

Understanding the Economic Impact of Tourism in the Asian Pacific Region Using the Tourism Satellite Account (TSA)

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Abstract

The Tourism Satellite Account (TSA) is a unique tool now available to policymakers in many countries to document the direct Gross Domestic Product (GDP) and employment contributions of tourism to national economies. The purpose of this study was to examine the main economic benefits and costs associated with tourism in the Asian Pacific region and to highlight the difficulties associated with their measurement using the Tourism Satellite Account. In the Asian and Pacific countries, the development of the TSA is an important step in obtaining world recognition and support. The results of this study show that a number of countries are already using TSA or in the process of initiating its use. Equally however, there are deficiencies in the information base, some of which will need to be addressed in order to advance the use of TSAs in the Asian Pacific region.

Keywords: Tourism Satellite Account, Asian Pacific, Tourists receipts, Gross Domestic Product, Economic Impacts.

1. Introduction

Tourism is a leading industry in the service sector at the global level as well as a major provider of jobs and a significant generator of foreign exchange at the national level. Tourism has become one of the largest and fastest growing industries in the global economy. During the period between 1996 and 2006, international tourist arrivals worldwide grew at an average annual rate of about 4.0%. In 1996 there were 575 million international tourists and in 2006 there were 846 million tourists. International tourist arrivals grew by over 4% in 2011 to 980 million, with tourists' receipts exceeding US\$919 billion. Growth continued in 2012 at the same pace but now international tourist arrivals reached the milestone 1.035 billion mark with tourists' receipts exceeding US\$1 trillion. During the ten-year period from 1996 to 2006, the Asian and Pacific region was second only to the Middle East in outperforming the rest of the world, with growth in tourist arrivals averaging 6.7% a year. The global market share of the Asian and Pacific region increased from 15.7% in 1996 to 19.8% in 2006. Europe remained the top regional tourist destination, while the Americas moved from second to third place behind Asia and the Pacific region. The global market shares declined slightly from 57.8% to 54.4% for Europe and 19.9% to 16.1% for the Americas over the decade from 1996 to 2006 (UNWTO). The Asia and Pacific region entered 2011 with healthy economic momentum (World Bank, 2012). Tourism is one of the most important sectors in the economies of the Asia Pacific countries. Currently, tourism is the most important sector and major source of foreign exchange earnings in Thailand, Australia, and New Zealand. It is ranked second in Hong Kong, Malaysia and the Philippines, and ranked third in Singapore and Indonesia (World Bank, 2012).

In late 2010, growth accelerated in China, Hong Kong Southeast Asian Region, and Singapore, due to both domestic demand and exports, and remained robust in India and Korea. In Japan, a pickup in economic activity emerged in early 2011, but was interrupted in mid-March by the earthquake and tsunami that caused extensive loss of life and property. Spillovers to economic activity in the region through disruptions to Japan's role in regional trade and finance are expected to be manageable.

Economic growth remained robust in Asian low-income and Pacific Island economies, as they benefited from strong commodity exports and investment in the mining sector, textile exports, and tourism (World Bank, 2012). In 2010, international tourism recovered more strongly than expected from the shock it had suffered from economic recession and the global financial crisis in 2009. The estimated worldwide number of inbound tourism arrivals in 2010 was 940 million, up 6.6% over 2009 and 2.5% more than the pre-crisis peak in 2008. While some destinations are still struggling to come out of the crisis, the tourism sector in Asia and the Pacific has been buoyant. The Asia-Pacific region had an increase in inbound tourism arrivals of 13% between 2009 and 2010, making the region a leader in the global recovery of tourism. In comparison with other regions across the globe, Asia and the Pacific had the second highest growth in inbound tourism arrivals in 2010 over 2009. The Middle East was the fastest growing region, up 14.1% in 2010, following a significant drop of 4.3% in 2009; Asia and the Pacific posted only a modest drop of 1.7% in 2009. Inbound tourism arrivals were up 7.3% in Africa, followed by Americas, up 6.6% and Europe up by 3.3%. Europe is recovering at a slower pace than other regions, mainly due to the uneven economic recovery (UNWTO, 2011).

