Abstract

The bilateral relation between India and Singapore has expanded in recent years and more particularly in the realm of tourism due to certain internal and external environmental forces. These forces are income, trade, investment, consumer price and geographical distance etc. A number of studies attempt to test the hypothesis that there is a linkage between trade and macro economic indicators of tourist origin country with that of tourist inflow. Most of the studies show that the variables are positively correlated and statistically significant. This paper specifies regression model for tourist inflow to India from Singapore for the period 1991-2008. The regression model approach indicates that gross domestic product (GDP) of Singapore is the only determinant in instigating tourist inflow to India in comparison to other bi-lateral trade and economic variables.

Keywords: Trade, Macro-economic Indicators, Trend, Regression.

INTRODUCTION

India and Singapore have over the years developed a very strong strategic partnership based on age old historical and cultural linkages, that covers a whole gamut of areas of cooperation including trade, tourism, security and defence. Launching of India’s Economic Liberalisation programme (1990-91) and subsequently the initiation of India’s Look East policy in 1992 received the quickest reaction from Singapore in the form of the latter’s ‘Look West’ policy and ‘mild India fever’ programmes. Singapore has played a central role in getting India into ASEAN (Association of South East Asian Nation) as a dialogue partner, the membership of the ASEAN Regional Forum (ARF), and also in initiating Indo-ASEAN summit meetings.

Singapore has also been instrumental in getting India on board the East Asia Summit, despite opposition from China and Malaysia. Singapore relations received a major boost from Singapore’s regionalization approach to trade and investment, resulting in the formation of India’s first ever Free Trade Agreement (FTA) with any ASEAN country. The recent years more particularly the period since 1991 have seen gradual deepening of India’s economic and business relations with the East Asian economies. This deepening of ties is evident both from the trends of growth of inter-country trade and investment patterns.

Incidentally the same period (i.e. the period following 1991) has also witnessed phenomenal growth of the tourist flows between India and Singapore. To a certain extent the enhanced level of tourist inflows to India from Singapore may be traced to such factors as India’s age-old cultural ties and geographical proximity, and also to the observed tourist boom (both inbound and outbound) since the 1980’s. Nevertheless, the positive influence on tourism growth played by such factors as the deepening of India’s trade and investment relation with the Singapore remain undeniable.

Indeed, the deepening of the economic ties between India and Singapore and the concomitant rise in the tourist flows between the two blocks have of late been the focus of growing attention of both researchers and policymakers in this country. The increased interest in this area may be traced as much to the growing realization of the economic significance of the tourism sector in the context of the national economy as to the genuine eagerness in all concerned quarters to promote India as a popular tourist destination among the Singaporean travellers amongst others. The bi-lateral trade relationship between India and Singapore has culminated in the mobility of people from one country to another, which has resulted in the development of tourism. The study entails the flow of tourists from Singapore to India in the wake of such
economic and macro economic prosperity of Singapore in the recent years.

OBJECTIVES OF THE STUDY

As against the above backdrop, the study is carried out with the following objectives:

i. to examine the trend of tourist inflow to India from Singapore during the period since 1991.

ii. to identify the factors that have a bearing on the trend of tourist inflows from Singapore to India.

REVIEW OF LITERATURE

Travelling overseas requires individuals to spend money on air-tickets, hotel accommodation, local transportation, and even on entrances to tourist attraction places. In order for an individual or a whole family to travel overseas, it would require advanced budgeting and planning. Travelling overseas used to be a luxury spending that only wealthy people could afford. However, due to recent economic factors, travelling has become quite affordable for more families. In Singapore, as the standard of living has risen, individuals can now afford to travel overseas for leisure. Traveling overseas has now become a very popular hobby amongst the Singaporeans.

