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Economic Significance of High-Value Tourists

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International tourism has grown significantly in the past decade. As one of the largest sectors in the global economy, international tourism receipts reached US$622 billion in 2004 and are growing at an annual rate of 5.9%. This study examines international tourist arrivals into Hong Kong and Thailand at different periods, in an attempt to discriminate between tourists based on their potential value to the regional economy, using characteristics of the tourist population including gender, age and type of travel. A method of identifying high-value tourists is presented here. Discriminant analysis is then used to predict which markets are of greatest economic return for Hong Kong and Thailand in the future. The significance of the research lies in the potential to refine target marketing to increase tourist returns.

1. Introduction

According to the World Tourism Organization (WTO) Panel of Tourism experts, world tourism has grown positively overall in 2004, as travel confidence has returned robustly from earlier terror and health threats. The world economy has finally bounced back extraordinarily and experienced the highest growth since 1976, despite all the earlier shocks such as September 11 and SARS. The WTO Madrid Report also shows that in absolute terms international tourist arrivals in 2004 worldwide increased by 69 million (WTO, Madrid 2005). Tourism is a form of trade whereby arrivals are exports and departures are imports. Because of the huge value of tourism trade worldwide, the balance of trade between these two main growth regions is important in terms of the overall redistribution of wealth. Currently, tourism is the main source of transferring funds from the developed to the underdeveloped worlds. However, as Asia grows (a region of net tourism imports and high arrivals growth) in its tourism imports this favourable balance could change at least to some degree.

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The developed countries have had a long history of gaining the greater benefit from trade between nations. Trade theory has a long period of discussion starting with mercantilism through the theory of Ricardian comparative advantage, to the concepts of balanced growth (Myrdal, 1957) and then unbalanced growth (Hirschman, 1958) to centre periphery theory (Perloff, 1965, Friedman, 1966)

whereby the centre (developed countries sometimes referred to as the core) not only have an advantage in trade through technology and the production of value added goods, but also draw resources and talented labour from the periphery (underdeveloped) countries to the centre, to maintain the state of Hirschman's (1958) unbalanced growth. These concepts have moved on more recently to discussion about trade agreements among nations aimed at opening up trade to free competition, while at the same time the developed nations have become the home of multi-national companies designed to take advantage of peripheral cheap resources including labour that are more readily available through free trade.

In consequence, more than two-thirds of world exports of manufactured goods originated in the late 90's in the developed countries, and almost three-quarters of that were destined for developed countries themselves. While the developing countries make about one quarter of the world's manufactured goods exports, they still receive only a small portion of the developed countries manufactured exports. As such capital investment tends not to flow from developing countries to the developed world. These developments are a function of economies of scale initially created from comparative advantage but now self-perpetuating in the centre economies (Mikic, 1998).

More recently an argument can be put that most manufactured and service trade now continues to advantage developed countries through their domination of "globalisation", a new force that is empowered by modern technology in communications and transport to facilitate the central control of industrial and service growth in a piecemeal way across the globe. These new technologies allow the use of labour where it is cheap (for example, call centres based in India), the purchase of natural resources at their source through electronic trading floors based in core stock exchange markets, and the application of expertise from the centres of education in the core. Therefore, this global advantage favours the larger economies that have economies of specialisation and scale.

Globalisation has been coupled with two key effects, one is the sharp reduction in relative employment in the core countries in industrial manufacturing, and the other is a sharp rise in relative employment in the service sector. The rise in service levels has come from greater investment in trade related services including transport, communications, marketing, finance and insurance (Mikic 1998, Hill 2001 and Reynolds 2002). As the market for manufactured goods has become saturated consumers have turned to spending more on leisure and personnel services, and inspired greater investment in research and development to create new products.

However, tourism remains location specific (except for the yet undeveloped concept of virtual tourism) and tends to fall back to the old school of trade theory based upon comparative advantage. The most sought after, although not yet visited regional international tourism locations tend to be those that have not been developed, and have remained somewhat pristine in either nature or culture. These locations have shrunk in number, and exist primarily in the underdeveloped countries, and to a lesser degree in the developed world often protected by underdeveloped transport and communication infrastructure.