North-East Asia has been the most dynamic sub-region in Asia and the Pacific, with an average growth rate in arrivals of 7.8% over the decade, while its global share grew from 8.3% in 1996 to 11.1% in 2006. China was the strongest performer with an annual average growth of about 9.0% over the ten year period. The number of international visitors to China more than doubled, reaching 49.6 million in 2006, which was almost equivalent to the total number of tourists visiting South-East Asia. This remarkable performance benefited from growing international and intraregional demand, reduced transport costs and the continued liberalization of outbound travel from China. Despite disasters and various crises, other sub-regions in Asia and the Pacific succeeded in maintaining a positive trend in growth of annual tourist arrivals over the decade, varying from 5.5% in South-East Asia to 6.6% in South Asia and 2.1% in Oceania (Australia, New Zealand and Pacific island countries and territories). Cambodia had an average annual growth rate of 20.3% in tourist arrivals from 1996 to 2006; Viet Nam had 6.5%; and Thailand had 13.0%. India had an average annual growth rate of 10.0%; and Maldives had almost 30.0% (UNWTO).

The strong growth in tourism arrivals for Asia and the Pacific, particularly the sub-regions of North-East Asia, South Asia and South-East Asia is one indicator of the increased significance of tourism for developing countries in this region. Visitors worldwide have clearly recognized the attractiveness of tourism experiences in Asian and Pacific developing countries in terms of the rich cultural heritage and natural environment. Many officials in these countries have seen that tourism can be part of their development strategies, especially in economic terms. In the last two years for which data are available, tourism has continued to grow rapidly in Asia and the Pacific. While the world's average annual growth rate for international tourist arrivals was 5.4% from 2005 to 2006, Asia and the Pacific grew at 7.7%, which was the third highest rate of growth for 2006, behind Africa's growth rate of 9.2% and the Middle East at 8.9%. A breakdown of the regional figures for Asia and the Pacific shows major sub-regional differences. That is, growth from 2005 to 2006 was 7.4% in North-East Asia; 9.3% in South-East Asia; 11.0% in South Asia; and 0.2% in Oceania. The strong growth in South-East Asia and South Asia was attributed in part to the full recovery of Thailand and the Maldives from the impact of the December 2004 tsunami, as well as high growth rates for Cambodia, India, Macao, China, Malaysia, and the Philippines (PATA). The definition of the Asia Pacific region in this paper corresponds to the definition used by the WTO which includes North-East Asia, South-East Asia, and Oceania.

2. Background

International tourist arrivals grew by 4.4% in 2011 to a total 980 million, up from 939 million in 2010, in a year characterized by a stalled global economic recovery, major political changes in the Middle East and North Africa and natural disasters in Japan. By region, Europe (+6%) was the best performer, while by sub-region South-America (+10%) topped the ranking. Contrary to previous years, growth was higher in advanced economies (+5.0%) than in emerging ones (+3.8%), due largely to the strong results in Europe, and the setbacks in the Middle East and North Africa. International tourism hit new records in 2011 despite the challenging conditions. The tourism sector is directly responsible for 5% of the world's GDP, 6% of total exports and employing one out of every 12 people. Available data on international tourism receipts and expenditure for 2011 closely follows the positive trend in arrivals (UNWTO, 2011). Among the top ten tourist destinations, receipts were up significantly in the USA (+12%), Spain (+9%), Hong Kong (China) (+25%) and the UK (+7%).

The top spenders were led by emerging source markets such as China (+38%), Russia (+21%), Brazil (+32%) and India (+32%), followed by traditional markets, with the growth in expenditure of travelers from Germany (+4%) and the USA (+5%) above the levels of previous years. UNWTO forecasts international tourism to continue growing in 2012 albeit at a slower rate. Arrivals are expected to increase by 3% to 4%, reaching the historic one billion mark by the end of the year. Emerging economies will regain the lead with stronger growth in Asia and the Pacific and Africa (4% to 6%), followed by the Americas and Europe (2% to 4%). The Middle East (0% to +5%) is forecast to start to recover part of its losses from 2011. International tourism receipts combined with passenger transport currently total more than US\$ 820 billion making tourism the world's number one export earner, ahead of automotive products, chemicals, petroleum and food.

