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TOURISM SATELLITE ACCOUNT

**Methodology and main results
Pilot Exercise 2000-2005**

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Pilot Exercise 2000-2005

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CONTENTS

Index of Tables

Index of figures

ANNEXES

TSA RMF Standard Tables:

Table 1   Inbound tourism expenditure 2000-2005, by products and classes of visitors

Annex 2   Domestic tourism expenditure 2000-2005, by products, classes of visitors and types of trips

Table 3   Outbound tourism expenditure 2000-2005, by products and classes of visitors

Table 4   Internal tourism consumption 2000-2005, by products

Table 5   Production accounts of tourism industries and other industries (at basic prices) 2000-2005

Table 6   Total domestic supply and internal tourism consumption, by products (at purchaser's prices) 2000-2005

Table 7   Employment in the tourism industries 2005

Table 8   Tourism gross fixed capital formation of tourism industries and other industries 2005

Table 9   Tourism collective consumption, by products and levels of government 2005

1

ACRONYMS

AVIANCA	Aerovías Nacionales de Colombia	Colombian National Airways
BoP	Balanza de Pagos	Balance of Payments
CAN	Comunidad Andina de Naciones	Andean Community of Nations
COICOP	Clasificación del Consumo Individual por finalidades	Classification of Individual Consumption by Purpose
CPC	Clasificación Central de Productos	Central Product Classification
DANE	Departamento Administrativo Nacional de Estadística	National Administrative Department of Statistics
DAS	Departamento Administrativo de Seguridad	Administrative Department of Security
DIMPE	Dirección de Metodología y Producción Estadística	Statistical Methodology and Production Division
DSCN	Dirección de Síntesis y Cuentas Nacionales	National Accounts and Synthesis Division
EAS	Encuesta Anual de Servicios	Annual Services Survey
ETUR	Encuesta de Turismo Interno	Internal Tourism Survey
EVI	Encuestas a Viajeros Internacionales	Survey of International Travelers
GDP	Producto Interno Bruto	Gross Domestic Product
GVA	Valor Agregado Bruto	Gross Value Added
IC	Consumo Intermedio	Intermediate Consumption
ISIC A.C	Clasificación Industrial Internacional Uniforme adaptada para Colombia	International Standard Industrial Classification adapted for Colombia
MIGRACIÓN COLOMBIA	Migración Colombia	Migration Colombia
MMH	Muestra Mensual de Hoteles	Monthly Sample of Hotels
ENH	Encuesta Nacional de Hogares	National Households Survey
TSA:RMF	Cuenta satélite de turismo: Recomendaciones sobre el marco conceptual	Tourism Satellite Account: Recommended Methodological Framework
IRTS	Recomendaciones internacionales para estadísticas de turismo	International Recommendations for Tourism Statistics
SNA	Sistema de Cuentas Nacionales	System of National Accounts
TDGVA	Valor Agregado Bruto Directo Turístico	Tourism Direct Gross Value
TDVA	Valor Agregado Directo Turístico	Tourism Direct Value Added
TSA	Cuenta Satélite de Turismo	Tourism Satellite Accounts
TSS	Sistema de Estadísticas de Turismo	Tourism Statistical System
UN	Naciones Unidas	United Nations
VA	Valor Agregado	Value Added
VAT	Impuesto al Valor Agregado	Value Added Tax
UNWTO	Organización Mundial del Turismo	World Tourism Organization

INTRODUCTION

According to the first results derived from the 2000-2005 Tourism Satellite Account (TSA) pilot exercise, using the available information, the share of tourism in the national economy measured using the indicator of Tourism Direct Gross Value Added (TDGVA) with relation to Total Gross Value Added (GVA) was around 2% for the reference period.

Table 1. Share of Tourism in Total Value Added

2000-2005			Thousand million pesos
Year	**Total value added**	**Tourism Value Added**	**Share of Tourism Value Added (%)**
2000	193.529	3.720	1,92
2001	209.383	4.142	1,98
2002	226.918	4.486	1,98
2003	250.926	5.030	2,00
2004	282.493	5.658	2,00
2005	311.281	6.143	1,97

Source: DANE, DSCN. Colombian TSA 2000-2005
Calculation: DANE, DSCN. Colombian TSA 2000-2005

The results shown in table 1 do not differ notoriously from those obtained previously[1], in which the relative share of TDGVA in GVA for year 2000 was 1,73%, comparable to the share of 1.92% of total value added (VA) in the present estimation[2].

Domestic tourism is the form of tourism with the greatest impact on the national economy. Nevertheless, when compared with total household final consumption expenditure, its share remains limited as it does not exceed 5% of this variable.

Figure 1.
Consumption by forms of tourism
2000-2005
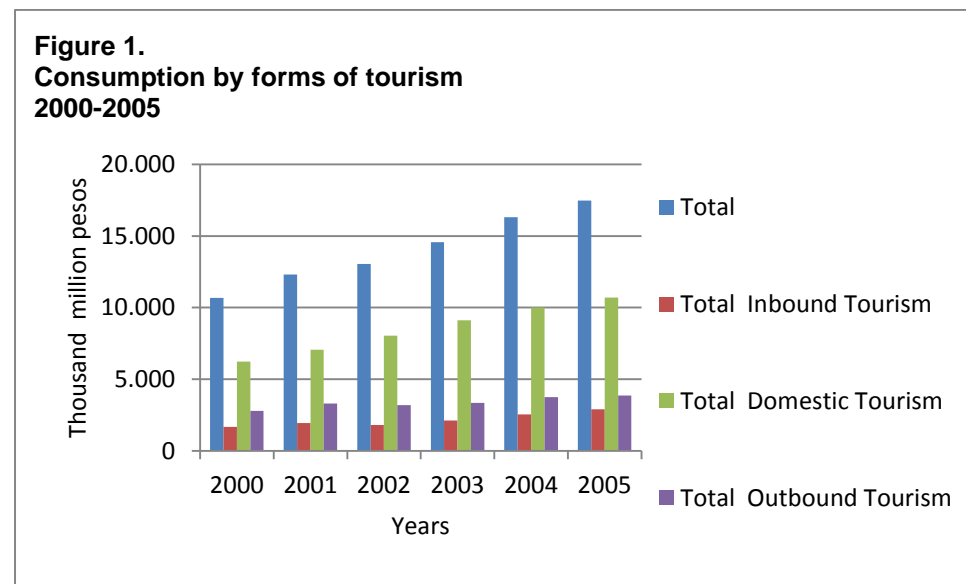
Source: DANE, DSCN., Colombian Tourism Satellite Account 2000-2005

Calculation: DANE, DSCN., Colombian Tourism Satellite Account 2000-2005

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[1] DANE – 2007 – Tourism Satellite Account – Pilot exercise 2000
[2] In this estimation, the comparison is made with total value added and not GDP, due to insufficient criteria to allocate taxes on product according to economic activities.

Figure 2. Consumption by forms of tourism
As share of resident households final consumption
2000-2005
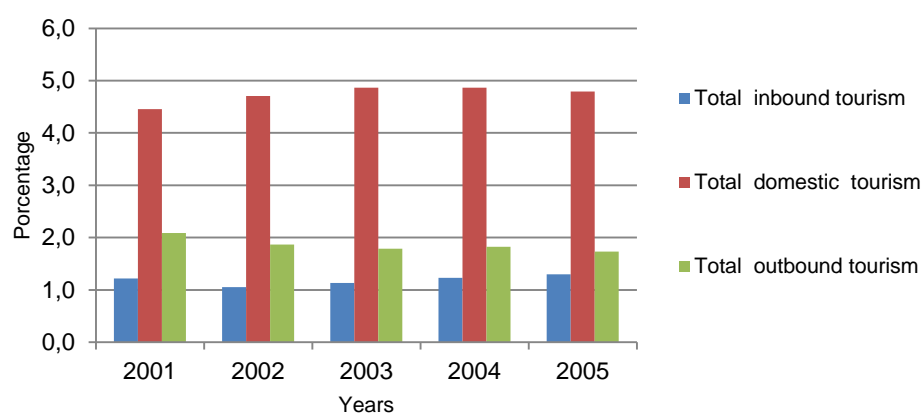
Source: DANE, DSCN., Colombian TSA 2000-2005
Calculation: DANE, DSCN., Colombian TSA 2000-2005

The estimated number of inbound visitors for year 2005 reached 10,3 million, 8,9 of which were same-day visitors and 1,4 overnight-visitors.

As far as employment is concerned, tourism characteristic industries employed 1,7 million persons for 2005, that is, approximately 11% of total national employment. However, this number decreases to 344.000 full time equivalent jobs when the analysis includes only the employment linked to tourism consumption.

This document provides detailed information on the Tourism Satellite Account pilot exercise for the years 2000-2005. It presents the background, sources of information used and the results obtained within the project of TSA compilation developed within the Andean Community of Nations (CAN) during the period 2008-2011, in line with the guidelines established by the World Tourism Organization (UNWTO)[3].

Certain basic tourism characteristics of Colombia are derived from this analysis. Some of the considerations will be important for the future development of the Tourism Statistical System, to which the country is committed under the direction of the Vice-Ministry of Tourism.

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[3] UNWTO. 2008 Tourism Satellite Account: Recommended Methodological Framework (TSA:RMF 2008)

1. BACKGROUND

1.1 INTERNATIONAL RECOMMENDATIONS: ROLE OF THE TOURISM SATELLITE ACCOUNT (TSA):

Since the mid-1990s, the UNWTO has been driving and supporting the implementation of the TSA worldwide. It provides a conceptual framework that allows the representation of tourism within the economy of the countries, using the general framework of the national accounts, therefore strengthening the recognition of its importance.

The recommended framework includes a series of ten standardized tables (see Annexes) compiled from the direct statistical information on the flows and the expenditure related to different forms of tourism. Furthermore, it contains information on the supply of goods and services in the economy, in particular those characteristic of tourism, employment and investment of tourism industries; a mutual reconciliation of this information and finally, its insertion within the estimations of the national accounts.

With the TSA, the UNWTO has a double purpose: on the one hand, it encourages the countries that are developing their tourism statistical system to try to establish it in an experimental or pilot way, in order to verify its coherence and detect the existing deficiencies of the information system. This would enhance further improvement of the system. On the other hand, the UNWTO emphasizes that once the statistical system has been established, the TSA is the instrument that verifies its internal coherence and allows linking explicitly the sectoral economic variables, proper to tourism, with other variables represented in its national accounts.

1.1.1. Efforts of Regional Coordination by the Andean Community of Nations (CAN).

The Andean Community of Nations (CAN by its acronym in Spanish) has driven a coordination initiative among the countries of the region in order to improve the information system on the tourism sector.

This initiative was put in practice with the elaboration of an action plan, in which common objectives and aims were established within a three-year project.

The elaboration of a Satellite Account was proposed for a reference year, despite being aware that the level of confidence of the results would be different from country to country due to their different level of development in basic tourism statistics and national accounts.

The results of this process were presented in June of 2011 in Madrid (Spain), at the closing session of the program.

The present document and the data included represent a reviewed version of the results that were presented on that occasion.

1.1.2. Previous experience in Colombia: The 2000 Tourism Satellite Account

In 2007, DANE completed the calculation of the TSA for the year 2000. The results can be found on the institution's official website[4]. On that occasion, in spite of the attempt to use the existing information, in particular the Survey of International Travelers (EVI), the final stage of the exercise consisted in extracting from the existing national accounts for that year, the component corresponding to tourism and thus, "to close" the accounts within a "forced" framework of coherence with the national accounts.

1.1.3. General Context of the Present Exercise

The present exercise is an attempt to develop an independent analysis based on the existing tourism statistical sources, to elaborate an account from these sources, to look at its consistency with the 2005 base national accounts and to draw conclusions from the apparent lack of coherence of certain results. In some cases, it was necessary to extract data directly from the national accounts to complement the analysis (for instance, in the case of international transport).

An essential requirement for constructing a TSA is to count with a Tourism Statistical System (TSS), defined as a permanent system for compiling statistical data regarding the most important economic aspects related to demand of goods and services by visitors, and the corresponding supply within the economy.

Moreover, it is important to be able to rely on a full system of national accounts, in line with the recommendations of the United Nations, and especially, with detailed supply matrices that serve as framework, support and validation of the TSA, because it is a satellite of the central framework of national accounts from which it derives its essence[5].

Although Colombia has an advanced system of national accounts, this is not the case with the TSS: the statistical information available on tourism is scarce, outdated and, in some cases, inconsistent. Therefore, the purpose of this present pilot exercise, following the guidelines of the UNWTO, is to reveal the existing deficiencies of the information on both the magnitude and characterization of flows, and the associated values. It is also necessary to stress that in spite of their development, the classifications of products and activities used within the central framework of national accounts are not always sufficiently detailed to isolate products and activities defined internationally as characteristic of tourism.

The pilot exercise has evidenced the weakness on the current tourism statistics, both from the demand perspective (in particular domestic demand), and from supply, a finding that must serve as point of reference towards the improvement of Colombia tourism statistics.

Additionally, the present pilot exercise has led to a critical revision of the national accounts in the following aspects: the calculation of the production and the consumption of accommodation services, as well as that of passenger international transport and travel agency services; the treatment given to the goods and services acquired directly by resident and non-resident visitors in the System of National Accounts (SNA); and finally, the relationship between the direct measurement of

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[4] www.dane.gov.co/daneweb_V09/index.pl
[5] Statistics "Methodological Annex Tourism Satellite Account - TSA pilot Exercise" Bogotá - Colombia 2007 P. 2.

international tourism expenditure with the "travel" item of the Balance of Payments (BoP).