International tourism has increasingly drawn out the huge similarity or "commodification" of developed economies that have created "sameness" from their intense competition. Under this process it is argued that the relatively wealthy developed markets have become the main source markets of tourism (away from the "sameness"), and the relatively poorer developed world the destination for much of this international travel.

Regions that are relatively developed such as Europe and the Americas receive less than the average rate of world tourism growth compared to regions containing few developed countries. Although, measures of world regional arrivals are confused by the huge intra Europe travel and some neighbour country movement, much of which is domestic in nature and very short in length of stay.

Consequently, this does not mean that international tourism does not flow between the developed economies such as within the states of Europe, but tourism has a rare capacity to transfer foreign exchange from developed countries to underdeveloped countries on a world scale. Therefore, those countries often most concerned about the flow of tourists are either those countries that benefit from the foreign exchange and want more of it, or countries that consider they want to reduce the flow of foreign exchange from their countries. It is increasingly difficult as Taiwan, Korea and China have found to artificially stop the outflow of tourists through economic or political barriers, and at the same time, the developing economies (in many instances) have increased their demand through improved destination attractiveness with lower costs, and

heightened tourism experiences (for example, China, Thailand, India, Laos, and many Pacific Islands).

This has not changed the potential benefits of the centre in their ownership of airlines, hotels, and resorts that enable a reverse trickling back of foreign exchange from the tourism in the developing world, but there is a limit to their control of this expenditure. Taxes and local factors of production can still favour local employment and a flow of foreign exchange to the destination market. Moreover, tourism is a service industry, and potentially provides a means for the developing countries to also develop a service based economy (around tourism) but in this case based more on the inbound market than the outbound market. Therefore, tourism unlike any other service tends to provide a degree of reverse comparative advantage in international tourism, from the long-term traditional domination by the core economies.
The share in outbound tourism exports is increasingly spreading to less developed economies and is characterized by less domination by a few large industrialized nations. The WTO estimates that in 1950 only 15 countries received about 25 million international tourists, but in 2000 over 70 countries received more than one million tourists per annum. Noticeably China (PRC), the Russian Federation, Mexico, Poland, Hungary and Hong Kong SAR now rank in the top 15 tourism destinations. Furthermore, tourism spending is concentrated into the large industrialized countries.

Consequently, tourism is unusual as a world economic trade, in that it has been characterized by a capacity to redistribute international wealth from the wealthiest nations to developing nations.

The economic contribution tourists make, as receipts, depends upon their total amount of expenditure and their expenditure pattern in their host country, and is not simply a function of volume of arrivals. Theoretically, a high-value tourist will spend more, not stay long and reduce relative resource use, and have an expenditure pattern that directs receipts to the local host economy. This type of expenditure is arguably more likely for independent travel excluding backpackers and includes shopping, entertainment, expensive accommodation, and local transport spending in the host country. Package tourists arguably will have a weaker expenditure pattern because they pre-pay their travel in the source country.

The objective of this study is to identify whether certain groups of tourists can be quantitatively identified as “high-value”, by their travel characteristics and expenditure patterns. The implications of the findings will be discussed in relation to the benefits for Hong Kong and Thailand but has extensive relevance to all tourist arrival destinations. Marketing and attractions by the National Tourism Offices (NTO’s) may be better directed to “high-value” tourists in order to maximize export income.

2. Data Sources and Definitions

Data on international visitor arrivals into Hong Kong are obtained from *A Statistical Review of Hong Kong Tourism Statistics 2004*, published by Tourism Research Hong Kong Tourism Board (2005).

Hong Kong 2004 inbound variables selected for each country/territory include Spending per Capita, Average Length of Stay, Gender, Marital Status, Occupation Status, Average Age, Package Type and Purpose of Visit. Although other measures would be useful indicators, the objective is to enable a simple quantitative model that does not require data that is not regularly collected by country based NTO's. Thirty countries/territories by nationality comprising the USA, Canada, South and Central America, UK, Austria, Switzerland, Belgium, Iberia, Nordic countries, Netherlands, Germany, France, Italy, South Africa, Middle East, Australia, New Zealand, Japan, South Korea, Indonesia, Malaysia, Philippines, Singapore, Thailand, India, Taiwan, China, North Asia, South Pacific and Macau, are sampled.

