



## **Tourism Statistics and Tourism Satellite Accounts: The Case of Turkey**

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### **Abstract**

The System of National Accounts(SNA) consists of a coherent, consistent and integrated set of macroeconomic accounts, balance sheets and tables based on a set of internationally agreed concepts, definitions and accounting rules. SNA provides information of economic activities and also shows the levels of the economy's productive assets and the wealth of the individuals.

As the economies all around the world is progressing ,United Nations(UN) published new national accounts in 1993 to cover the needs of new economic concepts. Tourism, environment, education were also included in this new system of accounts. Within this functional perspective the 1993 System of National Accounts (SNA93) defines industries as " groups of establishments engaged in the same kind of productive activities". The set of tourism characteristic activities does not comprise a unique industry conforming to this definition. But this set covers a number of "industries" in the International Standard Industrial Classification (ISIC) sense.

It is not easy to measure the economic impact of tourism as tourism is an economic activity which has many interrelated sectors. To realize the aim of measuring the value added of tourism and employment in tourism sector Tourism Satellite Accounts (TSA) has been developed to measure the economic impact of tourism in a national economy on a yearly basis.

The complete TSA will provide macroeconomic aggregates such as tourism value added, contribution of tourism to GDP and employment, detailed data on visitor consumption, detailed production accounts of the tourism industries, basic information needed for the economic models of tourism, a link between economic data and other non-monetary information on tourism.

The first study on TSA in Turkey was published in 2001 by State Institute of Statistics. This study is introduction to Tourism Satellite Accounts and it covers consumption tables between the years 1996 and 1998.The aim of my study is to evaluate the Turkey's experience of TSA . The study will also compare the TSA of Turkey to the existing TSA standards as adapted by European Implementation Manual (EIM), OECD, and WTO. General framework of TSA is examined in the first part of the study. As TSA cannot be analyzed without the system of tourism statistics of the country ,the system of tourism statistics of Turkey is analyzed in the second part of the study. The next section of the study will summaries the methodology and results of TSA of Turkey. The last part of the study is reserved for conclusion and recommendation for future studies.

**Key Words: Tourisn Statistics. TSA, Turkey**

## **Tourism Statistics and Tourism Satellite Accounts in Turkey**

### **I. Introduction**

Tourism satellite accounts are tools to understand the role of tourism in the economy and it is not easy to measure the economic impact of tourism as tourism is an economic activity which has many interrelated sectors. Tourism Satellite Accounts has been developed to measure the economic impact of tourism in a national economy on a yearly basis. TSA provides us with a means of separating and examining both tourism supply and tourism demand with the framework of the System of National Accounts.



TSA will help the nations while measuring the value added of tourism industries (VATI), Tourism value Added (TVA), Tourism Gross Domestic Product (TGDP), tourism's ranking compared to other economic sectors, the number of jobs created by tourism in an economy, the amount of tourism investment, tax revenues generated by tourism industries, tourism consumption, tourism's impact on a nation's balance of payments and characteristics of tourism human resources.

Tourism Satellite Accounts (TSA) is a statistical tool including concepts, definitions, aggregates, classifications and it is a building process to guide countries to their own system of tourism statistics.

To obtain those information countries need statistics and TSA and STS should be analyzed together. Without a system of tourism statistics TSA cannot be constructed. TSA provides a framework to harmonize and integrate most of the components of a system of tourism statistics therefore the development of the STS and the process of preparing the TSA should go hand-in-hand and both are conditioned by three important factors: Cooperation, sufficient resources and regular reviews of tourism statistics and analysis.

TSA is designed to put tourism activities into perspective within the domestic economy. In general terms the TSA is a four-layer accounting system which collects, orders and interrelates statistics on all significant and measurable aspects of tourism activities. TSA uses the ordering mechanisms of Input-Output as a primary reference point. And TSA is based on the general balance existing within an economy between the demand of goods and services generated by tourism and their supply.

The preparation of TSA is a permanent and ongoing process. It depends on the country's system of tourism statistics and provides a framework to harmonize and integrate most components of tourism statistics. Inter-institutional cooperation among producers and users of tourism statistics must be essential. The development of TSA has been primarily focused on the data production.

The National Tourism Agency should establish on a periodic basis a specific agenda or work schedule in the field of tourism statistics and the other institutions related to tourism statistics will coordinate with the national tourism agency. Principal actors can be grouped into three categories. The first one is the bodies that produce statistics and supply basic information such as National Statistical Offices, National Tourism Administrations, Central Banks and associations of national tourism enterprises. The second body is information providing units such as tourism enterprises and establishments and other public departments and the last body is the potential users of tourism information.