The outbound statistic had increased manifold; it showed that the outbound tourism is growing in the recent years (c.f Table: 2). The growth in the use of technology such as the Internet and e-commerce has made some impact on travel agencies. However, researchers like Liao and Cheung (2000) have argued that Internet has made a limited impact on Singaporeans’ way of life and that virtual retailing has yet to establish a prominent market in Singapore. There may be other significant factors that are causing consumers to turn away from local travel agents.

Compared to other Asian countries, Singapore is an extremely small-sized country but her residents live with an advanced and well-organized infrastructures. In a Quality of Living survey conducted by Asia Barometer in 2006 (Tambyah, Tan, & Kau, 2009), it was reported that more than two-thirds (72.2 per cent) of Singaporeans surveyed described their standard of living as “average”\(^1\); while the others surveyed described it as “high” (6.8 per cent) or “relatively higher” (15.8 per cent) standard of living. In comparison to the other Asian countries (China, Hong Kong, Japan, South Korea, Taiwan, and Vietnam) that participated in this 2006 survey, this is the highest percentage reported for the year.

This immense satisfaction in the standard of living has lead to the feeling of well-being amongst Singaporeans. By being satisfied with their standard of living, Singaporeans enjoy a certain level of enjoyment. Based on the 2006 survey, in comparison to the other East Asian countries, Singaporeans appear to be the happiest (Tambyah et al., 2009). In term of global connection, Singapore is ranked the first in all aspects of globalization. About 50 per cent of the Singaporeans surveyed, stated that in the past three years they had travelled at least three times either for business or vacation. As far as consumers surveyed in other countries, they claimed a percentage ranging from a mere 2 per cent to only 17 per cent. In comparison, Singaporeans are well travelled than people from the other six East Asian countries.

In another survey conducted by Statistic of Singapore - General Household Survey (GHS) in 2005 showed that Singapore residents with higher-income had the tendency to travel overseas; 75 per cent of the survey residents travelled overseas earned a monthly income of $10,000 and over, and 32 per cent of the survey residents traveled overseas with below $2,000 monthly income. “As monthly household income from work increased, there was an increasing proportion of residents who had their holiday in more distant destination such as Europe, Australia, Japan and South Korea” (GHS, 2005, p. 20). The majority (60.2 per cent) Singaporean residents traveled for holiday purpose, while 19.5 per cent travelled overseas to visit relatives and friends, and 15.9 per cent traveled due to work. Among the residents who travelled overseas, the majority of residents were older residents aged 55 years and above and younger residents aged 15-24 years. 50 per cent of Singapore residents travelled on at least one overseas trip. It was also noted that the proportion of residents who traveled overseas declined with increasing age (GHS, 2005, p. 13).

Singapore is a developed capitalist country with advanced economic infrastructures and customer-base (Nam, Klemz, Boshoff, & Mazibuko). Rogers (1947) explained that in the phenomenological study, an individual’s personality is shaped by interpretations of life events. In Rotter (1966) concept of “Locus of Control”, it refers to people’ cross-situational belief – what determines whether what is to be reinforced into their life. In his concept of “Locus of Control (LOC)”, people were classified by either internal or external. Individual with external LOC would feel that they lack control of what happens to them and they would look for external controls in environment that are matching with their feelings (Kongsompong, 2006). LOC researchers also found that social influence is another powerful which may affect tourism. LOC and social influence complement each
Demand for travel and tourism has grown faster than the demand for most areas of economic activity. Uyusal et al. (1994) described the increase in international tourist flows since the end of World War II as quite dramatic. An important contribution towards the future outlook of tourism sector in India and ASEAN has been made by Sen, Asher and Rajan, (2004). Alongside, researchers have also focused on different aspects of the growing ties between India and her East Asian neighbours. Gaur (2004) has studied the current status and future prospects of Indo-ASEAN economic relations. The deepening of ties between India and the East Asian countries in areas like trade, investment, tourism, science and technology have also been dealt with extensively by a number of researchers. (Asher 2003, Gaur 2003, Kumar 2000, Bhattacharjee and Arif 2002). International trade researchers such as Gray (1982), Kunglendran and Wilson (2000), Eliat and Einav (2003), and Pender (2005) typically explained tourism demand by income in tourist generating countries, price of tourist services, transport costs and promotional expenditures. International trade is the most important player in economics. Little mention is made of tourism. Tourism is a significant source of export revenues for any country. It is important that policymakers and economists understand the factors affecting foreign tourism demand. In other words, this export commodity allows us to understand international economics. Poor quality of data has been a persistent problem in tourism studies. The majority of studies focus on travel flows among developed countries. Bilateral trade has a positive impact on tourism demand. Recent literature, including Pender (2005), Mervan and Payne (2007), and Vogt (2008), considers that tourism demand is a dynamic phenomenon. Many researchers have attempted to find answers to the question, “Why are some destinations more attractive to tourists than others?” Empirical models of tourism demand often make use of consumer theory (e.g., Varian 1992), which holds that optimal consumption is influenced by the consumer’s income, the price of goods, the prices of substitute and complementary goods, and other demand-influenced factors. Sinclair (1998) specified tourism demand as a function of income per capita, GDP, population and the urban population in an originating country, relative prices in destination and origination countries, exchange rates, transportation cost between points of origination and destination, and dummy variables for one-off events. Other variables, such as common borders, common languages, and distance, are also important in determining tourism flow, especially for less developed countries.