The two major challenges facing tourism policy-makers, statisticians and researchers are: (i) how to present a rational, universally acceptable and technically sound definition of the tourism sector within clearly delineated boundaries; and (ii) how to more precisely measure the economic value-added and impact of the tourism sector. Those challenges derive from the fact that the "tourism industry" or the group of industries identified in the tourism sector does not exist as a distinct entity in the traditional national accounts or national statistical system. Thus, data on the range of economic activities directly attributable to tourism may be found in the statistical infrastructure, but they are disjointed, and widely dispersed among other economic sectors. Consequently, the value added of the tourism sector has been consistently underestimated in traditional national income accounting. Recognizing that, with a few country specific exceptions, one of the biggest limitations in the regional tourism sector is the absence of a reliable, thorough and internationally uniform statistical database from which one could measure the full economic impact of tourism.

The Tourism Satellite Account (TSA) initiated in the year 2000 by the United Nations World Tourism Organization (UNWTO), is a statistical accountant framework in the field of tourism and measures the goods and services according to international standards of concepts, classifications and definitions which allow valid comparisons from country to country in a consistent manner. A complete TSA contains detailed production accounts of the tourism industry and their linkages to other industries, employment, capital formation and additional non-monetary information on tourism. Tourism Satellite Accounts (TSAs) implementation in the Asian Pacific region has become a topical issue with many initiatives aimed at facilitating that process now at various stages of conceptualization. A number of regional institutions and several governments in the region have acknowledged the necessity for more precise measurement of tourism through TSAs in order to provide policymakers with more reliable information on which to gauge the economic value-added of the sector.

Indeed, a number of initiatives designed to facilitate the implementation of TSAs are ongoing with support from institutions such as Development Banks, Non Governmental Organizations and Asian Pacific Tourism Authorities. Measuring tourism is difficult. Unlike other sectors in the economy, tourism cannot be measured using standard economic accounting methods. While most industries are measured by counting what is produced, tourism is defined by what visitors buy. As such, tourism is a demand activity that touches many industries, including accommodations, transportation, food and beverage, and entertainment to name a few. The key is to separate the level of industry activity made by visitors from that which is contributed by residents. Tourism Satellite Accounting is the international (UNWTO) standard for measuring the contribution of tourism to an economy. By using this standard, each TSA is constructed in precisely the same way, making the measurement of tourism activity consistent and comparable across states, countries, and industries. Guam tourism statistics can be compared to those of Fiji, the Philippines compared to Thailand or Hong Kong to Macau. Additionally, the tourism industry as a whole can be compared to the healthcare industry or information technology.

3. Literature Review

Worldwide, inbound tourism expenditure reached US\$919 billion in 2010, up from US\$851 billion in the previous year, corresponding to an increase by US\$68 billion. Travel and tourism in the Asia-Pacific region had an increase in inbound tourism arrivals of 13% between 2009 and 2010, making the region a leader in the global recovery of tourism. In comparison with other regions across the globe, Asia and the Pacific had the second highest growth in inbound tourism arrivals in 2010 over 2009. Inbound tourism expenditure grew to US\$249 billion in 2010, up from US\$203 billion in 2009 (WTO, 2010). The TSA aims to compile and present information about the participation of this sector on a national or regional economy.