In Turkey principal actors that produce statistics are the Ministry of Tourism and Culture, State Institute of Statistics, Central Bank, Association of Turkish Travel Agencies (TURSAB), Association of Hoteliers of Turkey (TUROB) and General Directorate of Security Affairs. Tourism enterprises and establishments are providing information to those agencies and lastly investors, academicians and researchers are the potential users of tourism statistics in Turkey.

In Turkey the first study on TSA was published by the State Institute of Statistics in 2001. The study covers the period 1996-1998. The publications are an introduction to TSA and it covers tourism consumption tables of the years 1996, 1997, 1998, 2001 and 2002 (January-June). In those tables expenditures of foreign visitors by types of expenditures and according to nations are presented. Inbound tourism expenditures are presented according to WTO classifications: food and beverage, accommodation, health, transportation, tour and others. The table which shows foreign visitor expenditures is very similar to table 1 (inbound tourism expenditures) of TSA. This study is only related to the Table 1 of TSA.

The aim of this study is to analyze the problems of publishing tourism statistics by different institutions in Turkey. This study deals with the statistics that are needed to compile ten tables of TSA and this study will also show the missing data to compile the ten tables of TSA. The study analyzes the tourism statistics in Turkey and tries to answer how the cooperation among the institutions can be increased. The study will try to answer three questions:



1. Can household consumer surveys be extended to estimate the domestic tourism expenditures?
2. Can the employment statistics in tourism sector be obtained from household labor force surveys and hotel-restaurant establishment's survey ?
3. Can the coverage of accommodation statistics be extended by the project proposed by General Directory of Security Affairs?

## II. Tourism Statistics and TSA

This study deals with the statistics that are needed to compile the ten tables of TSA. For TSA inbound tourism consumption, by products and categories of visitors, domestic tourism consumption, by products, outbound tourism consumption, internal tourism consumption, production accounts of tourism industries and other industries, employment in the tourism industries, tourism gross fixed capital formation of tourism industries and other industries, tourism collective consumption, by functions and levels of government and non-monetary indicators such as number of trips and overnights by type of tourism and categories of visitors, number of arrivals and overnights by means of transport, number of establishments and capacity by forms of accommodation and number of establishments in tourism characteristic and tourism connected

The ten tables which compromise Tourism Satellite Accounts are derived from or related to the tables of SNA 93 which relate to supply and use of goods and services. They are at the centre for international comparisons of economic impact of tourism among economies.

The proposed tables, accounts and main aggregates should be developed in two separate stages since most countries will not be able to compile all tables at the same time. In a first stage, the aim would be to compile tables 1, 2, 3, 4, 5, 6 and 10. Those tables are the minimal set of tables required to speak of system of satellite accounts.

The concentration must be both on demand and supply sides. A TSA must include at least a presentation of supply and consumption in certain detail in terms of goods and services consumed and activities produce them.

In Turkey there are some efforts for the supply side of TSA however they are not completed that is why this study will not deal with the supply side of TSA which are mainly table 5 and table 6.

The hotel-restaurant establishment survey gives some information on value added of hotel and restaurants. However this survey calculate the value added by two and three digit economic activity codes in hotel and restaurant sector. State Institute of Statistics try to calculate the value added from tourism industry by 4 digit economic activity as 4 digit economic activity is needed for the supply side of TSA.

## III. Tourism Statistics in Turkey

Tourism Statistics is collected by State Institute of Statistics (SIS- the National Statistical Office of Turkey), Ministry of Tourism (The National Tourism Administration), Central Bank of Turkey (CB). In Turkey tourism statistics have been collected since 1963. The annual and monthly statistical data on tourism has been published by the Ministry of Tourism since 1972.

Tourism receipts, the oldest statistics regularly published, in Turkey was provided by the Ministry of Finance till 1978 and these statistics were provided by the Central Bank between the years 1978-1983. Due to the change in the law related to "Protection of the Value of Turkish Currency" which is the result of economic liberalization and freedom of using foreign currency at the end of 1983 all tourism receipts could not be registered by the Central Bank. Therefore from the year 1984, yearly tourism receipts has been forecasted by a survey which has been conducted by the C.B between 1991-1995. 1996-1998, 2001 and 2002 tourism receipts have been calculated according to the results of the surveys conducted separately by SIS and Ministry of Tourism. 1999 and 2000 tourism receipts were obtained from Central Bank survey SIS did not able to conduct foreign visitor surveys in 2000 because of financial constraints.