Economic Indicators as Predictors of Tourism

Economic indicators have been widely employed in the economic literature for the purpose of forecasting business activities. The usefulness of leading indicators is that they enable researchers to determine and predict turning points in the cyclical movements of an activity of interest (Jones and Chu Te, 1995). In the tourism demand literature, it is well acknowledged that Per-capita income and Gross Domestic Product are some of the leading demand determinants in tourism demand analysis. According to literature reviewed by Lim (2006), out of 124 published papers, income variables were employed in 105 empirical papers. In addition, Cho (2001) and Turner et al. (1997) employed macro-economic variables, such as money supply, gross domestic products, imports and exports to examine tourist arrivals.

Rossello Nadal (2003) examined monthly tourist growth in Balearic Islands using the number of constructions, industrial production, foreign trade and exchange rates. Swarbrooke and Homer (2001) argued that the level of economic development and state of the economy can influence the demand for business travel and tourism. Accordingly, a high level of economic development and a strong economy increase demand and vice-versa. Similarly, Njegov (2005) asserted that business expectations can be one of the leading indicators that influence the demand for business air travel. The underlying reason is that firms are most likely to authorise travel for conference and business purposes when they feel more confident about the business environment. According to Prideaux (2003) the structural weakness in the national economy are not only the factor that affects the tourism flow. Gross domestic product (GDP), market competitiveness, and population size of a region have significant roles, too. Some other factors that might control tourist movements are globalisation, exchange rate fluctuations, changes in visa regulation, manmade and natural disasters etc. The growth of income per capita in a country can encourage more local residents to travel overseas, causing domestic tourism to compete with foreign tourism. For example, in China, the Chinese government introduced a new policy that promotes outbound tourism with the continuous growth in disposable income, more wealthy Chinese residents can now easily switch from domestic holidays to overseas travel Huimin and Dake (2004). Athanasopoulos and Hyndman (2008) found that the number of visitors nights by domestic holiday makers in
Australia declined significantly, which could relate to Australians choosing overseas travel rather than domestic holidays. Kulendran and Wilson (2000) asserted that countries with more open markets provide opportunities for international trade as well as an exception of increasing business tourism demand. Moreover, tourism researchers believe that trade volume or openness to trade between countries of origin and destination has a certain degree of influence on tourism demand, particularly for business travel. Thus, the review of available literature enabled us to accentuate the following variables, viz: Export (of commodities) from India to Singapore, Import (of commodities) by India from Singapore, Gross Domestic Product (GDP) of Singapore, Urban Population of Singapore and Per-capita Income of Singapore (as independent variable) which had a bearing on tourist inflow to India from Singapore. (as dependent variable).