This idea have been developed and fostered by different institutions, including the UN World Tourism Organization. At least 90 countries (UNWTO, 2011) already have complete or incomplete TSAs. The UNWTO expects that this number will increase fast in the next few years. The TSAs have also been an issue of academic research (e.g., Ahlert, 2007; Calvin & Max, 2007; Diakomihalis & Lagos, 2008, Dwyer, Deery, Jago, Spur & Fredline, 2007; Egon, 2006; Gerd, 2008; Jones & Munday, 2008; Kalin, 2007; Libreros, Massieu & Meis, 2006; Sharma & Christie, 2006; Zhang, 2005). Occasional progresses in the world have been presented (Libreros et al, 2006) and textbook which dealt with TSA were published (Vanhove, 2005, Hara, 2008). Measuring tourism is difficult. Unlike other sectors in the economy, tourism cannot be measured using standard economic accounting methods. While most industries are measured by counting what is produced, tourism is defined by what visitors buy. As such, tourism is a demand activity that touches many industries, including accommodations, transportation, food and beverage, and entertainment to name a few. The key is to separate the level of industry activity made by visitors from that which is contributed by residents. Tourism Satellite Accounting is the international (UNWTO, PATA) standard for measuring the contribution of tourism to an economy. By using this standard, each TSA is constructed in precisely the same way, making the measurement of tourism activity consistent and comparable across states, countries, and industries. Guam can be compared to the Philippines, Thailand can be compared to Singapore, and tourism can be compared to healthcare or information technology.

Tourism Satellite Account (TSA) use lies in enabling comparisons regarding the size and importance of traditionally industries like agriculture and manufacturing, and non-traditionally industry like tourism within an economy. The information reported in a set of satellite accounts also enables better and more efficient policy development and planning. The environment for the economic analysis of tourism has improved remarkably in the developed countries in the recent past. Improvements can be explained, in part, by better underlying government data on the composition of tourism expenditure. This includes the development of a national level TSA, which provides a consistent accounting of tourism activity that can be set alongside the national income account. The approach then works to estimate the supply of those goods and services, through domestic production and imports (Jones *et al.*, 2003). Alongside methodological improvements relating to the accounting of tourism, have been improvements to regional data on tourism. Implementation of TSA in the Asian Pacific region will greatly benefit the countries and the region not only with sound tourism policies but also with short and long term planning for tourism growth and development.

4. Tourism Satellite Accounts

After years of targeted statistical systems development in collaboration with other international institutions, in 1993 the United Nations Statistical Commission adopted a new System of National Accounts (SNA) which recommended the adoption of a new concept called “Satellite Accounting”, designed to enhance and expand countries’ ability to more accurately capture the economic impact of previously undefined “sectors” such as health, tourism and the environment. Tourism has grown substantially over recent decades as an economic and social phenomenon. Unfortunately, the development of statistical concepts and frameworks for tourism has not kept pace with the changes in the nature and significance of tourism worldwide and its potential for future growth. The problem with measuring the economic significance of tourism spending is that ‘tourism’ does not exist as a distinct sector in any system of economic statistics or of national accounts. As a result, tourism’s value to the economy is not readily revealed. Tourism activity is “hidden” in other industry activities such as accommodation, transportation, and telecommunications and so on. Tourism’s economic contribution can be measured, however, through the construction of TSAs, see table 1.

Tourism Satellite Accounts (TSAs) extract from the National Accounts the contribution that tourism makes to each other sector of the economy allowing measurement of the true contribution of tourism to Gross Domestic Product (GDP) or Gross State Product (GSP) and permitting comparison with other economic sectors listed in the national accounts. The TSA is a method of measuring the direct economic contributions of tourism consumption to a national economy. Its unique approach derives from employing the principles and structure of the internationally-adopted System of National Accounts to measuring the direct economic impact of tourism. It comprises a unique set of inter-related tables that show the size and distribution of the different forms of tourism consumption in a country and contributions to GDP, national income, employment and other macroeconomic measures of a national economy.

While the concept of a satellite account for tourism is nearly three decades old, it was only in early 2008 that two documents exhaustively elaborating the concepts and data requirements for a TSA were approved by principal international economic and statistical bodies: 2008 Tourism Satellite Account: Recommended Methodological Framework and 2008 International Recommendations for Tourism Statistics. In TSA, the “tourism industry” is identified from the demand side by measuring the demand for various commodities. This makes it possible to form a link to the supply side of the tourism industry through the identification of tourism commodities and hence to the industries which are characteristic of, or connected to, tourism and to calculation of their relative dependence on tourism generated demand. TSA provide an internationally recognized and standardized method of assessing the scale and impact of tourism related production and its links across different sectors. TSA can provide a comprehensive database which identifies tourism's role in an economy and provides a rigorous and reliable basis for drawing comparisons between tourism and other sectors in terms of their contribution to the economy, as well as international comparisons. They provide an invaluable tool for measuring and monitoring the development of tourism and assessing its economic contribution. Countries in which TSA have been implemented are able to gain a much clearer picture of tourism's position within their economy and are thus able to evaluate more accurately the benefits it offers. Such information is the prerequisite to efficient and effective policy decisions to guide the future development of tourism. In addition, they provide a foundation for more sophisticated analyses of the impact of tourism and the assessment of different policy regimes using techniques such as computable general equilibrium modeling. The Asia and Pacific region tourism development in part is dependent on those destinations implementation of TSAs.