Finally, it is worth mentioning that although the compilation of a TSA for Colombia surged as an interinstitutional project, within a tourism committee comprising the following government agencies: DANE (National Accounts and Synthesis Division [DSCN] and [Statistical Methodology and Production Division [DIMPE]), the Vice Ministry of Tourism and the Central Bank, the compilation of the TSA was an exclusive responsibility of the DSCN due to the importance of its integration within the System of National Accounts.

1.2. METHODOLOGICAL FRAMEWORK: IMPLEMENTATION OF THE TOURISM SATELLITE ACCOUNT

The purpose of a Tourism Satellite Account is to provide a reconciled description on tourism flows and spending by visitors within the conceptual framework of a supply and use table of the national accounts.

The results of the present pilot exercise for the 2000-2005 period are expected to be relevant today, in particular concerning the relative economic importance of the different forms of tourism, the relative importance of the use of different means of accommodation and its relative impact in terms of expenditure, etc.

The compilation of a TSA is developed through the following stages. First, (i) the tourism flows are measured and categorized; then, (ii) the associated expenditure is estimated; (iii) the supply in the economy is established, in particular, that of tourism characteristic products; (iv) supply and demand are balanced autonomously and finally (v), this is performed within the framework of national accounts.

The analytical data, which are initially obtained using the information available on tourism activity, are processed under successive stages of revision and coherence until reaching final results that can differ from the initial ones.

However, it should be pointed out that in Colombia during the last ten years, the efforts made in order to measure the flows and the demand associated with tourism were sporadic and had no continuity.

The last surveys that tried to measure inbound and outbound tourism expenditure and flows, in particular those associated with flows at the airports, were conducted from 1999 to 2001, a period in which only four (4) non-consecutive quarters were surveyed.

The surveys of national tourism (domestic/outbound) were conducted in 2003 (specific questionnaire/survey), 2006 and 2007 (as modules of the National Households Survey, ENH). As a result, the attempt to calculate a satellite account, with such insufficient and biased observation can only aim at identifying the current limitations of the information system in order to guide future decisions about the efforts needed to create a true information system.

1.3. THE CONCEPTUAL FRAMEWORK

Tourism is a social, cultural and economic event, related to persons travelling to places outside their usual environment, for periods less than a year, mainly for purposes of

leisure[6], but also for other purposes such as business, conferences, health, education, etc.

Tourism is a phenomenon whose statistical presentation entails particular challenges due to its nature. Therefore, it is necessary to define some fundamental concepts such as trip, traveler, visitor and usual environment, among others, as well as other variables associated with expenditure. These concepts have been defined at international level by the UNWTO[7].

The term *travel* refers to the activity of travelers. A *traveler* is someone who moves between different geographic locations for any purpose and any duration.

The term *tourism trip* refers to the travel by a person from the time of departure from the place of origin until he/she returns. Therefore, an outbound trip, whose main destination is located outside the country, will correspond to the activity developed between the moment the traveler leaves his/her place of usual residence and the moment he/she returns. As an exception to this rule, and due to its particular importance for the receiving country, an inbound tourism trip corresponds to the activity of a non-resident in the country of reference between the moment of arrival to that country and that of departure, due to the fact that from the perspective of the receiving country, what happened to the visitor before his/her arrival is of none of its interest.

Tourism refers to the activity of visitors. A *visitor* is any person who travels to a main destination, outside his/her usual environment, for not more than one year for any main purpose (leisure, business, health care, visiting relatives or other purposes), different from being employed by an organization resident in the country of visit[8]. Trips by visitors are considered tourism trips.

The *economic territory* is a geographic and economic reference and refers to the country for which the measurement is required. The concept of residence allows the classification of visitors according to their place of departure and destination, thus making it possible to define international tourism as the activities of visitors outside their country of residence.

The *usual environment* of an individual, a key concept in tourism, is defined as the geographical area (though not necessarily a contiguous one) within which an individual conducts his/her regular life routine.

Finally, international tourism includes the activities of a visitor outside his/her country of residence, as part of an international tourism trip[9].

Tourism expenditure refers to the amount paid for the acquisition of consumption goods and services, and of valuables, for own use or to give away, during tourism trips or in anticipation of such trips.

1.4 GENERAL METHOD OF CALCULATION

The method applied consists of establishing a first version of inbound, outbound and domestic tourism expenditure, from different sources related with the flow of visitors

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[6] UNWTO. "TSA: RMF 2008". Luxembourg, Madrid, New York, Paris, 2008. para. 2.9.
[7] United Nations and World Tourism Organization. "International Recommendations for Tourism Statistics 2008". Madrid and New York, 2008 "Tourism Satellite Account: Recommendations on the Conceptual Framework, 2008". Luxembourg, Madrid, New York, Paris, 2008
[8] Ibid. para. 2.10
[9] Ibíd. para. 2.40.

and their consumption expenditure per capita. This consumption expenditure is stated in terms similar to those used in national accounts (the same classification), and data are compared with the reported total both of demand and of supply in these accounts, in particular for characteristic products. Finally, the terms of comparisons are established, trying to reach a reconciled vision about the importance of tourism within the economy.

The calculation includes the 2000-2005 series. The base year of the new series of national accounts, is 2005. However, there are coherent estimations for all the series of years 2000-2010p.

1.4.1. <u>Estimation of Tourism Expenditure</u>

International tourism expenditure is considered separately for visitors who travel by air, and those arriving or leaving by land and water, due to the differences in the data sources used.

For visitors who travel by air, the flows are estimated from the administrative data sources on migration, and characteristics of flows and expenditures are derived from EVI-DANE 1999-2001- and extrapolated to the rest of years of the series. These expenditures exclude international transport, which is estimated from the balances of products for national accounts that are also closely linked to the estimates of the BoP.

For travelers who cross the land and water borders, their flows and expenditures are estimated using the border research conducted by the Central Bank. Due to statistical limitations of the sources, the calculations are much more aggregated, as key variables such as the number of overnight stays of tourists or their means of accommodation are unknown. Furthermore, the survey only collects information of overall expenditure per trip, a figure that unfortunately cannot be validated in contrast with the duration, as the only known breakdown is between same day visitors and tourists[10].

Domestic tourism is the most important in terms of flows and total value of expenditure. However, the information available is more limited and difficult to extrapolate due to the particular conditions of the observation period, a period of recovery of internal mobility after a period of particularly difficult public order situation. Additionally, it relates to a whole year (August 2002 to July 2003), although the data has been collected during only a month. Consequently, the estimation of data for the whole period (2000-2005) consists in cross-checking several sources of supply and demand in order to find a first estimated consistent result (cross-checking data on outbound tourism from two existing sources: EVI and the Internal Tourism Survey (ETUR) and cross-checking demand and supply for accommodation) based on the estimation data for 2002.

Consumption expenditure data are expressed within the TSA classification of products (a classification by purpose and close to the Classification of Individual Consumption by Purposes (COICOP)). Then, they are converted into the product classification of the 2005 base national accounts, which is globally consistent with the Central Product Classification (CPC) rev.1.0.[11]

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[10]The country is in the process of adapting to the new international classifications of products (CPC ver 2.) and of activities (ISIC rev. 4): these have still not been used in the statistical observations. The classifications of products and activities of the National Accounts base year 2005 have been defined in relation to previous classifications (CPC ver 1 .AC and ISIC rev. 3 AC).
[11] Knowing the basic conditions of a tourism trip in terms of origin, destination, purpose of the trip and place of accommodation, total expenditure in a trip is approximately a linear function of its duration.

In all cases, except for data derived from the Central Bank border surveys, the values are only known for the moment of the survey (year 2000 for outbound and inbound flows at air borders; period 2002-2003 for domestic tourism flows). Data for the current years are extrapolated, using corresponding price indexes, under the assumption that there is no change in consumption expenditure per capita per day, once the variables related to form of accommodation and purpose of the trip are controlled.

1.4.2. Estimation of Supply

Within the calculation of national accounts, the elements of supply of products by activities have been estimated (production matrices). Nevertheless, some adjustments of presentation and treatment are required in order to adjust them to the formats of the TSA.

1.4.3. Cross-Checking Demand and Supply

Within the national accounts framework, demand and supply of products have already been reconciled. Nevertheless, for not including a specific work on tourism and a detailed knowledge of its special features, certain elements have escaped the analysis (e.g. the treatment of travel agencies that present particularities, mainly caused by its activity as provider of trade services of other services).

This stage consists of reviewing the elements of supply and demand of the TSA in light of data included in the national accounts, reviewing their consistency and making the necessary adjustments or comments. In the case of domestic tourism, this stage initiates directly from the beginning, since the interaction with the demand is what makes possible the validation of the existing data and the estimation of the change over time (see paragraph. 2.2.2).

For the remaining cases, when cross-checking with the national accounts, the information compared is not being corrected, since the national accounts figures are considered to be final while a decision on revision has not been taken.

1.4.4. Other Components of the Tourism Satellite Account (TSA)

Finally, the other elements of the TSA are integrated: employment in tourism characteristic activities and tourism employment, tourism gross fixed capital formation, and tourism collective consumption but only for year 2005. In fact, these estimates have been carried out independently from the rest of estimates and derived directly from the national accounts. The present document only details the method followed for the calculation of employment.

2. TOURISM FLOWS

2.1 AVAILABLE STATISTICS

2.1.1. Inbound and Outbound Flows

- **The Administrative Department of Security,[12] (DAS)** conducts a continuous record of migratory inflows and outflows of all travelers who cross Colombian immigration checkpoints at both airports and land borders. There are approximately 9.500 of such movements daily.

In such records, travelers are classified according to their nationality, age, sex, port of departure and destination. Additionally, foreigners are also characterized by their immigration status (an information only available for incoming flows).

This information is used as a framework to implement the structures derived from the (EVI) that makes it possible to draw estimates on international tourism by country of residence and other important characteristics as purpose of trip and place of accommodation. However, data are missing for year 2002 and had to be estimated.

- **International Travelers Survey (EVI)**

The International Travelers Survey (EVI) is a survey that was designed to be of continuous character. Its comprehensive theoretical universe of reference is that of international travelers who use commercial flights as mode of transport. During the period of study, there were approximately such 1.200.000 travelers. It was applied to resident travelers as they returned to the country (outbound flow) and to non-resident travelers at the moment of leaving the country (inbound flow).

It collects variables of interest such as nationality, country of residence, place of accommodation, purpose of trip, expenditure and length of stay, by using a form filled out by the traveler.

Besides the variables of identification and characterization of travelers, the variables measured are: length of stay (number of overnight stays), purpose of trip, type of accommodation, total expenditure (in US dollars), and its distribution in five main functional categories.

The survey is a probabilistic sample, stratified and by conglomerates, in which the conglomerate is a flight (an arriving flight for outbound tourism or a departing flight for inbound tourism).

The research is conducted on a quarterly basis; the sample of flights was selected according to the movements of passengers in specific days of the week. Three intervals were initially established: Friday-Saturday, Sunday Monday-Thursday and finally, Tuesday-Wednesdays. They were later reduced to two.

Each quarter, approximately 250 arrival flights and 580 departure flights were selected; corresponding respectively to 6.500 residents in Colombia back from a tourism trip abroad and 14.000 non-residents finalizing their stay in Colombia.

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[12] Since 2011, it has been replaced in this function by Migración Colombia, an agency that depends on the Ministry of Interior.

Finally, to reduce costs, the survey was not applied to all passengers on a flight, as was the original intention, but only to those who recognized themselves as belonging to the field of study. Additionally, the questionnaire on expenditure was applied to groups of persons traveling together (without establishing clearly the notion of a group, as a set of people sharing the majority of expenses,) and not to each individual traveler. As the surveys went on, some questions were modified, for instance, the country of residence and country of nationality were no longer asked simultaneously. This question was only included in the first quarter of 2000 and was no longer included in any other survey as it was considered that there was little variation from one period to another in the relationship between these variables, a debatable hypothesis that would need to be tested statistically.

Within this project, four surveys were carried out: the first survey in 1999 (IV quarter), which was experimental; the second and the third surveys were applied in 2000 (I and IV quarters) and the fourth in 2001 (II quarter). Although four quarters were selected, the third quarter was never matter of research.

For running this statistical survey, the National Administrative Department of Statistics, DANE, had the technical support and sponsorship of the Ministry of Tourism and the Central Bank.

The present analysis only uses two of the four surveys, since during the revision of the respective database, it was observed that the information from the 1999 IV quarter survey (taking into account that it was an experimental test) was not available and the partial figures for the IV quarter survey of 2000 are not consistent with their totals. This means that the surveys for the I quarter of 2000 and II quarter of 2001 are the only ones that display "validated" data. These data were used in structure and were expanded to all the years of the series, in as much detail as the statistical validation of the observations allows.

- **Research at land borders.** This survey is conducted by the Central Bank on a quarterly basis, in order to estimate the expenditure related with the population flows in areas considered legally as border areas. The flows that occur exclusively within these areas are not subject to control by DAS, which only carries out immigration controls on travelers whose final destination is outside these areas.

This research consists of two parts developed simultaneously: the first part aims at establishing the flow of persons and vehicles crossing the main land border posts and some river borders along Venezuela, Ecuador, Brazil and Peru by means of a counting; the second part collects information on the expenditure related with these flows, thereby providing the necessary information for the compilation of the "travel" item of the BoP.

The census enumeration of flows is conducted during the days of the preselected week: each quarter, a week is selected ahead of time and considered by its characteristics to represent the period for the survey[13]. The second component (characteristics and measurement of expenditure) corresponds to a systematic sampling of informants (1 per x[14]) which is performed simultaneously as the counting. They are asked to inform on the purpose of their trip, the overnight stays and total expenditure by means of a format including a limited number of questions.