The data for this study are gathered from India Tourism Statistics, Centre for Monitoring Indian Economy (CMIE): Business Beacon and various newsletters of Secretariat of Industrial Assistance (SIA), World Travel and Tourism Council (WTTC), and various issues of Statistical Year-Book of Singapore. Accomplishment of the objectives of the study called for gathering data on the following.

- Detailed data pertaining to the inflow of tourists from Singapore to India.
- Data pertaining to bi-lateral trade (export and import) between India and Singapore.
- Data pertaining to the macro-economic variables of Singapore.

The collected data have been tabulated, processed, and analysed to draw inferences relevant to the objectives of enquiry. The trend of tourist inflow will be studied through time series trend analysis. For establishing causal linkages between tourists inflow to India from Singapore with that of economic engagements and macro-economic indicators of Singapore such measures as co-efficient of correlation and multiple regression will be applied.

HYPOTHESES

In light of the above discussion, we propose the following hypotheses for empirical examination:

- **H1**: Trade (export and import) relations between India and Singapore positively impacts the tourist inflow from Singapore to India.
- **H2**: Growth in macro-economic indicators of Singapore positively impacts the tourist inflow from Singapore to India.

METHODOLOGY

Geographically, the study covers India and Singapore. The study covers a period of 18 years, i.e from 1991 to 2008. The choice of the initial year was made keeping in view the launching of India’s economic liberalisation programme. The cut-off year for the study has been decided keeping in view the data-availability factor. Approximately, this is the period covered by the Eighth, Ninth, and Tenth Five Year Plan in India. It also coincides one and half decades of economic liberalisation in India. There is generally a time lag between the actual year of occurrence of a phenomenon and the year of publication of official data. Therefore the terminal year for the purpose of analysis are constrained by the latest data availability.

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between tourist inflow from Singapore to India, export and import and other macro economic indicators. The results are given in Table 3.

It may be observed that most of these correlations are significant at P<0.05: 0.95 (export), 0.88 (import), 0.78 (urban population), 0.93 (GDP), 0.89 (per-capita income).

**Observation:**

**Trend equation:**
\[ y = 1E-41e^{0.0525x} \]

X represents time
Y represents inflow of tourists to India from Singapore.
R Square = 0.7423 gives an indication of good fit as 74 per cent of variation in Y is explained by time using this equation.

**The Fitted trend:**
\[ Y = 1E-41e^{0.0525x} \]

Where b= 0.0525, indicates that the rate of inflow of visitors from Singapore to India during 1991 to 2008 is by a factor of 0.52 in a year.

The regression analysis carried out to determine the predictive fitness of the above model yielded a composite adjusted R’ of 0.88, which is a respectable result (Tabachnick and Fidell, 1996). The model summary is given in Table 4 and the coefficients are given in Table 5.

It may be observed from the coefficients table that only one independent variable in the list, namely, the Gross Domestic Product of Singapore significantly predict tourist inflow from Singapore to India (p<0.05). In other words, the proposed hypotheses are only partially supported to the extent of just one variable. Thereby, rejecting the other variables such as exports from the destination country to the source country, imports to the destination country, per-capita income of the source country and the urban population of the source country which do not predict tourism flows from Singapore to India.