5. Methodology

An extensive literature review was conducted using published reports, emails, desk and Internet research. Areas covered included TSA methodological frameworks, TSA implementation across the Asia and Pacific region, with particular reference to the experiences of Australia, New Zealand and Malaysia. United Nations World Tourism Organization (UNWTO) documentation on the subject was also reviewed. PATA reports were also studied, including papers and country reports presented at Regional Meetings, Symposiums and Standing Committees. The Association of South Eastern Asian Nations (ASEAN) and Asia Pacific Economic Cooperation (APEC) were also utilized. In order to conduct a more objective assessment of TSA readiness, criteria were developed and an assessment tool in the form of a structured questionnaire was designed. The questionnaire was sent via email and facsimile to the TSA contact official in each country, most of whom were based at the National Tourism Authorities or Agency. The study frame consisted of the twenty five countries in the Asia and Pacific.

6. Results

The review of tourism and other relevant sources has indicated that there is a substantial volume of information available which could provide an initial basis for the preparation of TSA or the improvement of what already exist. A number of countries are already using TSA or in the process of initiating its use as seen in Table 2. Equally however, there are deficiencies in the information base, some of which will need to be addressed in order to advance the use of TSAs. In particular, there are major gaps in the data, weaknesses in the comprehensiveness of otherwise useful sources, and variations in definitions and methodology between survey sources. The main gaps include both actual areas where information is not collected, and more often the absence of data on the tourism share of overall spend on a particular category. Thus information on overall retail demand, is collected from the retail sector by tourism authorities but at some destinations the survey does not distinguish between visitor and resident demand in. The main areas of weakness include:

- Expenditure by tourists on consumer durables which is not related to a specific trip such as items of leisure clothing, luggage, cameras and other equipment used on multiple trips, and transport which is partly used for tourist trips.
- Capital investment and/or maintenance and service costs on accommodation such as second homes which is not dependent on a specific trip. Such accommodation includes not only permanent dwellings used as second homes but also touring and static caravans, tents and boats. Partial data is available from manufacturers in respect of a number of these items, but not often in a form which allows disaggregation between tourist and non-tourist use.

- Revenue expenditure by public bodies on visitor management and tourism marketing which is not reflected in spending by visitors; some information is collected through annual surveys of Local Authority spending but tourism is often narrowly defined and often identified in different ways by reporting authorities.
- Capital investment in new tourism facilities and capacity by the private sector; capital investment in tourism infrastructure such as airports, railways, roads and other facilities by the public and private sectors.
- Data collection.

7. Conclusion

Tourism is one of the most important sectors in the economies of Asia and Pacific countries. Currently, tourism is the most important sector and major source of foreign exchange earnings in Thailand, Australia, and New Zealand. It is ranked second in Hong Kong, Malaysia and the Philippines, and ranked third in Singapore and Indonesia. PATA predicts that Asia and Pacific destinations will see a year-on-year growth rate of four to five per cent in international visitor arrivals during 2012, and this pace of growth is expected to continue into 2015. Strong intra-regional tourism growth supported by consistently rising disposable incomes, coupled with continued expansion of airline seat capacity to new destinations within the region, remain a key factors in driving Asia and Pacific tourism in the foreseeable future. There is no question that the coming decade leading into 2020 is set to become the Asia Pacific decade in tourism. According to World Bank figures, in 2011 over 60 million Chinese travelled internationally compared to 40 million in 2007. Growth in international tourism departures from India has increased from just fewer than 10 million in 2007 to over 14 million in 2011. Japan and South Korea both boast well over 10 million international departures of their citizens and this trend is rapidly spreading to other parts of Asia. The high Australian dollar helped to motivate 7.5 million Australians to travel internationally in 2011, about one third of the population. The Asia and Pacific region is well aware of tourism as a vehicle for economic, social and political development. It is therefore very important that mass tourism to the region be checked and one way of doing this is through the TSAs. This is matched by a determination of the many enlightened tourism industry leaders in the region to focus on developing both a sustainable and a culturally authentic tourism infrastructure.