For Thailand, inbound data are obtained from *Statistical Report 2004*, published by Tourism Authority of Thailand (2004). Forty-six countries by nationality are identified. Thailand 2004 inbound variables selected are the same as of Hong Kong without Marital Status as this is not available.

3. Methodology

The selection of the two countries (destinations) is made partly on the basis of available data, as it is necessary to have significant tourist survey results to obtain a reasonably whole set of determinant variables. Several countries conduct such surveys and both Hong Kong and Thailand have a long established record of significant survey based data collection and reporting. Another reason for selecting these countries is the preference to have two quite different tourist markets in order to extensive the robustness of the methodology. As shown in Table 1 there are significant differences in the travel market for each country.

Table 1 Characteristics of Tourist Profile

Hong Kong	Thailand
Average Length of Stay	Average Length of Stay
Percentage of Package Travel	Percentage of Travel Arrangement
Total Average Expenditure	Tourism Revenue
Percentage of Male Tourists	Gender
Average Age	Average Age
Percentage of Business Travel	Purpose of Visit
Percentage of Holiday Travel	Frequency of Visit
Percentage of Tourist Travel	Accommodation Establishments and Rooms
	Mode of Transport

The countries/territories of nationality are divided into three groups namely: high-value, medium-value and low value receipts, based on their Spending per Capita.

Discriminant analysis is used to identify / discriminate high-value tourists from low-value tourists based on their potential value to the regional economy using their characteristics. Discriminant analysis can also be used to predict which markets are of greatest economic return for Hong Kong and Thailand in the future.

The general formula of the discriminant function is expressed as:

$$D = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots. + \beta_i X_i$$

Where:
D = the discriminant score
β_0 = a constant
β_i = the discriminant coefficient for X_i
X = independent variable

This function can be used to provide a score that will determine which group the case is predicted to belong.

The One-Way ANOVA is used to determine whether the differences in Spending per Capita by the three groups are significant or could have occurred simply by chance. Once their differences are determined as statistically significant, correlation coefficients are then calculated to see if any pair of independent variables is highly correlated, and if they are, then which one's are best selected for the discriminant anlaysis.

Discriminant analysis is then applied to predict which markets are of greatest economic return for Hong Kong and Thailand in the future. For discriminant analysis, a categorical dependent variable is needed; in this case the tourist returns by country categorized into three groups: high, medium and low receipts. These groupings are an arbitrary selection and more groups or only two could be used. The question of group membership is a practical one and three groups provide a reasonable categorization.

It is necessary to determine the characteristics of the tourist population that are useful in discriminating between these three groups. The independent variables used in this study are: Average Length of Stay, Gender, Marital status, Occupation status, Average Age, Package/Non Package type, and Business/Non Business purpose. This list is not exhaustive of all possible measures from NTO survey results, but does represent a list that is commonly collected. As such it represents a reasonable set of variables to test the applied ability of the method applied.

4. Results

I. HONG KONG 2004 INBOUND DATA

Table 2 ANOVA
Expenditure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15271330.667	2	7635665.333	76.891	.000
Within Groups	2681241.500	27	99305.241		
Total	17952572.167	29			

The analysis of variance (Table 2) shows that overall the means differ significantly. That is the expenditure per capita ($HK) for 2004 differs significantly for international tourists with different levels of expenditure (p-value=.000) low, medium and high. A further test was conducted to determine the significance of the difference between the means for the different levels of expenditure (refer to Table 3).