**CONCLUSION**

The paper highlighted the relationship between the increase in a certain aspect of economic indicators and the increase in tourist inflow to India from Singapore. More research is required to answer why this happens. Many studies have examined how trade promotes tourism in general (Endo, 2006; Tang, Selvanathan, and Selvanathan, 2007). But, research on how trade from country A in country B increases tourism from A to B scarce. One probable reason could be that bi-lateral trade relation of a country in another country makes the citizens of the former country to take partial ownership in the affairs of the latter one. And, this is an especially an important factor given the highly ethnocentric orientation of the Singaporean society (Sullivan and Schatz, 2009). A history of healthy bilateral economic relations might increase the confidence and trust among the member country citizens. While such conditions alone would not generate tourism demand, these can act somewhat as ‘hygiene factors’: factors that are essential to maintain a healthy level of tourism flow. The variable Gross Domestic Product of Singapore (GDP) has got only statistically significant with tourist inflow to India from Singapore. This implies that the preference for India is significantly impacted by the wealth of Singapore as determined by its GDP. Generally, India is a relatively inexpensive destination, not so far away from Singapore. This also explains why urban population did not emerge as a significant predictor. Also, at times, economic logic may be surpassed due to the presence of cultural-religious motivators as some of the key antecedents of most of Singaporean visits to India. Another interesting observation is that per-capita income of Singapore which did not predict the tourist movement to India.

Oftentimes, culture-oriented differentiation strategies are proposed as a solution to increase visitation numbers and visitor satisfaction. Yet, marketing strategists are very likely to turn myopic in their tendency to reduce culture to religion and traditional values is rampant (O’Hanlon and Washbrook, 1992). Targeting Singaporean tourists based on such simple generalizable assumptions is problematic, notes Pizam and Sussmann (1995). In their study, these authors reveal that French, Italian, and American tourists a lot of commonalities where as Singaporeans are very unique. The value system of Singaporeans is a complex whole made up of belongingness, family influence, empathy, dependency, hierarchical knowledge, commemoration, etc (Ahmed and Krohn, 1992). For so long, Indian tourism authorities have seen the cultural make up of the Singaporean in a very limited way: i.e, every tourist from Singapore who visits India is for business or Buddhist pilgrimage. This premise and the marketing strategy based it works like a self-fulfilling prophesy: concentrate efforts to promote Buddhist circuits among the Singaporeans which makes more and more tourists to visit only the Buddhist circuits which in turn make the policy makers reaffirm their belief in the original preconceived notion. Thus, this study has got significant implications for the community of policy makers.
REFERENCES


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Online Database


Newsletters

- Secretariat of Industrial Assistance (Government of India).
- World Travel and Tourism Council (WTTC).
Table 1: Summary data used for the study