SIS published the tourism revenues as total expenditures of the foreigners and the Turkish citizens who are living and working in abroad. However CB does not consider the expenditures made in Turkey by those citizens Turkish citizens working abroad as tourism expenditures. CB only considers those Turkish citizens income transfers via the banking system under the heading of workers' remittances for balance of Payment purposes. (Coskun, 2002)

There is an important difference between the tourism revenues figures of SIS and CB for the year 2001 and 2002. SIS also includes the expenditures of Turkish citizens who are living and working in abroad to inbound tourism consumption. That's why there is a large difference between the tourism revenues of SIS and the tourism revenues of CB for the year 2001. In 2001 tourism revenues was 12.4 billion dollars according to SIS however this figure was 8.09 billion dollars according to CB. And the international institutions( IMF, OECD,WTO) uses the Central bank figures in their publications . CB forecast of tourism revenues is less than the SIS' s forecast. Then the economic importance of tourism is underestimated for Turkish economy.(Coskun, 2002)

In 2003 only one tourism revenues figure was published based on the foreign visitor survey conducted together by SIS, Ministry of Tourism and Central Bank. The questionnaire was jointly carried out by SIS , Ministry of Tourism and Central bank. In the survey the expenditures of the Turkish citizens who are living and working in abroad is also included in tourism receipts of Turkey as those Turkish citizens are considered as tourists according to international definitions. CB did not consider those Turkish citizens as tourists that s why there was a significant difference between SIS tourism revenues of Turkey and CB tourism revenues of Turkey in 2001 and 2002. Then there is no coordination problem between State Institute of Statistics and Central Bank in terms of tourism statistics.

As foreign visitor survey is the data source of inbound tourism consumption and inbound tourism consumption by products and categories of visitors is needed for the first table of the TSA and the first table of TSA can be published and the published statistics of inbound tourism consumption is reliable and accurate now.

For the table 2 of the TSA domestic tourism consumption by products is needed and in Turkey there is no accurate and reliable information on domestic tourism consumption so domestic tourism expenditure statistics is one of the weakest part of the Turkish tourism statistics.

In Turkey household consumption survey is conducted regularly by State Institute of Statistics for GDP calculations. There are two types of questionnaires: 1. Household Consumption Expenditures Survey, 2. Household Income Distribution Survey.

Household consumption survey is used to determine the consumption patterns of individuals. Through the survey information on household sizes, employment conditions and status of household members ,total household income, sources of revenues , consumption and expenditures types are investigated. This survey analyzes the types of consumption expenditures. Types of consumption expenditures are food beverage and tobacco, clothing and footwear, housing and rent, house furnishing, health, transportation, entertainment and culture, education , hotel and restaurant.

As household consumption expenditures survey includes hotel and restaurant expenditures , transportation, entertainment and cultural expenditures, this study suggests that by adding some questions to household consumption expenditure survey inbound tourism expenditures for TSA can be obtained as hotel expenditures include fees for hotels, holiday and travel expenditures and tours.

Table 3 is the outbound tourism expenditures and those statistics can be obtained from CB as CB collects those information for balance of payment purposes.



Table 7 of TSA requires statistics on employment in the tourism industries. This information can be obtained from household labor force statistics and in some cases from administrative records such as social security records.

In Turkey SIS conducts labor force survey and hotel-restaurant establishments surveys to determine the employment level in tourism industry in Turkey. Labor force survey is conducted for all geographic regions, urban and rural, since 2000. Besides the yearly estimates for Turkey SIS conducts the survey quarterly after 2001. The labor force survey was conducted semi-annually up to year 2000. Since 2002 the survey is conducted on quarterly basis. All economic activities are coded at the four digit level according to the International Standard Industrial Classification, ISIC-1990 in labor force survey. Hotels and Restaurants are classified as G,H. Each economic activity is analyzed according to status in registration as Social Security Institution(SSK), Self-Employment Institution(Bag-Kur) and not registered.

The annual survey on hotel and restaurant establishments are conducted by State Institute of Statistics . This survey gives information about employment status, payments to employees, input-output and value added by two and three digit economic activity codes in hotel-restaurant sector. Table 7 of TSA can be compiled by using household labor force survey and hotel restaurant statistics.

Table 8 of TSA is related to tourism gross fixed capital formation. Hotel restaurant survey gives information about the fixed assets in tourism sector. It includes the value of capital goods built or produced by the establishment unit.

National Tourism Agency which is Ministry of Tourism and Culture in Turkey is responsible from non monetary indicators such as number of trips and overnights by type of tourism and categories of visitors, number of arrivals and overnights by means of transport, number of establishments and capacity by forms of accommodation and number of establishments in tourism characteristic and tourism connected. The Ministry collects non monetary indicators from hotels and other accommodation units.