It covers a number of border crossings (it is not an exhaustive observation of borders posts), considered the most important ones: Cúcuta, Maicao, Ipiales, Arauca and Leticia.

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[13] It is somewhat more complex, since the observed periods represent in fact, periods of high and low flows and are combined to estimate the values of the variables assigned to each quarter.
[14] X: depends on the border checkpoints.

The value of expenditure relates with the purpose of trip and length of stay, classified as "with overnight stay" and "without overnight stay". (The number of nights is not available)

The purposes of trip considered by the survey are recreation, personal shopping, education, business and professional, health care, and other. For tourism analysis purposes, only trips corresponding to recreation, business and professional and health care were taken into consideration, under the assumption that the others do not correspond to tourism as presumably these occur within the usual environment.

2.1.2. Tourism Flows by Residents

- **Tourism flows by residents from the Survey on Domestic Tourism (ETUR), August 2003**. A household survey was conducted between 1st and 31st of August of 2003, in order to collect information on the trips taken by residents within the economic territory and out of it during the last year. (August 2002 - Julio 2003).

The reference universe is limited to the resident households in the urban area excluding the former national territories, under the implicit assumption that persons residing in other areas do not travel or their tourism activity is so scarce and scattered that its measurement is not worth the costs involved.

In this survey, the observation of the statistical unit denominated "trip" referred to a journey taken by one or several household members, alone or with other members of the same household, a unit which does not correspond to the international definition of trip as one taken by a unique person, a person-trip. Therefore, it was necessary to reprocess some of the information in order to return to this observation unit. In the further stage, it was also necessary to review the related variables such as overnights stays, main purpose of the trip and the last trip expenditure since they had to be assigned to person-trips and not to the so-called "trips".

The reference period was the entire calendar year; a period far too long and thus not recommendable. Additionally, the observed period had particular characteristics related to the public order situation so that, the behaviors observed in the survey can hardly be considered as "normal" and representative of an average behavior of period 2000-2005, reasons why total expenditure levels were not consistent. The only "useful" structures were average expenditure per day, by main purpose of the trip and types of accommodation, which apparently provided mutually consistent results. Additionally, the inclusion of business trips was not systematic and it was necessary to make certain additional assumptions in order to restore the true incidence of such types of tourism trips.

The sample design is probabilistic, stratified and by conglomerates. The information was collected through direct interviews.

A total of 29.942 households corresponding to 112.642 persons were interviewed.

- Even though the **modules of the National Households Survey (ENH), 2006 and 2007** had a statistical design that seemed interesting and had as a period of reference the immediately previous month, they could not be used for two reasons:

> - While each member of the household was interviewed about the number of trips made during the previous month, he/she did not have to inform separately on how many trips were within the country (inbound tourism) and how many trips were abroad (outbound tourism). Consequently, it was not possible to establish the proportion of domestic trips as compared to outbound trips, which

would have been an important variable to relate international tourism and domestic tourism.

- Additionally, there was no question on the type of accommodation used during the trip, which made it impossible to relate the information with other frameworks, in particular with supply frameworks, specifically accommodation in hotels, a source of information that is being used to extrapolate the information in current year, due to the lack of any other source of information. Moreover, a high correlation has been observed between the type of accommodation and average expenditure, reason why it is necessary to have a control on this characteristic, in order for the aggregated results obtained to make sense.

2.2 TOURISM FLOWS: MEASUREMENT AND CHARACTERIZATION

2.2.1. Inbound and Outbound Tourism
The calculation method is applied separately for air borders and land or waterway borders.

- **The flows**. For movements through air borders, the data is derived from the records of passengers reported by DAS at airports, which are gradually converted into estimated flows of resident and non-resident visitors.

For travelers crossing land and waterway borders, the estimates were derived directly from the measurements and estimations undertaken quarterly by the Central Bank.

- **Global Flows**. In order to obtain flows of visitors for inbound tourism by country of residence and outbound tourism by country of destination, it is necessary to perform the following procedures:

➢ **Inbound tourism**: this flow is calculated on arrival into the country; the expenditure is calculated when the travelers leave the country. From the statistics available on flows of passengers reported by DAS it is necessary to:

→ Exclude the flows of passengers crossing at land borders checkpoints (as they are also captured by the Central Bank´s border survey without being possibly isolated);

→ Exclude non-visitors using the information on their migratory status;

→ Determine the flows of visitors by country of residence, applying the country of nationality per country of residence matrices observed on EVI (see table 4).

→ Exclude the travelers who come to be employed by a resident entity in the country visited.

➢ **Outbound tourism**: The flow is established on departure from the country; the expenditure is calculated when finalizing the trip, that is to say, on their way back. From the available statistical data on flows of travelers reported by DAS it is necessary to:

→ Exclude the flows of passengers crossing the land borders checkpoints (as they are also captured by the Central Bank's border survey without being possibly isolated);

→ Exclude the non-resident nationals and to include the non-national residents, taking into account the proportions calculated for outbound tourism (data from table 4);

→ Determine the flows by country of destination (with doubts about the meaning of country of destination, as the information is derived from administrative sources).

- **The initial data. (DAS & Land Borders)**

Table 2. Total travelers arrivals, according to DAS and Land Borders Estimations (Central Bank)
2000-2005

Number of travelers	2000	2001	2002	2003	2004	2005
Total arrival of travelers	**25.440.141**	**27.080.998**	**26.029.086**	**24.387.900**	**26.474.233**	**25.600.450**
DAS	1.509.740	1.714.176	1.708.417	1.685.856	2.065.498	2.345.320
DAS Colombians	952.459	1.098.553	1.141.656	1.060.947	1.274.558	1.412.076
DAS Foreigners	557.281	615.623	566.761	624.909	790.940	933.244
Borders (only foreigners)	23.930.401	25.366.822	24.320.669	22.702.044	24.408.735	23.255.130

Source: DAS; Central Bank
Note: As it was mentioned above, data are not totally additive since DAS also includes some flows at land borders.

Table 3. Total travelers departures, according to DAS and Land Borders Estimations (Central Bank)
2000-2005

Number of travelers	2000	2001	2002	2003	2004	2005
Total departure of travelers	**25.171.122**	**26.353.083**	**25.237.309**	**22.971.773**	**24.963.584**	**24.841.148**
DAS	1.623.550	1.734.889	1.618.011	1.517.463	1.870.529	2.179.771
DAS Colombians	1.104.504	1.191.269	1.072.856	970.773	1.177.027	1.354.861
DAS Foreigners	519.046	543.620	545.155	546.690	693.502	824.910
Borders (only nationals)	23.547.572	24.618.194	23.619.297	21.454.310	23.093.055	22.661.377

Source: DAS; Central Bank
Note: As it was mentioned above, the data are not totally additive since DAS also includes some flows in land borders.

- *The adjustments.*, The following adjustments are made to the initial data:

  - Subtracting data duplications between DAS and land borders, that is, excluding DAS data flows corresponding to land borders and assigning these flows either to Venezuelans or to Ecuadorian according to the border;

  - Subtracting foreigners traveling with certain types of visa that exclude them from the de facto universe of inbound visitors, (crews, diplomats, residents, and others);

  - Dealing with the case of non-resident nationals and include them in the flow of inbound tourism: these are established by country of residence, as a proportion of the resident foreigners in this country, and traveling to Colombia;

This last adjustment uses the cross-classified table: country of nationality/country of residence, (see table 4) which is derived from EVI 2000 (I quarter). Note that because of the reduced size of the sample, it is not possible to have a statistically significant more detailed breakdown of countries or regions.

Table 4. Cross classified table: region of nationality by region of residence
2000 (I quarter)

Region of residence		Region of nationality									
	Total	Africa, Asia and the Australian Continent	Central America	Rest North America	United States	Mexico	Spain	Rest of Europe	Ecuador	Venezuela	Rest Sou Ame
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	10
Africa, Asia and the Australian Continent	100,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Central America	100,0	0,0	95,9	0,0	3,0	0,0	0,0	3,0	0,0	0,0	
Rest of North America	100,0	0,0	0,0	91,5	0,0	0,0	0,0	0,0	0,0	0,0	
United States	100,0	0,0	4,1	8,5	96,1	5,8	0,0	3,3	0,0	2,8	
Mexico	100,0	0,0	0,0	0,0	0,0	94,2	0,0	0,0	0,0	0,0	
Spain	100,0	0,0	0,0	0,0	0,0	0,0	100,0	1,6	0,0	0,0	
Rest of Europe	100,0	0,0	0,0	0,0	0,0	0,0	0,0	88,7	0,0	0,0	
Ecuador	100,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	100,0	0,0	
Venezuela	100,0	0,0	0,0	0,0	0,0	0,0	0,0	1,7	0,0	97,2	
Rest of South America	100,0	0,0	0,0	0,0	0,8	0,0	0,0	1,6	0,0	0,0	9

Source: EVI2000 (I quarter)
Calculations: DANE, DSCN.

The table above has to be analyzed in the following way: vertically it displays for each country/region of nationality, (other than Colombia), the country/region of residence of its nationals. For instance, in the case of the United States nationals (United States column), 3.0% are resident in Central America, 96.1% are resident in the United States and 0.8% are resident in the rest of South America.

Once calculated the foreigners by country/ region of residence, it is possible to determine also the Colombian travelers living in this region, applying the percentages shown in the last column which present, within the total of the travelers resident in a country other than Colombia, how many of them have Colombian nationality.

-To deal with the case the resident foreigners and include them from the flow of outbound tourism;

-To eliminate those traveling to be remunerated in the country visited (a percentage by country of residence). Additionally, in the case of land borders, those who travel for purposes other than tourism purposes should be excluded, that is to say, that the only flows remaining are solely those corresponding to professional or business, recreation and medical care purposes.

The corresponding flows for inbound tourism are presented in table 5 and figure 3 and for outbound tourism in table 6 and figure 4.

Table 5. Total inbound tourism flows, according to sources 2000-2005

Number of visitors	2000	2001	2002	2003	2004	2005
Total visitors arrivals	**8.308.340**	**8.079.273**	**8.314.023**	**9.229.581**	**10.363.066**	**10.343.024**
DAS (at airports)	643.633	685.469	607.964	673.877	851.738	1.009.356
non-residents foreigners	481.648	512.794	451.209	500.605	636.867	756.069
non-residents nationals	161.985	172.674	156.755	173.272	214.872	253.288
DAS: Total tourists*	607.345	646.429	573.637	635.769	803.069	951.881
Borders (only foreigners)	7.700.995	7.432.844	7.740.387	8.593.812	9.559.997	9.391.144
Borders: total tourists	643.431	937.477	513.651	459.032	777.354	454.281
Total tourists	*1.250.777*	*1.583.906*	*1.087.288*	*1.094.801*	*1.580.423*	*1.406.161*
Total same-day visitors: Land borders	*7.057.564*	*6.495.367*	*7.226.736*	*8.134.780*	*8.782.644*	*8.936.863*

Source: DAS; Central Bank
Calculations: DANE, DSCN.
*Excluding those remunerated by resident business in Colombia

Figure 3. Total Inbound Tourism Flows 2000-2005
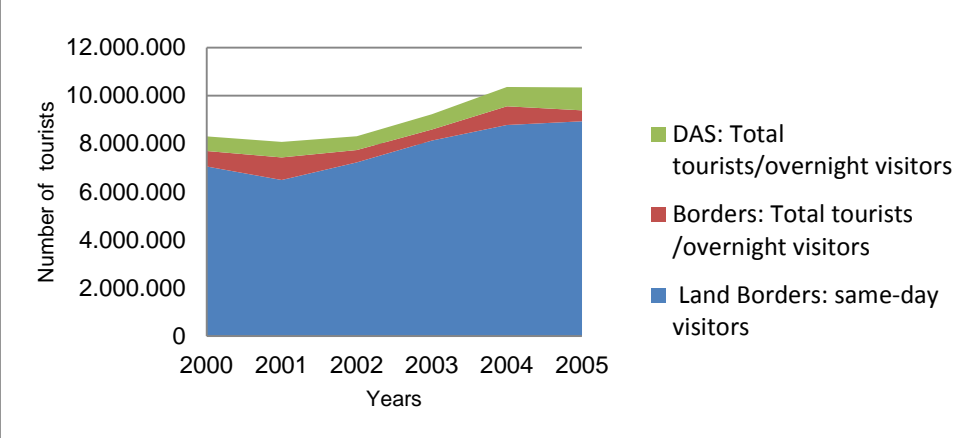
Source: DAS; Central Bank.
Calculations: DANE, DSCN.