<table>
<thead>
<tr>
<th>Year</th>
<th>Total FTA</th>
<th>Per-Capita</th>
<th>Export from</th>
<th>Import from</th>
<th>Population of GDP of Singapore***</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>inflow</td>
<td>inflow</td>
<td>to India</td>
<td>India**</td>
<td>Singapore***</td>
</tr>
<tr>
<td></td>
<td>from India</td>
<td>from India</td>
<td>(in Rs crs)</td>
<td>(in Rs crs)</td>
<td>(In Rs)</td>
</tr>
<tr>
<td>1991</td>
<td>1677508</td>
<td>28363</td>
<td>1.69</td>
<td>391.11</td>
<td>43164600 13100.96</td>
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<tr>
<td>1992</td>
<td>1867651</td>
<td>35039</td>
<td>1.88</td>
<td>553.6</td>
<td>49715560 13828.96</td>
</tr>
<tr>
<td>1993</td>
<td>1764830</td>
<td>40223</td>
<td>2.28</td>
<td>751.17</td>
<td>58158490 15410.50</td>
</tr>
<tr>
<td>1994</td>
<td>1886433</td>
<td>44157</td>
<td>2.34</td>
<td>770.57</td>
<td>70678700 17011.89</td>
</tr>
<tr>
<td>1995</td>
<td>2123683</td>
<td>48632</td>
<td>2.29</td>
<td>902.86</td>
<td>84290610 18214.20</td>
</tr>
<tr>
<td>1996</td>
<td>2287860</td>
<td>47136</td>
<td>2.06</td>
<td>978.21</td>
<td>92552420 19219.25</td>
</tr>
<tr>
<td>1997</td>
<td>2374094</td>
<td>52004</td>
<td>2.19</td>
<td>780.55</td>
<td>95866650 20475.68</td>
</tr>
<tr>
<td>1998</td>
<td>2358629</td>
<td>54328</td>
<td>2.30</td>
<td>972.15</td>
<td>82399430 19740.72</td>
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<tr>
<td>1999</td>
<td>2481928</td>
<td>53310</td>
<td>2.15</td>
<td>669.78</td>
<td>82610700 21306.73</td>
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<td>2000</td>
<td>2649378</td>
<td>46612</td>
<td>1.76</td>
<td>862.41</td>
<td>92716860 23563.23</td>
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<tr>
<td>2001</td>
<td>2537282</td>
<td>42824</td>
<td>1.69</td>
<td>975.18</td>
<td>85484100 22931.92</td>
</tr>
<tr>
<td>2002</td>
<td>2384364</td>
<td>44206</td>
<td>1.86</td>
<td>1424.33</td>
<td>88069060 24042.27</td>
</tr>
<tr>
<td>2003</td>
<td>2726214</td>
<td>48368</td>
<td>1.77</td>
<td>2126.13</td>
<td>92349640 25168.15</td>
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<tr>
<td>2004</td>
<td>3457477</td>
<td>60710</td>
<td>1.76</td>
<td>3999.17</td>
<td>107401100 27715.02</td>
</tr>
<tr>
<td>2005</td>
<td>3918610</td>
<td>68666</td>
<td>1.75</td>
<td>5424.60</td>
<td>116693400 29662.59</td>
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<tr>
<td>2006</td>
<td>4447167</td>
<td>82574</td>
<td>1.86</td>
<td>6064.19</td>
<td>132158500 32995.64</td>
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<tr>
<td>2007</td>
<td>5081504</td>
<td>92908</td>
<td>1.83</td>
<td>7371.33</td>
<td>142264489 34552.59</td>
</tr>
<tr>
<td>2008</td>
<td>5366966</td>
<td>100351</td>
<td>1.87</td>
<td>8222.32</td>
<td>145632119 36226.67</td>
</tr>
</tbody>
</table>

Table 2: Singaporean tourists to India as a fraction of total Singaporean outbound tourism.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Outbound Tourists from Singapore (to all Countries)</th>
<th>Outbound Tourists from Singapore coming to India</th>
<th>Share (%) of India in Singapore's outbound tourist market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>2867000</td>
<td>48632</td>
<td>1.70</td>
</tr>
<tr>
<td>1996</td>
<td>3305000</td>
<td>47136</td>
<td>1.43</td>
</tr>
<tr>
<td>1997</td>
<td>3671000</td>
<td>52004</td>
<td>1.42</td>
</tr>
<tr>
<td>1998</td>
<td>3745000</td>
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<td>1.45</td>
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<tr>
<td>1999</td>
<td>3971000</td>
<td>53310</td>
<td>1.34</td>
</tr>
<tr>
<td>2000</td>
<td>4444000</td>
<td>46612</td>
<td>1.05</td>
</tr>
<tr>
<td>2001</td>
<td>4363000</td>
<td>42824</td>
<td>0.98</td>
</tr>
<tr>
<td>2002</td>
<td>4399000</td>
<td>44306</td>
<td>1.01</td>
</tr>
<tr>
<td>2003</td>
<td>4221000</td>
<td>48368</td>
<td>1.15</td>
</tr>
</tbody>
</table>
Table 3: Correlations between tourist inflow and other variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Export to India</th>
<th>Import by India</th>
<th>GDP of Singapore</th>
<th>Per Capita Income of Singapore</th>
<th>Urban Population of Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.954</td>
<td>.88 (**)</td>
<td>.934( **)</td>
<td>.898 (**)</td>
<td>.788 (**)</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
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</tbody>
</table>

Graph 1: Trend of tourist inflow from Singapore to India

\[ y = 1E-41e^{0.0525x} \]

\[ R^2 = 0.7423 \]