Table 3 Multiple Comparisons
Tukey HSD

(I) Value	(J) Value	Mean Difference (I-J)	Std. Error	Sig.
low	medium	-1209.500(*)	200.487	.000
	high	-2254.000(*)	201.843	.000
medium	low	1209.500(*)	200.487	.000
	high	-1044.500(*)	121.376	.000
high	low	2254.000(*)	201.843	.000
	medium	1044.500(*)	121.376	.000

* The mean difference is significant at the .05 level.
Dependent Variable: Expenditure

Table 3 shows that the differences between each pair of tourist expenditure groupings are statistically significantly different (p-value=.000).

It is possible that of the variables selected (available) for analysis, there will be correlations that may make one or more variables redundant. The correlation matrix (Table 4) shows that Spending and Male tourists are significantly correlated (p-value=.012) at the .05 level. The predictor variables used in this study for Hong Kong include: Average Age, Package type, Average Length of Stay, Marital Status, Non-Business (Purpose of Travel), and Working (Occupational Status). These variables are not significantly inter-correlated for Hong Kong.

Table 4 Correlations

		Age	Ave.Stay	Package	Non-Business	Male	Married	Working
Age	Pearson Correlation	1	-.027	-.652	-.343	.364	-.197	.142
Ave.Stay	Pearson Correlation	-.027	1	-.340	.133	-.011	.249	-.221
Package	Pearson Correlation	-.652	-.340	1	.575	-.540	.067	-.362
Non-Business	Pearson Correlation	-.343	.133	.575	1	-.923	-.045	-.854
Male	Pearson Correlation	.364	-.011	-.540	-.923	1	.167	.735
Married	Pearson Correlation	-.197	.249	.067	-.045	.167	1	-.013
Working	Pearson Correlation	.142	-.221	-.362	-.854	.735	-.013	1

* Correlation is significant at the 0.05 level (2-tailed).

The variables Male and Non-Business are highly negatively correlated whilst Working and Non-Business highly negatively correlated. It is logical given the above that Male and Package tourism will also be negatively correlated because if Males are most likely to be on business travel and hence working they are more likely to be independent travelers (Non-Package). Consequently, gender is not a good discriminating variable for spending amongst this particular set of variables. Hence the Male (Gender) variable will not be included in this study.

As an analysis starting point – it has been confirmed that the spending can be divided into the significantly different spending groups, and separately which determent variables act independently of each other. Further, significant differences are examined between the groups for each of the independent variables used as predictors, by looking at the group means (Table 5) derived from Univariate ANOVA. This analysis indicates that Package, Age, Working, and Non-Business are significantly different, so they may be useful predictors of spending in the case of Hong Kong.

For each of the independent (predictor) variables above significant differences exist between the spending groups. In order to determine the capacity of these variables to account for different country specific tourism receipts (measured as per capita spending) a discriminant analysis is used to derive potential predictive functions.

Table 5 Group Statistics

Value		Mean	Std. Deviation
low	Age	36.4000	.56569
	Package	41.0000	.00000
	Non-Business	68.0000	7.07107
	Working	79.5000	3.53553
medium	Age	38.0714	1.80743
	Package	25.5000	12.15762
	Non-Business	65.6429	12.92944
	Working	80.2143	5.43746
high	Age	40.0000	1.80139
	Package	11.3846	5.75237
	Non-Business	51.8462	11.68222
	Working	85.5385	5.45612
Total	Age	38.8207	2.06491
	Package	20.2414	12.79971
	Non-Business	59.6207	13.75140
	Working	82.5517	5.87115

Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Age	.685	5.990	2	26	.007
Package	.505	12.721	2	26	.000
Non-Business	.729	4.828	2	26	.016
Working	.781	3.639	2	26	.040

Table 6 Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.375(a)	96.0	96.0	.761
2	.057(a)	4.0	100.0	.231

a First 2 canonical discriminant functions were used in the analysis.

The Eigenvalues (Table 6) provide information regarding the two discriminant functions produced by the analysis. Note that only two discriminantions are needed to separate between three groups. The square of the canonical correlation provides an index of the overall model fit, which is interpreted as the proportion of variance explained (R-squared). Table 6 shows the first function has a canonical correlation of .76, thus the first model explains 58% of the variation in the dependent variable Tourist Groups. The second function has a lower canonical correlation (.23) and explains only 5% of the variation in the dependent variable.