Table 6. Total Outbound Tourism Flows 2000-2005

Number of visitors	2000	2001	2002	2003	2004	2005
Total visitors departures	**7.946.479**	**7.936.901**	**7.895.261**	**7.906.485**	**8.565.730**	**9.190.882**
DAS (at airports)	927.135	999.765	929.577	808.420	969.482	1.105.450
Resident Foreigners	20.649	15.264	20.389	14.766	17.050	17.607
Resident Nationals	906.486	984.502	909.188	793.653	952.432	1.087.843
DAS: total tourists*	780.404	841.525	782.382	680.466	816.055	930.485
Borders (only foreigners)	7.166.074	7.095.376	7.112.878	7.226.019	7.749.675	8.260.397
Borders: total tourists	508.373	447.503	356.846	226.243	344.859	283.166
Total tourists	*1.288.778*	*1.289.028*	*1.139.229*	*906.709*	*1.160.914*	*1.213.651*
Total same-day visitors: Land Borders	*6.657.701*	*6.647.873*	*6.756.032*	*6.999.776*	*7.404.816*	*7.977.232*

Source: DAS; Central Bank
Calculations: DANE, DSCN.
* Excluding those being remunerated by businesses in the place visited

Figure 4. Total Outbound Tourism Flows 2000-2005
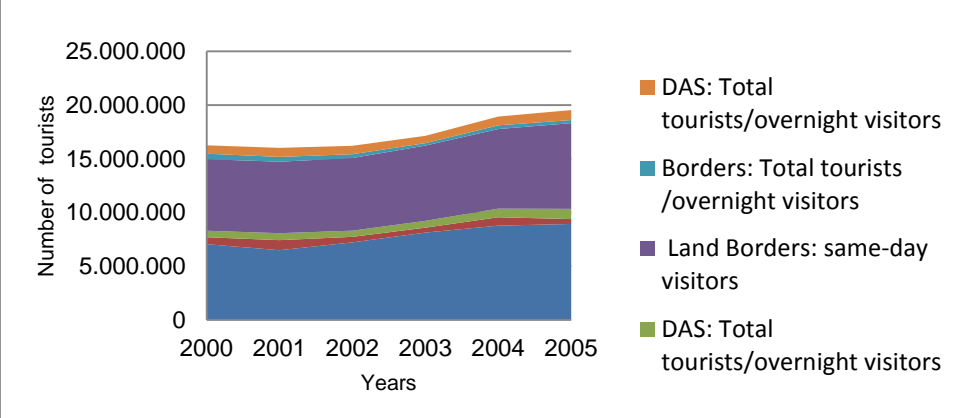
Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.

It is necessary to further characterize these flows, because the expenditure is closely related with variables such as origin or destination, purpose of trip, type of accommodation and naturally, length of stay.

Due to limitations in the sample size or the type of collected information (a particular case of surveys at land borders), it has not been possible to cross all these characteristics as would have been desirable.

- **Flows by country of residence/country of destination (flows at airports).** Using the information from DAS, in which non-resident visitors are classified by nationality, it was possible to determine the country of residence of inbound visitors.

  Then, knowing the proportion of non-resident nationals and resident foreigners (according to type of visa), it was possible to determine the characteristics of outbound tourism.

  As it appears in the previous table (Table 6) and due to the reduced size of the sample, it was only possible to determine the residences or destinations corresponding to the following regions or countries:

  - Africa, Asia, the Australian Continent
  - North America
    - United States
    - Mexico
    - Canada
  - Central America
  - Europe
    - Spain
    - Rest of Europe
  - South America
    - Venezuela
    - Ecuador
    - Rest of South America

- **Flows by purpose of trip (flows through airports**). For travelers by air, the following purposes were theoretically considered (those which are collected in EVI):
  - Business and Professional
  - Recreation and Leisure
  - Congress
  - Health or Medical Care
  - Education
  - Others

  It should be noted however, that it was not possible to isolate the purpose of *medical care* by origins and destinations, due to the lack of sufficient number of observations. Likewise, the *education* purpose did not present sufficient observations in the sample of inbound tourism, whereas it was possible to observe it in certain cases for outbound tourism. Since the great majority of those who travelled on package tours came for recreation, an additional category was created which included those who came on package tours, because its measurement presents particularities.

  The only purposes that were considered for the flows on the land borders were recreation, health care, and business and professional.

Therefore, it is not possible to establish a coherent summary of cross-classified tables by origin-destination with all the purposes of trip, although the detailed tables are used to carry out the calculations at the levels of region/country.

Table 7. Cross-classified table: **Arrivals through airports by country/region of residence and purpose of trip. - Inbound tourism**
2000 (I quarter)   Percentage

Countries/Regions		Purposes of trip						
	Total	Business and Professional	Recreation or Leisure	Congress	Health Care	Other	Total non-package	Total on package tour
Africa, Asia and the Australian Continent	100,0	3,0	64,8	ND	ND	2,8	97,9	2,1
Central America	100,0	20,3	59,1	3,9	ND	6,1	89,4	10,6
Others of North America	100,0	ND	82,3	ND	ND	13,7	96,0	4,0
United States	100,0	9,6	82,3	1,7	2,0	2,4	97,9	2,1
Mexico	100,0	2,6	62,5	ND	ND	7,9	96,8	3,2
Spain	100,0	13,1	67,7	ND	ND	9,2	90.0	10,0
Rest of Europe	100,0	13,8	73,4	ND	ND	6,0	93,2	6,8
Ecuador	100,0	39,4	33,3	9,2	ND	10,8	92,7	7,3
Venezuela	100,0	33,7	53,8	ND	ND	9,1	96,5	3,5
South America	100,0	23,9	36,8	ND	ND	6,7	67,4	32,6

Source: EVI 2000 (I quarter)
Calculations: DANE, DSCN.
Note: the category "others" is not homogenous among countries/regions, because it includes all the purposes not explicitly described for lack of statistically significant information.

Tables 7 and 8, and figures 5 and 6 illustrate the type of data derived from the sources. As it can be observed, the most frequent purpose of inbound tourism in all countries/regions except for Ecuador and other South-American countries, is by far ´´recreation´´. Additionally, with the exception of other South-American countries, the visitors do not come frequently on package tours. As for outbound tourism, the purposes are more diverse, although in most cases the purpose "recreation" continues to be the most frequent one. Moreover, resident visitors on outbound trips do not frequently use package tours, except in the case of Mexico as destination.

Figure 5. Inbound tourism: 2000 (I quarter): Cross classification between country/region of residence and purpose of trip
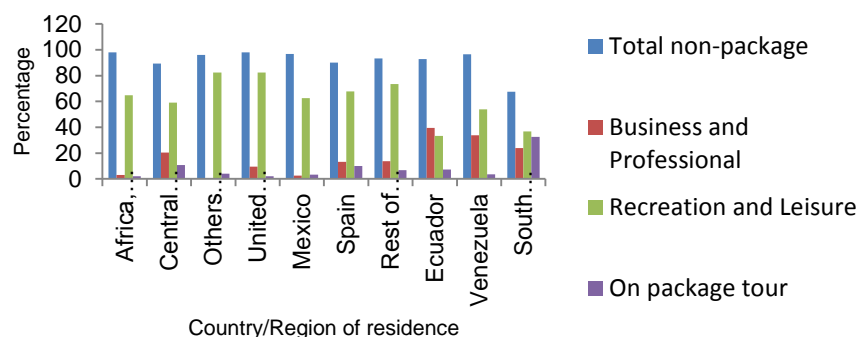
Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.
Note: the category "others" is not homogenous among countries/regions, because it includes all purposes
not explicitly described for lack of statistically significant information.

Table 8. Cross-classified table: Departures through airports by country/region of destination and purpose of trip. Outbound tourism

2000 (I quarter)   Percentage

Regions	Total	Business and Professional	Recreation and Leisure	Congress	Education	Health Care	Other	Total non-package	Total on package tour
Africa, Asia and the Australian Continent	100,0	18,2	63,6	ND	ND	ND	4,5	86,4	13,6
Central America	100,0	10,9	60,1	2,2	2,4	2,4	4,5	82,4	17,6
Others of North America	100,0	ND	95,9	ND	ND	ND	4,1	100,0	0,0
United States	100,0	6,3	80,5	1,4	2,1	1,1	1,7	93,0	7,0
Mexico	100,0	29,2	26,4	ND	ND	ND	7,5	63,2	36,8
Spain	100,0	5,1	65,3	ND	7,1	ND	4,0	81,5	18,5
Rest of Europe	100,0	6,1	70,6	ND	6,3	ND	2,8	85,8	14,2
Ecuador	100,0	30,2	42,3	ND	ND	ND	13,2	85,7	14,3
Venezuela	100,0	22,4	68,5	ND	ND	ND	4,7	95,7	4,3
South America	100,0	26,2	62,8	ND	ND	ND	8,9	97,9	2,1

Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.
Note: the category "others" is not homogenous among countries/regions, because it includes all purposes not explicitly described for lack of statistically significant information.

Figure 6. Outbound tourism: 2000 (I quarter) Cross classification between country/region of residence and purpose of trip
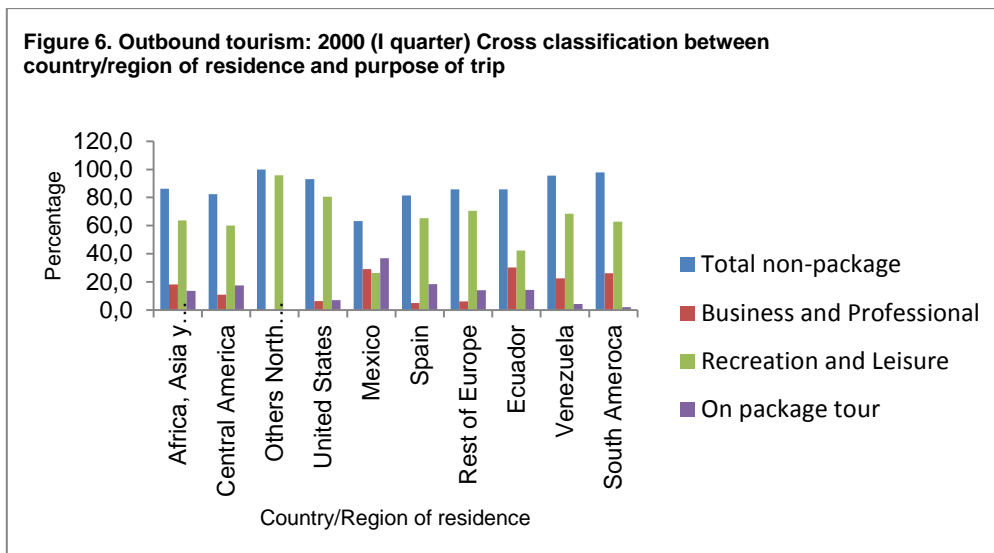
Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.
Note: the category "others" is not homogenous between countries/regions, because it includes all
the purposes not explicitly described due to the lack of statistically significant information

- **Flows by type of accommodation (flows through airports)** Finally, the types of accommodation that were considered were the following:
  - Hotel
  - Friends and relatives
  - House or apartment
  - Combined (when more than one of the above were used)

In addition, it was assumed that all the visitors on package tours were lodged in hotels.

Note that for the flows at land borders, the type of accommodation used is not known (which indeed, generates difficulties of reconciliation with the supply data).

The matrices that intersect purposes of trip and types of accommodation were as follows (tables 9 and 10):

Table 9. Cross classified table: arrivals through airports by purpose of trip and type of accommodation - Inbound tourism

2000 (I quarter)					Percentage
Purpose of trip/type of accommodation	Total	Hotel	Friends and relatives	House or apartment	Combined
Business and Professional	100,0	77,6	15,9	4,5	2,1
Recreation	100,0	18,6	76,6	4,0	0,8
Congress	100,0	41,2	43,5	6,5	8,8
Education	100,0	59,8	29,9	10,3	0,0
Health Care	100,0	27,0	59,7	9,0	4,3
Other	100,0	56,8	34,5	4,7	4,0

Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.

11

Figure 7. Inbound tourism: 2000 (I quarter): Cross-classification of main purpose of a tourism trip and type of accommodation
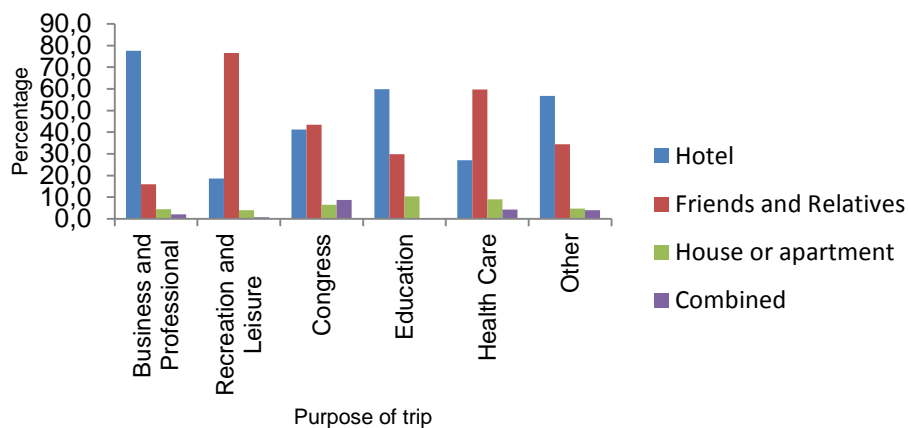
Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.