Developing and maintaining a successful tourism industry has clearly become a major element in the economic and social development of many countries in the region. Whether we talk about Fiji, Singapore, China, New Zealand, Thailand, Malaysia, Vietnam or Singapore, tourism is a major employer for many citizens of all these countries but if managed sensitively can also present opportunities to nurture and showcase the cultural distinctiveness of each country in this vast and expansive region. The TSA is a relatively new statistical instrument designed to address these and related issues and to allow the measurement of the economic importance of tourism according to international standards of concepts, classifications and definitions. A properly constructed TSA will allow valid comparisons of tourism's economic contribution to be made with other industries and across territories, and economic performance measures derived for tourism will be compatible with other internationally-recognized macroeconomic and sectoral economic statistics. TSA allow the tourism industry to be better included in the mainstream of economic analysis. Tourism's total economic contribution (both direct and indirect) measures the size and overall significance of the tourism industry within an economy. TSA provide the basic information required for the development of models of the economic impact of tourism. Tourism researchers now have the data to explore the performance of individual tourism sectors or of the entire tourism industry relative to that of other industries, domestically and internationally.

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Table 1: The 10 TSA Tables

Table 1	Inbound Tourism Expenditure (element of aggregate demand)
Table 2	Domestic Tourism Expenditure (part of total consumption)
Table 3	Outbound Tourism Expenditure
Table 4	Internal Tourism Final Consumption
Table 5	Production Accounts of Tourism & Other Industries
Table 6	Domestic Supply & Internal Consumption by Product
Table 7	Employment in Tourism Industries
Table 8	Tourism Gross Fixed Capital Formation
Table 9	Tourism Collective Consumption by Function & Levels of Government
Table 10	Non-Monetary Indicators of Tourism

(Source: United Nations World Tourism Organization)

Table 2: Asia and Pacific Summary of Current Tourism Satellite Accounts Projects as of June 2012

COUNTRY	TSA STATUS	COMMENTS
Australia	TSA in full use since 1997	A range of tourism and economic statistical standards have been reviewed and updated in 2008 Very good data with no current challenges
Cambodia	Preliminary TSA completed. New Initiative.	Some data collection constraints, training challenges, definitions not clear and coverage not extensive.
China	TSA in full use since 2004.	Continue to improve the method of compilation by strengthening cooperation and communication.
Sri Lanka	TSA in full use.	Technical assistance received from UNWTO and is improving data collection.
Vanuatu	TSA feasibility study under discussion	Not currently in use
Fiji	TSA in full use since 2002	Data sources provide consolidated data on both domestic and international tourism Budget allocation withdrawn for the TSA project by the government Improving data collection
India	TSA in full use since 2002	Efforts continue to bridge the existing data gap
Indonesia	TSA in full use	Some data collection challenges
Philippines	TSA in full use since 2009	Compilation done by the Ministry of Tourism limiting the scope of the database Lack of interest in tourism statistics at the sub-national level
Republic of Korea	TSA in full use	Doing a fairly good job collecting data
Malaysia	TSA in full use	Need to improve data collection
Maldives	TSA studies completed	Data collection regulations are being drafted
Japan	TSA in full use	identifying instruments for measuring and modeling tourism flows with pilot tests in different cities Improving data collection
Taiwan	TSA in full use	Improving data collection
Thailand	TSA in full use	Improving data collection
Singapore	TSA in full use	Improving data collection
New Zealand	TSA in full use since 1999	Very good data with no current challenges