Table 7 Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.399	22.537	8	.004
2	.946	1.349	3	.718

Table 7 shows that the disciminant function 1 through 2 is significant (p-value=.004) at the .05 level. However, discriminant function 2 is not significant.

Table 8 Standardized Canonical Discriminant Function Coefficients

	Function	
	1	2
Age	.403	-.278
Package	-.791	-.802
Non-Business	.523	1.122
Working	.841	.099

Table 8 shows the relative importance of the predictor variables. Function 1 shows Working and Package as the most important variables with .841 and -.791 standardized coefficients respectively. The negative sign indicates independent tourists as opposed to package tourists are better predictors of spending. Function 2 indicates Non-Business and Package as the two most important predictor variables (1.122 and -.802). Again the negative sign indicates independent tourists are better predictors. The most highly valued tourists are expressed as working travellers, on independent travel for holiday purposes. Age is also a determinant variable and suggests older tourists are more valuable in terms of export income.

Table 9 Canonical Discriminant Function Coefficients

	Function	
	1	2
Age	.227	-.157
Package	-.084	-.085
Non-Business	.043	.092
Working	.156	.018
(Constant)	-22.575	.809

Unstandardized coefficients

Using Table 9, the discriminant functions can be arranged as:

Function 1:
Value = -22.575 + .227 Age - .084 Package + .043 Non-Business + .156 Working

Function 2:
Value = .809 -.157 Age - .085 Package + .092 Non-Business + .018 Working

Table 10 Functions at Group Centroids

Value	Function	
	1	2
low	-2.406	-.668
medium	-.717	.182
high	1.142	-.093

Unstandardized canonical discriminant functions evaluated at group means

Table 10 provides the average value of the discriminant value for each value group. From this we can see the separation between groups (Low, Medium and High Value) and the values of the discriminant function associated with each group.

Midpoints for Function 1 are -.660 and for Function 2 are -.193.

II. THAILAND 2004 INBOUND DATA

Table 11 ANOVA
Expenditure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5010302.663	2	2505151.332	63.417	.000
Within Groups	1698623.793	43	39502.879		
Total	6708926.457	45			

Table 11 shows the analysis of variance for Thailand comparing the mean levels of expenditure low, medium and high. The result shows that overall the difference between means for three levels of expenditure is significant (p-value=.000). This is also consistent with the results for Hong Kong international arrivals.

Table 12 Multiple Comparisons
Tukey HSD

(I) Value	(J) Value	Mean Difference (I-J)	Std. Error	Sig.
Low	Medium	-347.389(*)	77.649	.000
	High	-855.071(*)	79.209	.000
Medium	Low	347.389(*)	77.649	.000
	High	-507.681(*)	66.354	.000
High	Low	855.071(*)	79.209	.000
	Medium	507.681(*)	66.354	.000

* The mean difference is significant at the .05 level.
Dependent Variable: Expenditure

Table 12 (Hong Kong Table 3) further examines which pairs of mean expenditure are significantly different. As such, the mean difference between low and medium expenditure is 347 Baht per person per day for 2004. Also, the mean difference between low and high expenditure groups are 855 Baht and between medium and high are 507 Baht. All the differences are statistically significant with a p-value of .000.

Table 13 Correlations

		Ave.Stay	Age	Package	NonBusiness	Male	Working
Ave.Stay	Pearson Correlation	1	.303(*)	-.364(*)	.265	.006	.184
Age	Pearson Correlation	.303(*)	1	-.283	-.257	.010	.380
Package	Pearson Correlation	-.364(*)	-.283	1	.275	-.376	-.105
NonBusiness	Pearson Correlation	.265	-.257	.275	1	-.406	-.367(*)
Male	Pearson Correlation	.006	.010	-.376	-.406	1	.220
Working	Pearson Correlation	.184	.380	-.105	-.367(*)	.220	1

* Correlation is significant at the 0.05 level (2-tailed).