Table 10. Cross-classified table: Departures through airports by purposes of trip and types of accommodation –- Outbound tourism

2000 (I quarter)   Percentage

Purpose of trip	Total	Hotel	Friends and relatives	House or apartment	Combined
Business and Professional	100,0	70,8	10,4	11,2	7,6
Recreation and Leisure	100,0	26,1	61,7	8,5	3,7
Congress	100,0	42,7	30,9	11,8	14,5
Education	100,0	29,4	32,2	31,7	6,7
Medical Care	100,0	43,4	47,4	2,6	6,6
Other	100,0	39,3	39,9	13,5	7,4

Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.
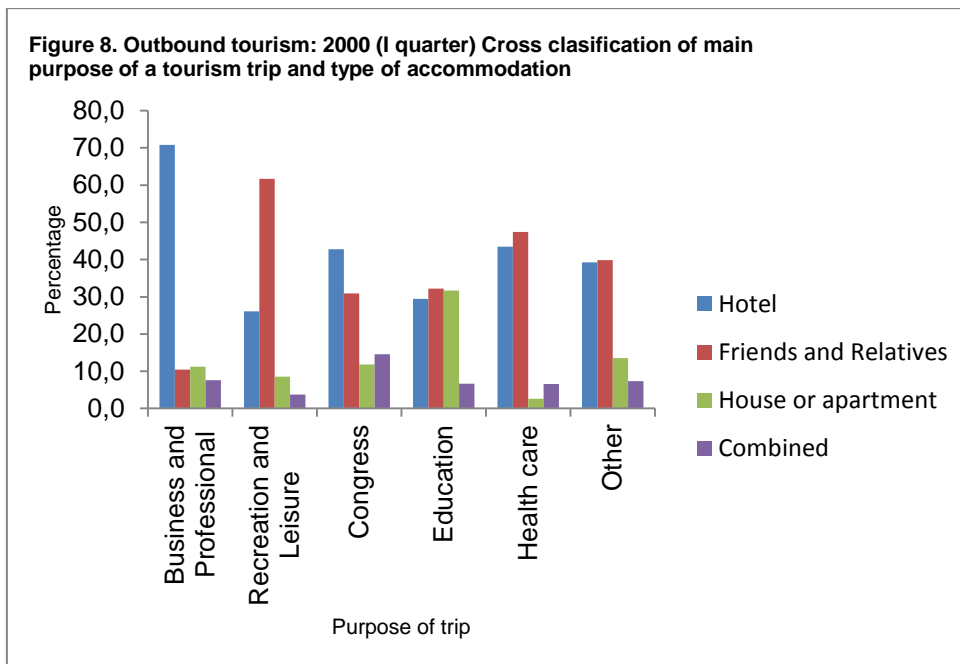
Figure 8. Outbound tourism: 2000 (I quarter) Cross clasification of main purpose of a tourism trip and type of accommodation

Except for business and professional, congress and education related trips, which have their own characteristics, accommodation with friends and relatives have a strong preponderance, for both inbound tourism and outbound tourism. This observation will be important when comparing flows of inbound tourism with accommodation in hotel from the perspective of supply.

- **Summary**. As a result of these structures, and applying them to the flows observed at borders, the results obtained are as follows (tables 11 to 14):

Table 11. Flows of inbound tourism: through airports, classified by purpose of trip 2000-2005

Number of visitors

Purposes of trip	2000	2001	2002	2003	2004	2005
Grand Total	607.345	646.429	573.637	635.769	803.069	951.881
Business and Professional	109.700	119.974	104.815	117.112	151.757	179.188
Recreation and Leisure	399.946	423.900	378.792	417.531	519.296	614.914
Congress	9.676	10.698	9.932	11.471	15.052	16.725
Education	ND	ND	ND	ND	ND	ND
Health Care	4.221	4.596	4.366	4.794	5.729	6.708
Other	35.886	38.312	33.153	36.821	47.763	56.641
Total non-packages	559.429	597.480	531.058	587.728	739.596	874.176
Total on packages tours	47.917	48.950	42.578	48.040	63.473	77.704

Figure 9: Inbound tourism: 20000-2005: Visitors through airports by main purpose of trip
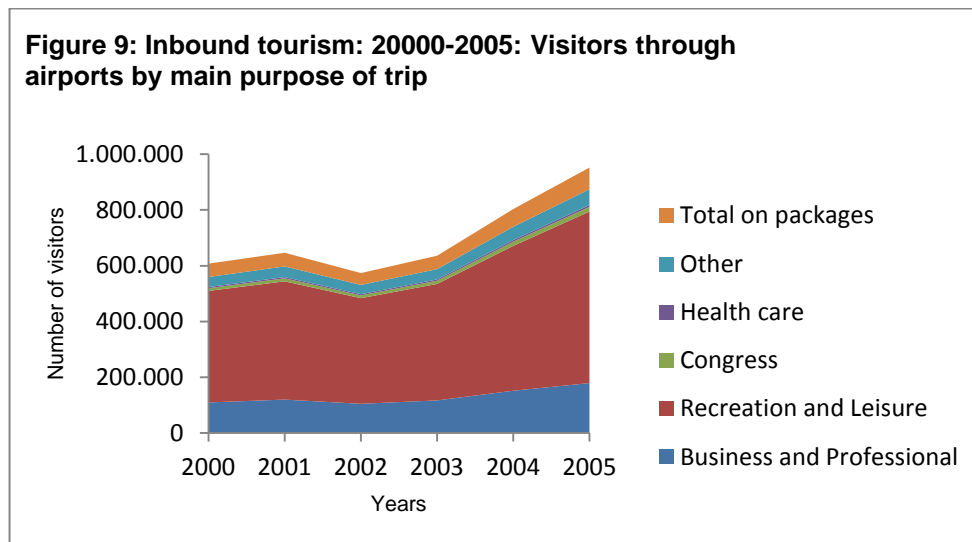
Source: EVI, 2000 (I quarter)
Calculations: DANE, DSCN.

Table 12. Flows of Inbound Tourism crossing land borders, classified by type of visitors 2000-2005

Number of visitors

Types of visitors	2000	2001	2002	2003	2004	2005
Total visitors	**7.700.995**	**7.432.844**	**7.740.387**	**8.593.812**	**9.559.997**	**9.391.144**
Recreation	5.277.423	5.946.907	6.244.469	7.276.427	8.246.079	8.460.509
Health care	653.509	488.178	490.516	446.285	505.801	415.150
Business and professional	1.770.064	997.759	1.005.402	871.100	808.117	515.484
Total tourists	*643.431*	*937.477*	*513.651*	*459.032*	*777.354*	*454.281*
Recreation	504.189	825.339	462.508	400.354	693.941	395.778
Health care	17.792	31.659	13.690	17.391	25.464	24.594
Business and professional	121.451	80.478	37.454	41.287	57.948	33.909
Total same-day visitors	*7.057.564*	*6.495.367*	*7.226.736*	*8.134.780*	*8.782.644*	*8.936.863*
Recreation	4.773.234	5.121.568	5.781.961	6.876.073	7.552.138	8.064.731
Health care	635.717	456.519	476.826	428.894	480.337	390.557
Business and professional	1.648.613	917.281	967.949	829.813	750.168	481.576

Source: Central Bank; Border Surveys.
Calculations: DANE, DSCN.

The flows corresponding to outbound tourism are as follows:

Table 13. Flows of outbound tourism through airports, classified by purposes of trip 2000-2005

Number of visitors

Purpose of the trip	2000	2001	2002	2003	2004	2005
Grand Total	**780.404**	**841.525**	**782.382**	**680.466**	**816.055**	**930.485**
Business and professional	77.740	83.782	78.007	67.770	81.260	92.636
Recreation and leisure	554.655	598.240	556.033	483.685	580.062	661.445
Congress	8.970	9.714	8.996	7.843	9.409	10.742
Education	18.573	19.957	18.594	16.159	19.376	22.073
Health care	8.219	8.902	8.243	7.187	8.622	9.844
Other	26.180	28.194	26.269	22.813	27.353	31.176
Total non-package	694.336	748.788	696.142	605.457	726.083	827.916
Total on package	86.068	92.737	86.240	75.009	89.972	102.570

14

tours

Figure 10. Flows of outbound tourism through airports classified by purpose of trip 2000-2005
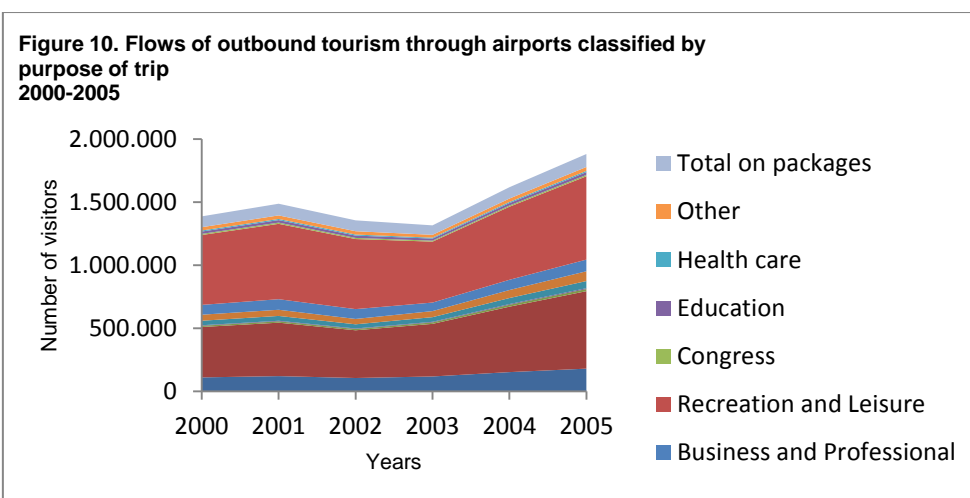
Table 14. Flows of outbound tourism crossing land borders by categories of visitors 2000-2005

Number of visitors	2000	2001	2002	2003	2004	2005
Total visitors	**7.166.074**	**7.095.376**	**7.112.878**	**7.226.019**	**7.749.675**	**8.260.397**
Recreation	4.980.698	5.826.383	5.921.432	6.248.838	6.920.366	7.494.142
Health care	158.373	127.669	93.860	119.732	136.706	153.449
Business and professional	2.027.004	1.141.324	1.097.586	857.448	692.603	612.806
Total tourists	*508.373*	*447.503*	*356.846*	*226.243*	*344.859*	*283.166*
Recreation	373.882	347.783	259.511	154.987	248.615	210.812
Health care	12.225	17.935	14.745	19.397	33.038	8.084
Business and professional	122.266	81.786	82.591	51.859	63.205	64.270
Total same-day visitors	*6.657.701*	*6.647.873*	*6.756.032*	*6.999.776*	*7.404.816*	*7.977.232*
Recreation	4.606.815	5.478.601	5.661.921	6.093.851	6.671.751	7.283.330
Health care	146.148	109.734	79.115	100.336	103.668	145.365
Business and professional	1.904.738	1.059.538	1.014.995	805.589	629.398	548.536

- **Final Comments**. For future calculations, data should be elaborated in detail and using three-dimensional matrices (origin country/destination X purpose of trip X means of accommodation matrices; separately for each year). In the present case, it should be observed that although the structures of purpose of trip and types of accommodation by origin country/destination are fixed, changing the distribution of arrivals or departures by country influences the overall general structure of resulting final calculation.

2.2.2. Domestic Tourism

The calculation of domestic tourism was made by reconciliation of the different available sources, for demand and supply, in particular those on supply of accommodation services.

- **Survey of Domestic Tourism (ETUR)**

  The only data available to establish domestic tourism were derived from ETUR, a special survey conducted in August of 2003 in which all trips taken during the twelve months prior to the survey period had to be reported. This is due to the fact that the modules of the general household survey applied in two quarters of 2006 and 2007 could not be extrapolated to a full year as the tourism behavior of residents in Colombia has a strong seasonality, so that the information from only one quarter cannot be extrapolated to the whole year. Nevertheless, using the data collected in ETUR, it was not possible to directly estimate domestic tourism for this period neither could the results be directly extrapolated to other periods for the following reasons:

  o The information was collected during a period of one month, but the reference period for the reported trips was a whole year, a period which was far too long for responses to be significant. The negative effect of an unnecessarily long reference period has been widely discussed in the literature[15].

  o In addition, as noted above, the reference period was atypical for changes in the public order situation.

In spite of those limitations, the ETUR information was first processed separating trips taken within the country and trips abroad. In each of the cases the number of trips-persons, and number of overnight stays, were estimated globally and according to purpose of trip and type of accommodation, and in each of the cases, both total expenditures and average expenditures per day were established.

According to ETUR, 12,0 million internal trips/ persons with overnight stays and 343 thousand trips/persons outside the territory were reported in the reference year (calculations by extrapolation of EVI, excluding land borders show between 680 and 780 thousand trips). With a population of around 40 million persons, this gives 0,3 trips/person per year of domestic tourism, a non-credible value when compared with data of other countries, in particular the neighboring countries (other countries belonging to CAN).

Nevertheless, when compared to each other, that is to say structurally, these data seem coherent. As far as the classification by purpose of trip and type of

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[15] *Memory effect in the Spanish Domestic and Outbound Tourism Survey (Familitur)"* by Teresa Guardia & Sandra Garcia, paper presented to the International Forum on Tourism Statistics - Paris 19-21 November 2008

accommodation is concerned, the average expenditure by person/day presents the expected ranking, and the process followed will try to take full advantage of this information.

- **Statistical Procedure for cross-checking the sources**

  - **Comparison with data on outbound tourism**. As ETUR covers both domestic and outbound tourism, data derived from ETUR were crosschecked on outbound tourism with data calculated from EVI. Land border data were excluded from the comparison due to the lack of information on the number of overnight stays and type of accommodation used.

  There are significant differences with the data estimated using EVI and large inconsistencies in the number of trips and distribution of the trips by purpose and types of accommodation, as well as in the number of overnight stays. These facts raise questions regarding the overall quality of the information. This can be observed in tables15 and 16:

Table 15. Comparison of calculations of number of outbound trips by types of source data 2002-2003

Outbound visitors	Sources (DAS + Land Borders)			Source ETUR	
	2002	2003	Average 2002 - 2003	ETUR	Relationship Outbound Direct/ETUR
Total DAS	**782.382**	**680.466**	**731.424**		
Hotel	223.778	194.594	209.186	11.380	25,5
Friends and relatives	373.875	325.213	349.544	216.776	1,6
Others, house or apartment	66.768	58.063	62.416		
Combined	31.722	27.587	29.655	15.247	1,9
Package tours	86.240	75.009	80.625		
Tourists (Land Borders)	356.846	226.243	291.545		
Total Tourists	1.139.229	906.709	1.022.969	343.403	3,0

Source: DANE, DSCN.
Calculations: DANE, DSCN based on EVI and ETUR.

