiTM Terengganu
- iv. Associate Professor Wan Kemala Wan AhmadProgram Coordinator (Economics) UiTM Terengganu
- v. Mr. Kamarudin Othman

 Ex- Program Coordinator (Economis) UiTM Terengganu
- vi. Mr. Rizal Miseman

 Lecturer (Finance) UiTM Terengganu
- vii. Our fellow colleagues
- viii. Our beloved families

ABSTRACT

The tourism industry is currently Malaysian third most important industry in terms of foreign exchange earnings after the manufacturing and palm oil sectors. However, conventional tourism activity is vulnerable to current shocks e.g. Bird Flu, H1N1 pandemic and terrorist activities. Therefore alternative tourism activity such as education tourism (edu-tourism) has become one of the solutions. The objective of the study is to model international student enrolments using the Gravity Model whereby Malaysian public higher education institutions is the reference point. Results from panel data analysis using GLS-Two Way Estimation indicate that distance is the most elastic variable in determining the education tourism demand. The higher the distance, the lower enrolment it will be. Meanwhile, education tourism demand is positively related with Malaysian export. In addition, more enrolled students come from countries which have socio-economic agreement with Malaysia. Appropriate actions have been proposed, to place Malaysia as one of the major exporters in education tourism industry, parallel with its vision to become an international center of excellence for education beyond year 2020.

TABLE OF CONTENT

		PAGE				
LETTI	i					
LETTI	iii					
LETTI	iv					
ACKN	vi					
TABL	vii					
LIST (×					
LIST (хi					
LIST (OF ACRO	xiii				
ABST	XV					
CHAP	TER 1					
INTRO	ODUCTIO	N .				
1.1	Backgr	Background				
	1.1.1	Tourism in Malaysia	1			
	1.1.2	Education Tourism in Malaysia	2			
	1.1.3	The Gravity Model	5			
1.2	Proble	Problem Statement 9				
1.3	Object	Objective 10				
1.4	Signific	Significance 11				
1.5	Theoretical Framework 11					
1.6	Hypoth	neses	13			
1.7	Scope		14			
1.8	Constraint and Limitation		14			
1.9	Structu	ure	15			
CHAP	TER 2					
LITER	ATURE F	REVIEW				
2.1	The Gr	The Gravity Model 16				
2.2	Touris	Tourism 18				
2.3	Higher	Higher Education 19				
2.4	Depen	dent Variable	22			

	2.4.11	nternational Student Enrolments	22
2.5	Indepe	23	
	2.5.1	Gross National Income per capita	23
	2.5.2	Consumer Price Index	24
	2.5.3	Export / Bilateral Trade	26
	2.5.4	Distance	27
2.6	Indepe	28	
	2.6.1	Adjacency (ASEAN Countries)	29
	2.6.2	Socio-Economic Bloc (OIC Countries)	30
СНАР	TER 3		
RESE	ARCH M	ETHODOLOGY	
3.1	Model	Specification	32
3.2	Depen	34	
	3.2.1	International Student Enrolments (STUDENT _{im})	
3.3	Indepe	34	
	3.3.1	Gross National Income per capita (GNIPC _{im})	34
	3.3.2	Consumer Price Index (CPI _{im})	35
	3.3.3	Malaysian Export (EXP _{im})	35
	3.3.4	Distance (DIST _{im})	36
3.4	Independent Variable (Qualitative)		
	3.4.1	Adjacency - ASEAN Countries (D-ASEAN _{im})	36
	3.4.2	Socio-Economic Bloc - OIC Countries (D-OIC _{im})	36
3.5	Data Analysis		
	3.5.1	Pooled Ordinary Least Squares (POLS)	37
	3.5.2	Random Effects Model (REM)	38
	3.5.3	Fixed Effects Model (FEM)	39
CHAP	TER 4		
RESU	LT AND	DISCUSSION	
4.1	Enrolm	nent Trend and Country Classification	42
4.2	Result		45
4.3	Discussion		
	4.3.1	Malaysia Export	52
	4.3.2	Distance	55
	4.3.3	Socio-Economic Bloc (OIC Countries)	57