The correlation table (Table 13, Table 4 for Hong Kong) indicates that Age and Average Stay are significantly correlated at the 0.05 level. The variables Package tourist type and Average Stay are negatively correlated, as well as Working (occupation status) and Non-Business (purpose of visit) with correlation of -.367. Although these correlations are statistically significant, they are quite low; hence these variables are still included in the disciminant analysis as predictor variables.

Table 14 Group Statistics

Value		Mean	Stdandard Deviation
Low	Ave.Stay	11.7640	3.16620
	Age	40.0630	1.69775
	Package	35.8880	12.40260
	NonBusiness	92.2260	2.66342
	Male	58.8820	4.88081
	Working	73.9540	5.16420
Medium	Ave.Stay	11.3132	3.30984
	Age	39.1858	2.03527
	Package	32.3000	9.52789
	NonBusiness	92.0200	3.79963
	Male	58.5184	7.36213
	Working	71.9789	5.81069
High	Ave.Stay	6.6171	2.22310
	Age	39.3788	2.06548
	Package	41.2859	18.54463
	NonBusiness	90.7518	4.05804
	Male	59.2853	9.20927
	Working	69.7382	6.25803

Total	Ave.Stay	9.6757	3.71209
	Age	39.4478	1.96600
	Package	36.4009	14.33625
	NonBusiness	91.5961	3.67181
	Male	58.8809	7.53107
	Working	71.5802	5.94686

Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Ave.Stay	.591	14.877	2	43	.000
Age	.970	.659	2	43	.523
Package	.921	1.836	2	43	.172
NonBusiness	.968	.714	2	43	.495
Male	.998	.045	2	43	.956
Working	.926	1.707	2	43	.194

Table 14 (Hong Kong Table 5) indicates the group means of Average Stay and Package between the three groups are significantly different so they may be useful predictors on spending. However, when looking at the Univariate ANOVA (Table 14), the analysis shows that Average Stay is the only statistically significant predictor variable (p-value=.000). Package and Working variables also show relative significant differences between the spending groups with low p-values.

Table 15 Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.003(a)	93.3	93.3	.708
2	.072(a)	6.7	100.0	.260

a First 2 canonical discriminant functions were used in the analysis.

The Eigenvalues in Table 15 (Hong Kong, Table 6) show the two discriminant functions. The first function has a canonical correlation of .71, explaining 50% of the variation in the dependent variable (Spending) tourist groups. The second function explains only 7% of the variation in the dependent variable.

Table 16 Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.465	30.968	12	.002
2	.933	2.826	5	.727

Table 16 (Hong Kong, Table 7) shows that the discriminant function 1 through 2 is statistically significant (p-value=.002) at .05 level, whereas the discriminant function 2 is statistically insignificant with a p-value of .727.

Table 17 Standardized Canonical Discriminant Function Coefficients

	Function	
	1	2
Ave.Stay	.954	.052
Age	-.597	.824
Package	-.306	.682
NonBusiness	.023	.374
Male	-.309	.415
Working	.502	.301

The importance of the predictor variables for functions 1 and 2 are shown in Table 17 (Hong Kong, Table 8). Function 1 indicates Average Stay as the most important variable on the list with coefficient of .954. Working and Age variables are also important predictor variables (.502 and -.597). The negative sign of the coefficient for Package indicates that independent tourists (as opposed to package tourists) are better predictors of spending. Function 2 shows Age and Package as the most important predictor variables (.824 and .682) respectively with holiday travel as somewhat discriminating relative to Function 1. The most highly valued tourists are expressed as working travellers, who stay longer, are older (age is negative in Table 7) and on independent travel.

Table 18 Canonical Discriminant Function Coefficients

	Function	
	1	2
Ave.Stay	.327	.018
Age	-.302	.416
Package	-.022	.048
NonBusiness	.006	.101
Male	-.040	.054
Working	.086	.051
(Constant)	5.176	-34.471

Unstandardized coefficients

From Table 18 (Hong Kong, Table 9), the discriminant functions can be derived as followed:

Function 1:

Value = 5.176 + .327 Average Stay -.302 Ag e-.022 Package + .006 Non-Business -.040 Male + .086 Working

Function 2:

Value = -34.471 + .018 Average Stay + .416 Age +.048 Package + .101 Non-Business + .054 Male + .051 Working

Table 19 Functions at Group Centroids

Value	Function	
	1	2
Low	.716	.454
Medium	.755	-.234
High	-1.265	-.005

Unstandardized canonical discriminant functions evaluated at group means

Table 19 (Hong Kong, Table 10) provides the average score of the discriminant value for each group. This score indicates the separation between (low, medium and high value) tourist groups and the values of the discriminant function associated with each group. Midpoints for functions 1 and 2 are calculated as .069 and .072 respectively.