Table 16. Comparison of calculations of number of overnights of outbound visitors by types of source data: 2002-2003

Overnights by Outbound visitors	Source EVI			Source ETUR	
	2002	2003	Average 2002-2003	ETUR	Relationship EVI/ETUR
Total	**26.835.399**	**23.340.540**	**25.087.970**	**6.021.602**	**4,2**
Hotel	2.814.191	2.447.179	2.630.685	911.635	4,9
Friends and relatives	16.154.762	14.052.119	15.103.440	4.427.526	3,4
Others, house or apartment	3.942.805	3.428.766	3.685.786	0	0

Combined	1.941.979	1.688.885	1.815.432	682.441	2,7
On Package	1.981.662	1.723.592	1.852.627	0	0

Source: DANE, DSCN.
Calculations: DANE, DSCN based on EVI and ETUR.

- **Comparison with data on accommodation in hotel and similar facilities.**

The data derived from ETUR were also compared with that of accommodation in hotel and similar facilities, first, for the year of the survey (assimilated to 2002) and then, as a volume indicator to estimate domestic tourism for other years of the series.

The Monthly Sample of Hotels (MMH by its acronym in Spanish) provides information on the overnight stays, for both residents and non-residents. Since the MMH was carried out during the year 2004, it was necessary to combine the changes in the Annual Survey of Services (EAS) for hotels(of the product " Hotels" in the national accounts) with the EVI data referring to Inbound Tourism. That helped to estimate the total of the overnight stays in hotels and similar facilities, corresponding to domestic tourism.

Applying the existing relationship between total overnight stays of domestic tourism and overnight stays in hotels and similar facilities, it was to possible to estimate the total number of overnight stays of domestic tourism for the period. Additionally, assuming that structures corresponding to the purpose of trip by type of accommodation and overnight stays by trip observed on ETUR, were stable in the period, the flows of domestic tourism were estimated as follows (table 17):

Table 17 - Domestic Tourism: number of overnight stays by type of accommodation
2000-2005

Years	Total overnight Stays	Overnight stays with friends and relatives	Estimated overnight stays in hotel	Others Overnight stays
2000	124.764.306	101.537.786	16.660.752	6.565.768
2001	132.905.325	108.163.247	17.747.886	6.994.192
2002	142.384.326	115.877.607	19.013.691	7.493.028
2003	152.909.886	124.443.695	20.419.251	8.046.940
2004	158.262.735	128.800.041	21.134.059	8.328.635
2005	162.787.848	132.482.744	21.738.333	8.566.771

Source: DANE, DSCN.
Calculations: DANE, DSCN.

Table 18 -Domestic Tourism: number of Person/trips by type of accommodation
2000-2005

Years	Total person /trips	Person-trips with friends or relatives	Person-trips in hotel	Person-trips in other type
2000	32.345.421	23.309.270	6.976.704	2.059.447
2001	34.349.473	24.723.702	7.431.943	2.193.828
2002	36.799.328	26.487.033	7.962.000	2.350.295
2003	39.519.666	28.445.049	8.550.579	2.524.038
2004	40.903.113	29.440.813	8.849.905	2.612.395
2005	42.072.632	30.282.596	9.102.946	2.687.090

Source: DANE, DSCN.
Calculations: DANE, DSCN.

3. TOURISM EXPENDITURE

3.1. INTRODUCTION TO THE GENERAL METHOD

Tourism expenditure is calculated by allocating average tourism expenditure per day derived from existing available statistical sources to the number of overnight stays estimated for each form of tourism. In addition, it is assumed that average tourism expenditure per day according to the characteristics of tourism trips is fixed at constant prices over the period. This means that for each year, the average tourism expenditure per day by product derived from surveys at current prices is updated using the consumer prices index of the corresponding products.

The available data clearly reveal the high sensitivity of the average expenditure per day and its distribution by product, to both the type of accommodation used and the purpose of trip.

3.2. DOMESTIC TOURISM

The following tables present the average expenditure per person per day, by type of accommodation and purpose of trip for each type of tourism, as it results from the sources used.

Table 19. Domestic tourism: Average expenditure per person/day classified by category of expenditure and type of accommodation
August 2002-July 2003 (pesos of year 2002)

Expenditure category	Total	Friends and relatives	Hotel and similar establishments	Other
Total expenditure	**50.605**	**25.447**	**195.739**	**79.019**
Accommodation	9.616	610	60.827	21.754
Food and beverage	14.626	8.405	49.358	24.701
Air transport	7.340	2.759	35.099	9.010
Land transport	7.091	5.446	16.406	9.400
Car rentals	153	60	672	315
Other transport	580	583	458	858
Fuel	1.718	1.169	4.290	3.920
Tolls	785	567	1.959	1.246
Other transport services	139	117	279	128
Recreational services	1.318	931	3.532	1.805
Gifts	3.668	2.425	11.627	2.985
Culture	436	321	1.150	439
Other	3.135	2.055	10.083	2.459

Source: DANE, DSCN.
Calculations: DANE, DSCN.

The average expenditure per day fluctuates between 25.447 and 195.739 pesos, with a weighted average of 50.605 pesos per day, depending on the type of accommodation used. As can be observed, the variations mostly affect accommodation and food and beverage, although the rest of expenditure categories also present important variations.

Table 20. Domestic Tourism: Average expenditure per person/day classified by category of expenditure and purpose of trip

August 2002 - July 2003
(pesos year 2002)

Expenditure Category	Total	Recreation and Leisure	Religion	Congress	Education	Health care	Business and Professional	Other
Total expenditure	**50.605**	**44.484**	**34.131**	**74.365**	**43.394**	**32.522**	**70.688**	**7.478**
Accommodation	9.616	7.839	3.696	16.284	7.573	4.427	14.953	853
Food and Beverage	14.626	14.800	11.286	18.711	15.516	7.467	16.176	1.891
Air Transport	7.340	4.843	1.074	17.078	6.222	7.679	12.873	1.497
Land Transport	7.091	6.134	11.822	9.879	3.677	7.229	9.652	2.122
Car Rental	153	122	8	413	-	12	233	3
Other Transport	580	143	293	62	570	599	1.857	34
Fuel	1.718	1.757	1.765	503	222	386	2.291	84
Tolls	785	896	684	225	151	440	791	30
Other transport services	139	163	52	-	115	19	133	73
Recreational Services	1.318	1.532	329	1.586	1.886	155	1.055	77
Gifts	3.668	3.223	1.300	4.635	1.296	1.837	5.475	307
Culture	436	497	128	1.421	638	98	198	47
Other	3.135	2.535	1.694	3.569	5.529	2.175	5.002	460

Source: DANE, DSCN.
Calculations: DANE, DSCN.

The same type of variation is observed by purpose of trip, in which the average expenditure per day fluctuates between 7.478 and 74.365 pesos, depending on the purpose of trip.

These findings explain why it is necessary to undertake a detailed characterization of the flows of visitors in terms of purpose of trip and type of accommodation used before proceeding to the calculation of total expenditure.

3.3. INBOUND AND OUTBOUND TOURISM

On the one hand, using the information derived from EVI 2000 (I quarter), it was possible to establish matrices showing for each purpose of trip and type of accommodation, average expenditure per person per day, total, and broken down into five functional categories (local transport, accommodation, food, shopping and other), excluding international transport. On the other hand, the information revealed the average number of overnight stays by visitors. These are then applied to matrices of visitors for each purpose of travel and type of accommodation to obtain total expenditure, as well as the number of tourism trips and overnights stays.

Tables 21 and 22 below show data according to purpose of trip. The expenditure per person per day has a broader spread than the expenditure per person, because the average overnight stays by purposes of travel show opposite variations (the longer the length of stay, the smaller the average expenditure per day).

21

Table 21 Inbound tourism - Average expenditure per person classified by category of expenditure and purpose of trip grouping by types of accommodation

2000 (I quarter)   Dollars of year 2

Expenditure category	Average expenditure	Congress	Education	Other	Recreation	Business and Professional	Health Care
Average expenditure per person- accommodation in hotels and others							
Total spending	885,0	744,2	773,0	1104,2	914,3	826,2	107
Local Transport	143,1	159,9	170,4	121,6	156,7	137,0	3
Accommodation	287,2	195,2	233,2	300,7	259,5	309,5	5
Food	151,8	110,2	128,0	185,9	161,3	138,0	23
Leisure and shopping	187,8	151,9	133,3	195,4	238,0	148,9	13
Other	115,1	127,0	108,1	300,6	98,8	92,9	10
Average expenditure per person- accommodation with friends and relatives							
Total spending	951,9	907,0	988,8	1162,5	949,4	909,5	98
Local Transport	105,9	70,5	64,0	114,3	107,9	78,5	
Accommodation	35,9	7,1	88,5	89,2	34,9	49,2	
Food	167,5	131,0	263,1	187,8	167,9	163,6	14
Leisure and shopping	404,6	266,1	273,8	362,9	411,3	379,5	25
Other	238,0	432,2	299,4	408,4	227,3	238,7	49
Average expenditure per person- accommodation in house or apartment							
Total spending	1273,0	794,2	3077,2	935,9	1101,6	2028,1	173
Local Transport	151,7	41,4	335,6	82,6	148,0	156,1	3
Accommodation	232,3	120,8	353,3	319,2	151,3	633,3	23
Food	244,7	63,2	447,2	183,7	213,2	424,2	30
Leisure and shopping	369,2	170,1	505,6	160,9	385,9	373,5	32
Other	275,2	398,7	1435,6	189,5	203,3	441,0	55
Average expenditure per person- combined accommodation							
Total spending	573,8	225,9	0,0	237,2	770,2	460,4	95
Local Transport	108,5	71,0	0,0	83,2	107,6	172,3	3
Accommodation	60,0	39,7	0,0	49,4	87,0	20,9	5
Food	97,5	21,1	0,0	29,2	141,8	70,9	10
Leisure and shopping	186,3	47,1	0,0	43,1	281,3	116,5	30
Other	121,5	47,0	0,0	32,4	152,5	79,8	40
Total spending by persons on package							
Package	892,8						
Additional spending	387,2						
Total spending	1279,9						
Overnight stays per capita	12,0						

Source: DANE, EVI, 2000 (quarter I)
Calculations: DANE, DSCN.

22

Table 22 Outbound tourism - Average expenditure per person classified by category of expenditure and purpose of trip - grouping by types of accommodation

2000 (I quarter) — Dollars of year 2000

Expenditure Category	Average expenditure	Congress	Education	Other	Recreation	Business and Professional	Health Care
Average expenditure per person- accommodation in hotels and others							
Total spending	1.244, 0	887,5	1.105, 5	1.466, 2	1.302, 3	1.122, 7	1.456, 7
Local Transport	231,0	183,1	274,9	113,4	240,5	231,5	159,4
Accommodation	359,4	321,1	343,8	294,6	349,9	403,3	231,8
Food	189,6	104,5	144,2	162,0	210,3	168,4	102,7
Leisure and shopping	346,2	155,0	269,0	805,2	383,1	206,4	699,7
Other expenditure	117,9	123,8	73,6	90,9	118,6	113,2	263,0
Average expenditure per person- accommodation with friends and relatives							
Total spending	1.019, 0	1.071, 3	2.726, 3	1.333, 7	1.027, 8	1.134, 5	1.560, 0
Local Transport	170,3	112,7	201,6	161,2	178,3	194,5	276,0
Accommodation	54,5	54,5	48,9	123,0	54,9	116,6	41,4
Food	172,2	131,5	251,4	224,7	180,8	149,3	124,3
Leisure and shopping	453,9	380,0	637,1	590,2	475,8	377,5	456,0
Other expenditure	168,2	392,5	1587,3	234,7	138,0	296,7	662,3
Average expenditure per person- accommodation in house or apartment							
Total spending	1.931, 7	851,5	4.790, 8	6.240, 9	1.394, 2	1.681, 7	0,0
Local Transport	266,8	46,2	683,0	291,8	215,8	269,5	0,0
Accommodation	541,1	53,8	1.512, 9	3.295, 5	297,3	439,0	0,0
Food	376,6	170,8	857,9	1.718, 2	257,8	323,0	0,0
Leisure and shopping	502,5	273,1	934,0	260,9	475,5	433,1	0,0
Other expenditure	244,7	307,7	803,0	674,5	147,9	217,2	0,0
Average expenditure per person- combined accommodation							
Total spending	1.215, 3	918,9	2.102, 0	1.418, 3	1.074, 2	1.513, 6	1.400, 0
Local Transport	233,3	26,2	392,1	262,5	190,5	349,1	640,0
Accommodation	133,0	67,7	483,8	143,3	97,2	199,2	80,0
Food	209,8	15,4	439,3	235,8	180,5	305,3	160,0
Leisure and shopping	392,8	150,8	213,6	400,0	417,3	424,5	160,0
Other expenditure	246,4	658,9	573,2	376,7	188,8	235,5	360,0
Total spending by persons on package							
Package	1.816, 7						
Additional spending	562,2						
Total expenditure	2.378, 9						
Overnight stays	23,0						

23

Source: DANE, EVI, 2000 (I quarter)
Calculations: DANE, DSCN.

3.4. FINAL ADJUSTMENTS

In order to be able to compile the tables required by UNWTO, it is necessary to perform additional adjustments:

- The expenditure obtained, in particular through international tourism survey, is classified in five functional categories (see section 3.3). In order to be able to compare these data with data from the supply and use tables of the national accounts, it is necessary to transform the classification by purpose into a classification of goods and services

- In the case of international tourism, the expenditure in international transport needs to be an exogenous estimation. This is done by using data available from the national surveys in relation to international passengers transport (partly derived from the estimations of Balance of Payments) since the questionnaire does not include this expenditure item.

- The case of visitors travelling on a package tour must be also taken into consideration, since the packages also include expenditure at origin or supplied by residents of the visitor´s economy.