In Turkey tourism enterprises can get license for accommodation either from Ministry of Tourism or Municipalities. Enterprises licensed by Ministry of Tourism are required to fill accommodation statistics forms. Those forms are used to determine the capacity of tourism enterprises and accommodation statistics.

The Ministry of Tourism and Culture is responsible in collecting accommodation and occupancy statistics in Turkey. As Turkey is a candidate country for EU the Ministry also studies the adaptation of statistics to the standards of EU. For this purpose Turkey benefit from MED-TOUR project. This project gives the opportunity of sending questions in electronic environment and this project covers the accommodation units which are licensed by Ministry of Tourism.

Ministry of Tourism collects the information from all the hotels and other accommodation units licensed by the ministry. By the implementation of MED-TOUR project the significant number of accommodation units are able to send the questioners in electronic environment. Reply rate is increased to 80 percent this rate was 60 percent before the MED-TOUR project..

Tourism enterprises can get license for accommodation either from Ministry of Tourism or Municipalities. As it was mentioned that enterprises licensed by Ministry of Tourism are required to fill accommodation statistics forms and those forms should be sent to Ministry of Tourism. Then capacity of tourism enterprises and related accommodation statistics are published by the Ministry of Tourism. The problem is statistics related to accommodation units licensed by municipalities. In fact all accommodation units which are in the territories of a city should give their accommodation information daily to the nearest police station because of security reasons.





General Directory of Security Affairs developed a project named as Temporary Resident Identification Information (GIYKIMBIL). This project is based on the Law on Informing the Security Departments on the Identification of Travelers Staying in Public Accommodation, numbered 1774 and dated 1974 and 1996. Managements of accommodation units (public or private) should give accommodation information online to the nearest police station or to the central data base of the GIYKIMBIL project located in Ankara and names are matched with the red list of the police station from security point of view.

All hotels, motels and hotel villages both licensed by the Ministry of Tourism and municipalities without any limits, in terms of bed numbers, should provide the accommodation information. Secondly all kind of health related accommodation establishments and the rest of accommodation facilities (private or state) including boarding houses, work and holiday camps, and camping should provide accommodation information daily as required by the Law.

By the requirement of the Law mentioned above, the management of public accommodation should collect some information from guests. These variables are citizen identity number, name and surname, name of father and mother, location of birth, date of birth, nationality, type of identification card, information on registration related with birth certificate, gender, marital status, profession, address of permanent resident, date of checked in and checked out, number of rooms stayed, number of plate of vehicle used by guest.

It should be noted that the variables indicated above are sufficient to fulfill the needs of accommodation statistics required by the Ministry of Tourism and Culture. The needed variables are check-in and check-out date, nationality and address of guests. City or country name is enough for addresses and this information is needed to distinguish the residents and non-residents.

There are more than 60 thousand bed capacity public camps (state-owned summer camps for government officials) and there is no statistics about the expenditure made and occupancy rates of those facilities. As GIYKIMBIL project will cover all the accommodation units, the accommodation statistics for public camps can be obtained.

Table 10 of the TSA can be easily and accurately compiled by the GIYKIMBIL project. In the next future the Ministry may only use the statistics obtained from General Directory of Security Affairs.

## Conclusion

This paper has reviewed possible sources of statistics to complete the ten tables of TSA in Turkey. The basic sources of tourism statistics are foreign visitor survey, household consumption survey, labor force survey and hotel and restaurant survey.

The study analyzed the data sources and statistics to compile the ten tables of TSA. In Turkey table 1, table 2, table 3, table 4, table 7, table 8, table 9 and table 10 can be compiled. The study asked three questions to expand the data sources for the tourism statistics for TSA.

The questions are: Can household consumer surveys be extended to estimate the domestic tourism expenditures?, Can the employment statistics in tourism sector be obtained from household labor force surveys and hotel-restaurant establishments survey?, Can the coverage of accommodation statistics be extended by the project proposed by General Directory of Security Affairs?

The answer of the three question is YES. Then household consumer surveys can be extended to estimate the domestic tourism expenditures. The employment statistics in tourism sector can be obtained from household labor force surveys and hotel-restaurant establishments survey and the coverage of accommodation statistics can be extended by the project proposed by General Directory of Security Affairs

The problem is the supply side of TSA in Turkey as the studies of SIS continues related to input-output tables. Table 6 is at the centre of the TSA, table 6 should be completed in Turkey to measure value added of tourism industries, tourism value added and tourism Gross Domestic Product.



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