5. Conclusions

The study uses two quite different countries Hong Kong and Thailand, where the tourist arrivals patterns are reasonably different to assess the capacity of a simple analysis tool to assess which commonly available travel indicators can point to the identification of high value tourists. Hong Kong is more a short term and transit destination while Thailand is a longer stay and often-final destination market. These two quite different travel markets yield similar travel indicators (refer to Table 20).

Table 20 Travel Indicators

Hong Kong	Thailand
Working Travellers	Working Travellers
Older Travellers	Older Travellers
Independent Travellers	Independent Travellers
Holiday Travellers	Longer Average Stay Travellers

The only major difference between the two countries relates to average stay that is more important for Thailand. This variable is most reflective of the differences in the two travel markets as original described in Table 1.

The discrimination modelling used is not complex and is readily available in statistical packages to replicate these examples for other countries. In both cases a positive of the most economically valuable tourist in terms of spending pattern has been derived from commonly available variables. As such the implications are highly significant for NTO's that wish to direct their marketing to either individual travelers of a particular type or to general markets (countries) that provide significant numbers of high value tourists.

The analysis is using data from two quite different tourist marketplaces with Hong Kong a city state, small in area and a significant tourist destination, compared to the large and diverse travel destination of Thailand where tourists are encouraged to stay and explore their regional diversity. However, the results are very similar in regard to deriving a definition of the most valuable tourist (tourist market country). This suggests that further analysis in other markets will also find a similar definition and may subject to that further analysis, indicate there is a determining the high value tourist relative to the medium and low value tourist.

An implication of such a finding is the question raised as to the relative importance of receipts return versus tourist arrival volume. Low value tourists in high volume may generate for higher receipts earnings than high value tourists in low volume, and the question arises as to which type of tourist is best. Conventional concepts might suggest that a lower impact (lower volume) is more economically sustainable and to be preferred with the direction of marketing to encourage such low volume high receipts markets.

References

Friedmann, J. 1966, Regional Development Policy. A Case study of Venezuela, MIT Press, Cambridge.

Hill, C.W.L. 2001, Global Business, 2 edn, McGraw-Hill, Boston.

Hirschman, A.O. 1958, The Strategy of Economic Development. Yale Univ. Press, New Haven.

Howard, D. R., Lankford, S. V. and Havitz, M. E. 1991, 'A Method for Authenticating Pleasure Travel Expenditures', *Journal of Travel Research*, vol. 29, pp.19-23.

Mikic, M. 1998, International Trade, Macmillan, UK.

Mules, T. 1996, 'Analysis of Changes in Expenditure by International Visitors in Australia', *Economic Papers*, vol. 15, pp. 43-51.

Myrdal, G. 1957, Economic Theory and Under-developed Regions, Duckworth.

Perloff, H.S, Dunn, E.S, Lampard, E.E. and Muth, R.F. 1965, Regions, Resources, and Economic Growth, Univ. of Nebraska Press, Lincoln.

Reynolds, C. 2002, Global Logic: The challenge of Globalisation for Southeast Asian Business, Prentice Hall, Singapore.

Tourism Authority of Thailand 2004, Statistical Report 2004

Tourism Research Hong Kong Tourism Board 2003, A Statistical Review of Hong Kong Tourism 2002, November.

West, G. 1993, 'Economic Significance of Tourism in Queensland', *Annals of Tourism Research*, vol. 20, pp.490-504.

Yearbook of Tourism Statistics, 2005 Edition, World Tourism Organization, Madrid.