- Finally, the estimates must be established at each year's current prices.

3.4.1. Breakdown by products.

In the survey of tourism related expenditure, visitors are requested to provide information on their expenditure by breaking it down into five functional categories as mentioned above: local transport, accommodation, food and beverage, shopping and other.

This is consistent with the international recommendation, which requires the expenditure reported by visitors to be related to the type of classification used for general households final consumption (Classification of expenditure by purpose).

In order to cross-check with the supply by producers, it is necessary to break down these categories of purposes into categories of products.

On a relatively arbitrary way, the breakdown of the global variables was based on experts' criteria as seen below:
Outbound and Inbound tourism (through airports)
Leisure and shopping
      Leisure (25%)

Shopping (75%)
        Telecommunications (15%)
        Goods (85%)
                Clothing (35%)
                Leather products (20%)
                Wood products (5%)
                Printed matter (6%)
                Refractory (8%)
                Jewelry (26%)

Domestic tourism:

The products were directly derived from the survey of tourism related expenditure, since the information was collected by products and not by purpose.

3.4.2. International transport and estimation of local expenditure of outbound visitors (an expenditure belonging to domestic tourism).

As it has been mentioned above, EVI did not include questions on international transport. It was therefore necessary to estimate this component of tourism expenditure.

This calculation is performed using data from the commodity flow balances of the corresponding products from the national accounts. The only expenditure taken into consideration is the one related with air transport, as Colombia has hardly any other mode of international passenger transport; therefore, in the present calculation, the other modes of transport are excluded.

For this calculation, it is necessary to remember that in the case of air transport, the buyer has to make use of the services provided by a travel agency[16]. The treatment given to travel agencies services and the intermediation service provided by these agencies is different in the TSA and in the national accounts, since in the TSA, a net approach is used whereas in the national accounts generally a gross approach is used[17]. This means that in the national accounts, part of the travel agencies services are considered as purchased by the airlines, particularly in the cases in which travel agents are paid a commission in return for placing tourists´ bookings with them. By contrast, in the TSA, all services are being considered as purchased by visitors, a treatment derived from considering travel agencies services as tourism characteristic products.

Firstly, a gross approach is used, assuming that there are no travel agencies services. These are only taken into account within the second stage:

- **Stage 1: Gross valuation approach.** International passenger transport can be provided by a resident or a non-resident carrier, for both inbound and outbound tourism.

    For inbound tourism, i.e. for a non-resident visitor traveling to this country, if the international air transport is provided by a non-resident carrier, it is a transaction between non-residents and therefore, it is not included into the measurement of

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[16] These services can be provided by the airline company itself, for instance, through a virtual agency on the WEB.

[17] It was an assumption as it is unclear what method is used. This is one of the elements where research is needed.

inbound tourism expenditure. Only the consumption of services provided by a resident carrier in Colombia is taken into consideration.

For outbound tourism, i.e. for a resident visitor traveling abroad, if the international air transport is provided by a non-resident carrier, it is part of outbound tourism expenditure. Otherwise, if it is by a resident provider such as Avianca, Aires, Aerorepública, etc., then it is a transaction between two residents and it is taken into account within domestic tourism expenditure (even if linked with trips abroad).

Additionally, for those travelling on a package tour, it was assumed that 30% of the value of the package corresponded to the expenditure incurred in the country of origin and in international transport.

This amount corresponds roughly to the amount observed internationally.

Applying this same rule of 30%, in the case of outbound and inbound tourism by airports and knowing on the other hand, from the commodity flow balance of the product "air passenger transport" of national accounts the national supply, the uses, the imports and exports of the product, it is possible to estimate which parts of this balance correspond to inbound tourism expenditure and which to domestic tourism expenditure.

Since not all international travelers are visitors, an overall discount of around 90% was estimated for outbound tourism and 75% for inbound tourism in order to convert the number of travelers into a number of visitors. A similar discount was also applied to the value of imports and exports of air passenger transport services in order to estimate the share corresponding to visitors.

- **Stage 2: Net valuation approach.** To calculate the net valuation it is necessary to know the balance of the product: "travel agencies services" on the one hand and on the other, how much of the intermediate consumption of the product corresponds to intermediate consumption by the air passenger industry. In the case of inbound tourism (ticket purchased abroad), the amount of travel agencies services is removed from the gross approach calculated on stage 1, which is considered a transaction between non-residents, and therefore, excluded from the TSA. By contrast, in the case of outbound tourism, it is a transaction between residents, included in the standardized table 2, as domestic tourism expenditure generated by trips included in the flows of outbound tourism.

Applying the principles of the treatment to travel agencies services following a net approach, the results obtained are as follows:

Table 23. Inbound tourism: Calculation of gross and net international transport. 2000 - 2005

Thousand

Years	Total inbound tourism expenditure by airports without international	3/7 of previous value	Exports air passenger transport (national accounts data)	75% of previous value: international transport of inbound visitors	Air passenger transport provided by non-residents: excluded	Travel agency Services of non-residents: excluded from the	Net international transport services of inbound tourism

	transport				from the TSA	TSA		
	(1)	(2) = 3/7*(1)	(3)	(4) = 0,75*(3)	(5) = (2) - (4)	(6)	(7)=(4) - (6)	
2000	1.190	510	599	449	61	90	359	
2001	1.334	572	624	468	104	59	409	
2002	1.247	535	683	512	22	45	467	
2003a	1.464	649	865	649	0	38	611	
2004	1.941	832	817	613	219	47	566	
2005	2.381	1.020	822	617	404	53	564	

Source: DANE, EVI, 2000 (I quarter); National Accounts 2005 base year

Calculations: DANE, DSCN.

[a] in 2003, international transport was adjusted for the coherence with data of export services

Table 24. Outbound tourism: Calculation of gross and net international transport 2000-2005

Thous

Years	Total outbound tourism expenditure by airports without international transport	3/7 of the previous value: total spending in international transport	Imports air passenger transport- Gross value (national accounts data)	90% of the previous value: provided to visitors	Air passenger transport provided by residents	Travel agency services of residents	International Transport by non- residents outbound tourism
	(1)	(2) = 3/7*(3)	(3)	(4) = 0,90*(3)	(5) = (2) - (4)	(6)	(7) = (4) - (6)
2000	2.073	888	855	770	119	86	68
2001	2.527	1.083	931	838	245	98	74
2002	2.609	1.118	731	658	460	59	59
2003	2.660	1.140	853	768	372	59	70
2004	2.980	1.277	984	886	392	77	80
2005	3.070	1.316	1014	913	403	81	83

Source: DANE, EVI, 2000 (quarter I); National Accounts 2005 base year
Calculations: DANE, DSCN.
Note: The transportation and the travel agencies services provided to residents are considered as domestic tourism expenditure.

3.4.3. Treatment of travelers using package tours.

Given the numbers observed in some international studies on package tours, it was assumed that international transport (including the trade margin of travel agencies and tour operators) represented approximately 30% of the total value of the package. Furthermore, the remaining 70% was broken down by product, the structure used was that observed for average total expenditure per day for visitors traveling for recreation purpose and staying at hotels. In this way, it was possible to estimate the expenditure fraction corresponding to the country visited, excluding international transport and travel agencies services.

3.4.4. Conversion to current pesos

As explained, it was assumed that at constant prices, the average expenditure by person per day according to characteristics remained unchanged. This means that the only variable element in the volume of consumption was due to changes in the flows of visitors.

The conversion to current pesos was done differently for inbound tourism and outbound tourism.

For inbound tourism the expenditure in US$ in the year 2000 was converted into pesos, by means of the average exchange rate of that year. Afterward, each expenditure was extrapolated at current prices, using the corresponding Consumer Price Index (CPI) of each individual product.

For outbound tourism, the expenditures in the year 2000 expressed in the US$ were extrapolated at current values in US$, using the international inflation of the countries visited (two great categories: developed countries, other countries), figures which were then converted into pesos, using the average exchange rate for that year.

For domestic tourism, the corresponding CPI was used for each of the products.

3.5. RESULTS: STANDARDIZED TABLES 1 TO 4

As a result of the calculations explained above, it was possible to compile the standardized tables shown in Annexes 1 to 4, required by the UNWTO TSA conceptual framework. It should be noted that the information is incomplete: it includes neither the movements associated with cruises, whose importance is becoming relevant; nor same-day domestic visitors. Finally, in the case of tourism through land borders, it was not possible to establish the number of tourists' overnight stays.

Furthermore, the adjustments to move from the concept of tourism expenditure, used in tables 1 to 3, to the concept of tourism consumption of table 4 were not included. These adjustments relate mainly to consumption by visitors corresponding to non-market production of government usually through social transfers in kind (mainly in the case of tourism, the difference between the cost of public entertainment and the prices at which they are sold to the public; and social transfers in kind associated with medical treatments received from the social insurance system among others), and the consumption by visitors of the production on own account, such as that associated with second homes owned by visitors.

4. SUPPLY ASSOCIATED WITH TOURISM

The basic source of information on the supply of tourism products and other products is the 2005 Base National Accounts of Colombia. In order to be able to use these data, it is necessary first, to homologate the classifications used in national accounts with those used in the TSA.

4.1 CLASSIFICATIONS

The classifications used in national accounts are derived from international classifications and their adaptation for Colombia. There are equivalence tables between the classifications of products and productive activities used in the national accounts and classifications ISIC rev.3 AC and (CPC) ver.1 AC. The 2005 Base national accounts uses two basic classifications, one that is applied to the backcasted series of accounts 2000-2005 and the one applied after 2005. Since the TSA presented here refers to series 2000-2005, it is the equivalence with the backcasted series that is going to be used.

The product classification used in the final tables in which the classification recommended by the UNWTO and the classification used in the National Accounts of Colombia are homologated as follows:

Table 25. Product Classification of the Tourism Satellite Account (TSA) and equivalence with the national accounts product classification

A.	Consumption Products / Tourism Production
A.1.	**Tourism Characteristic Products**
1.	Accommodation for visitors
450100	Lodging services
520101	Renting or leasing services involving residential property on own account
520102	Renting or leasing services involving own or leased residential property to third parties
2.	Food and beverage serving services
450201	Food serving services
450202	Beverage serving services for consumption on the premises
3.	Railway passenger transport
460202	Railroad Transport (freight and passengers)
4.	Road passenger transport
460102	Scheduled transport services of passengers (interurban and others) including special purpose services
5.	Water passenger transport services
470100	Costal and transoceanic water transport services
470200	Inland water transport services
6.	Air passenger transport services
480100	Scheduled and non-scheduled air transport services of passengers; rental services of aircraft with operator
7.	Transport equipment rental
	It does not exist as a separate product in the national accounts classification and is part of:
530101	Leasing or rental services concerning machinery and equipment and other goods without operator
8.	Travel agencies and other reservation services
490201	Travel agency, tour operator and tourist guide services
9.	Cultural services
	They are not identified separately in the National accounts classification
10.	Sports and recreational services
590007	Library and archive services
590008	Gambling and betting services
590009	Sports and recreational sports services
11.	Retail trade of country- specific tourism characteristic goods
	Such products have not been identified
12.	Country specific tourism characteristic services,
	Such products have not been identified
A.2.	**Other consumption products acquired by visitors**
	All the other products consumed by visitors are included in this category.

Source: DANE, DSCN.

There is a similar equivalence concerning activities. Nevertheless, the national accounts are not as detailed in the classification of activities as in that of products, as only sixty-one activities are considered. In order to establish the TSA, the classification of national accounts was used, opening up only hotels and restaurants, since these are aggregated into a single category within the national accounts.

The activity 49 corresponding to auxiliary transport activities, or activity 53 corresponding to business services were not considered to be characteristic of tourism, since the share of the tourism characteristic products associated with them is too small in their output and therefore, their inclusion would unnecessarily inflate the supply of industries considered as tourism characteristic.

4.2 TOURISM SUPPLY

Using this equivalence of the classifications used in the TSA and the classification of the national accounts and reclassifying products and activities as previously explained, the products and activities corresponding to tourism characteristic products and activities can be extracted and regrouped as they appear in the national accounts. The non-characteristic products and activities are grouped into goods on the one side and services on the other. Production is calculated at basic prices.

Nevertheless, it is necessary to make two adjustments to the matrices available in national accounts: on the one hand, the suppliers of accommodation services need to be separated from the suppliers of food and beverage services, due to their importance for tourism analysis. On the other hand, it is necessary to value the international transport on a net basis that is, excluding the consumption of travel agencies services from both the value of output and the value of intermediate consumption of the industry and consider that visitors acquire this consumption directly.

4.2.1 Breakdown of the "Hotels and Restaurants" Industry

To carry out this breakdown, the information provided by the Hotel and Tourism Association of Colombia (COTELCO) was used. This information allows to establish the weight of "Other" products, different from accommodation within the income of hotels.

Under the assumption that within this industry, only hotels had secondary production and that all the "Other" production of the aggregate activity in the production matrix would correspond to restaurants, it was possible to estimate the production of food and beverage services by hotels and by difference, to establish the production corresponding exclusively to restaurants.

4.2.2 Valuing air passenger transport on a net basis.

In the case of international passenger transport, the data must be recorded in net terms instead of gross terms; that is, the fees or commissions paid to travel agencies by carriers for commercializing their services should be excluded. This generates an adjustment for both the production of the airlines and their intermediate consumption. No change is generated in the supply of travel agencies services, only in the allocation of their production between final and intermediate consumption. No difference is generated in total value added, which remains the same as the totals of national accounts.

The series of standardized table for years 2000 to 2005 is shown in Annex 5.

5. LINKING TOURISM SUPPLY AND DEMAND

Relating demand and domestic supply of tourism and non-tourism products within the economy allows the verification of the coherence among estimations.

In the TSA standardized table 6, internal tourism demand and total supply are explicitly cross-checked (Annex 6)

It should be noted that the process has been simplified in the following way:
- Theoretically, the production of the activities is recorded at basic prices and demand is established at purchasers' prices. In the case of services (most of tourism consumption), the elements of difference are only taxes on products and imports and the Value Added Tax (VAT); they were omitted due to their small proportion with regard to the production value at basic prices;
- It was considered that visitors acquired and consumed services exclusively from the activities for which they were typical.This assumption is not very strict, since there is a low incidence of secondary output in the services consumed by visitors;
- Additionally, no distinction in treatment was made between goods and services included as non-tourism characteristic products. It is recalled that only the trade margin on goods generates tourism direct value added (TDVA). Nevertheless, it was considered that this simplification of the process should not have an important effect on the outcome.
- The standardized table 6 displayed in Annex 6 which simplified results are presented here generates questions that shall drive a review on the assumptions used in establishing national accounts in the future: in particular, the following can be highlighted:

Table 26. Summary of table 6. TSA

2000-2005   Thousand Million Pesos

Products	2000			2001			2002		
	Total output of domestic producers	Total internal tourism consumption	Weight of tourism consumption	Total output of domestic producers	Total internal tourism consumption	Weight of tourism consumption	Total output of domestic producers	Total internal tourism consumption	Weight of tourism consumption
	Output	Tourism consumption	%	Output	Tourism consumption	%	Output	Tourism consumption	%
Accommodation services for visitors	1.342	1.208	90	1.484	1.336	90	1.682	1.514	90
Food and beverage serving services	12.759	1.873	14,7	13.656	2.145	15,7	14.639	2.369	16,2
Road passenger transport services	12.873	995	7,7	14.376	1.130	7,9	15.737	1.215	7,7
Water passenger transport services	668	0	0	645	0	0	706	0	0
Air passenger transport Services	1.641	1.324	80,7	1.909	1.630	85,4	2.068	1.985	96
Travel agencies and other reservation services	249	153	61,5	258	176	68,3	261	143	54,8
Real estate, renting and business activities services	24.965	139	0,6	26.329	135	0,5	27.913	51	0,2
Transport equipment rental services	2.348	17	0,7	2.617	20	0,7	2.815	22	0,8
Services of membership organizations, cultural, sports and other market services	7.734	338	4,4	8.068	387	4,8	8.730	402	4,6
Services of membership organizations, cultural, sports and other non-market services	984		0	1.160		0	1.259		0
Other non- tourism characteristic industries	287.602	1.685	0,6	316.644	1.911	0,6	347.119	1.612	0,5
Total output/Total domestic tourism consumption	353.165	7.731	2,2	387.146	8.869	2,3	422.929	9.313	2,2
Total intermediate consumption	159.636	4.080	2,6	177.763	4.795	2,7	196.011	5.148	2,6
Total gross value added	193.529	3.651	1,9	209.383	4.073	1,9	*226.918*	*4.165*	1,8
Compensation of employees	68.389	1.280	1,9	75.261	1.493	2	82.762	1.575	1,9
Total taxes and subsidies	4.415	87	2	4.249	87	2	4.535	90	2
Other taxes on production	4.415	87	2	4.249	87	2	4.535	90	2
Gross mixed income	53.783	1.254	2,3	58.291	1.360	2,3	62.881	1.345	2,1
Gross operating surplus	66.942	1.029	1,5	71.582	1.133	1,6	*76.740*	*1.155*	1,5

Products	2003			2004			2005		
	Total production of domestic producers	Total internal tourism consumption	Weight of tourism consumption	Total production of domestic producers	Total internal tourism consumption	Weight of tourism consumption	Total production of domestic producers	Total internal tourism consumption	Weight of tourism consumption
	Production	Tourism consumption	%	Production	Tourism consumption	%	Production	Tourism consumption	%
Products	1.949	1.754	90	2.249	1.949	86,7	2.427	2.116	87,2
Food and beverage serving services	16.275	2.709	16,6	18.588	2.997	16,1	20.446	3.275	16
Land passenger transport services	17.954	1.445	8	20.447	1.630	8	23.421	1.765	7,5
Water passenger transport Services	742	0	0	773	0	0	747	0	0
Air passengers transport Services	2.424	2.273	93,8	2.734	2.442	89,3	3.043	2.599	85,4
Travel agencies services	299	162	54,1	330	196	59,4	364	212	58,1
Real estate, renting and business activities services	29.979	3	0	32.394		0	35.358		0
Transport equipment rental services	2.993	27	0,9	3.368	30	0,9	3.604	33	0,9
Services of membership organizations, cultural, sports and other market	9.119	449	4,9	9.909	507	5,1	10.906	547	5
Services of membership organizations, cultural, sports and other non-market services	1.261		0	1.476		0	1.621		0
Other non- tourism characteristic industries	392.417	1.772	0,5	443.356	2.108	0,5	487.547	2.282	0,5
Total output/Total domestic tourism consumption	475.412	*10.594*	2,2	535.624	11.860	2,2	589.484	12.829	2,2
Total intermediate consumption	224.487	5.965	2,7	253.132	6.642	2,6	278.204	7.173	2,6
Total gross value added	250.926	4.629	1,8	282.493	5.217	1,8	311.281	5.656	1,8
Compensation of employees	90.068	1.767	2	99.548	1.971	2	109.243	2.116	1,9
Total taxes and subsidies	5.246	105	2	5.863	115	2	7.038	135	1,9
Other taxes on production	5.246	105	2	5.863	115	2	7.038	135	1,9
Gross mixed income	67.899	1.486	2,2	76.365	1.676	2,2	83.859	1.854	2,2
Gross operating surplus	87.700	1.272	1,5	100.717	1.456	1,4	111.141	1.566	1,4

Source: DANE, DSCN., Tourism Satellite Account Colombia 2000-2005

The relative weight of tourism consumption within the supply of travel agency services is notoriously low, since it never reaches 70% in the period. This reflects the inconsistencies of the measurement of this activity in relation to the rest of the activities related to trips: an issue that needs to be reviewed.

The same applies to vehicle rental: the share of tourism consumption is less than 1% in the period, reflecting the difficulty to measure this consumption on the demand side (no assumption was made for inbound tourism consumption):

The same occurs for land transport services, which consumption might be undervalued.

6. EMPLOYMENT IN TOURISM INDUSTRIES

The conceptual framework of the TSA recommends the measurement of employment in the tourism characteristic industries as the main employment indicator. Since several characteristic tourism industries also provide services to non-visitors, and visitors also acquire non-tourism characteristic goods and services, many countries also use a complementary indicator- tourism employment. This corresponds to the employment generated by tourism and non-tourism activities, in response to the demand from visitors, despite the theoretical and practical difficulties in associating the level of employment to a specific part of the output of a productive activity[18].

As a result, the measurement of employment was performed from these two perspectives. Firstly, it consisted in calculating the employment in tourism industries using two indicators: the number of jobs and persons who held a job and have at least one job in these industries. Secondly, it consisted in calculating, from average production by worker, a tourism employment for year 2005 that is to say, employment that responds to the demand by visitors.

6.1 FIRST PERSPECTIVE: EMPLOYMENT IN TOURISM CHARACTERISTIC INDUSTRIES

The first perspective refers to estimated employment generated by those establishments whose main productive activity is a characteristic tourism activity, whose list is shown below:

Table 27. Tourism characteristic industries, according to ISIC Rev. 3 AC classification

Codes CIIU	Industries
5511	Accommodation in hotels, hostels and apartments
5512	Accommodation in hourly hotels, motels and other pay-by-the hour lodging
5513	Accommodation in resorts and camping sites
5519	Other types of accommodation n.e.c
5521	Sale of food prepared in restaurants with table service
5522	Sale of food prepared in cafeterias
5523	Sale of food prepared in self-service restaurants
5524	Sale of food prepared in self-service cafeterias
5529	Other types of sale of food prepared on-site n.e.c
5530	Sale of alcoholic beverages for on-site consumption
6021	Collective urban scheduled passenger transport
6022	Collective inter-municipal schedule passenger transport
6023	Collective International schedule passenger transport
6031	Individual non-scheduled passenger transport
6032	Collective non-scheduled passenger transport
6039	Other non-scheduled passenger transport n.e.c
6120	Inland water transport
6211	National schedule passenger air transport
6213	International schedule passenger air transport
7111	Renting of land transport equipment
6340	Activities of travel agencies and tour operators; tourist assistance activities n.e.c
9232	Museums activities and preservation of historical sites and buildings
9233	Botanical and zoological gardens and nature reserves activities
9241	Sporting activities
9242	Gambling activities services
9249	Other recreational activities

Source: DANE, DSCN.

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[18] IRTS 2008 Annex 3

- **Data sources on employment**. The main source of information to obtain data on employment is the Continuous Household Survey (ECH[19]) and the Integrated Household Survey (GEIH)[20]. These provide basic information on the structure of labor force and features of the occupied population such as: employment status, education, sex, type and amount of income and hours worked, among others.

- **Full-time equivalent employment.** The data on employment are presented from two points of view: first, it records all persons holding at least one job (main or the second, third, etc.) in a characteristic tourism industry and second under the perspective of the use of a production factor in which the quantity of work is standardized.

The use of full-time equivalent jobs allows correcting employment by the number of hours actually worked, in such way that part time workers are converted into full time workers unit, independently of their productivity.The coefficient of adjustment to full-time employment by industry and occupational category is calculated from the analysis of the average hours worked for each characteristic industry.

In conclusion, table 28 presents the employment in tourism industries in three aspects:

- -In terms of jobs
- - In terms of full time equivalent jobs
- - In terms of persons employed

It is possible to observe that the industries with the highest employment rates are those related to the food and beverage serving services, followed by land transport and finally those related to sports and recreation.

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[19] This survey was used between 2000 and 2006
[20] This survey has been in use since 2007.

**Table 28. Employment in terms of jobs, full time equivalent jobs, and persons according to tourism industries.**

2005

Tourism Characteristic Industries	Grand Total	Travel agencies and other reservation services industry	Accommodation for visitors	Transport equipment rental	Sports and recreational industry	Cultural industry	Food and beverage	Passenger Air transport	Passenger Land transport	Pas W tra
Jobs	**1.762**	**18**	**95**	**2**	**266**	**3**	**781**	**12**	**575**	
Employees	718	13	64	1	117	3	335	12	168	
Self employed employees	1.044	5	30	1	148	-	447	-	407	
Full time equivalent jobs	**1.697**	**16**	**93**	**2**	**223**	**3**	**682**	**11**	**657**	
Employees	703	12	69	1	104	3	305	11	194	
Self- employed	994	4	24	1	119	-	378	-	463	
Persons	**1.686**	**17**	**88**	**2**	**252**	**3**	**743**	**11**	**559**	
Employees	691	12	62	1	111	3	322	11	164	
Self- employed	994	5	26	1	141	-	421	-	395	

Source: DANE, DSCN.

• **Relative Importance of employment in the tourism industries.** According to the information provided by the surveys (ECH and GEIH), the share of average employment of tourism industries in the total economy during the period 2003 - 2006 remained constant, and represented approximately 11.0% of total employment while for periods 2007 and 2010 it reflected a relative growth, increasing from 10,4% in 2007 to 11,5% in 2010.

Figure 11. Percentage share of full time equivalent employment, by main economic activity 2003-2010
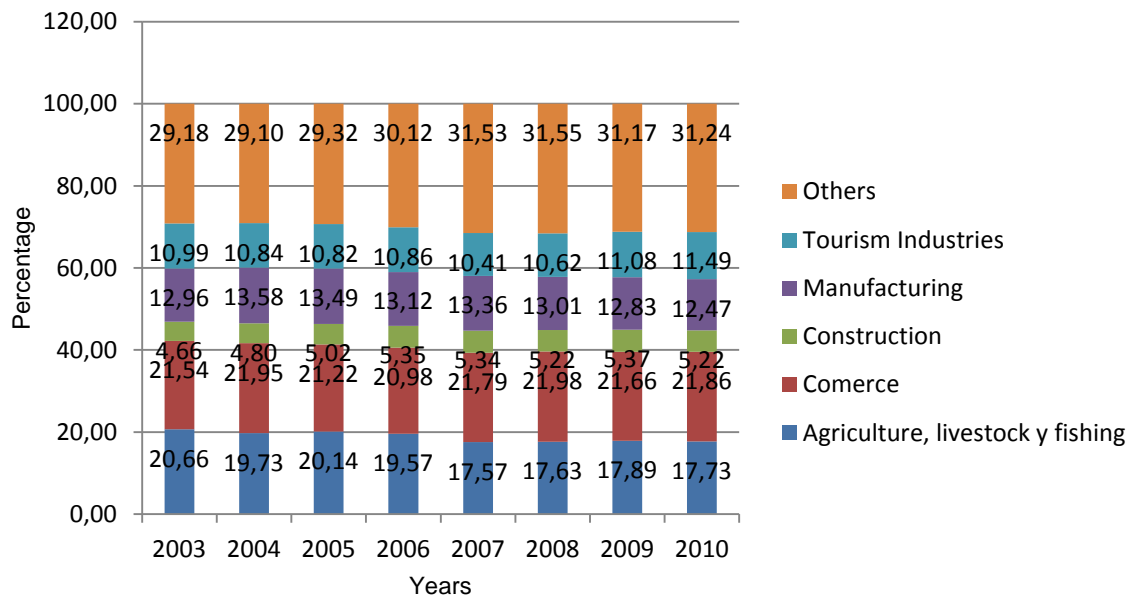
Source: DANE, DSCN.

Within total employment in tourism industries, the employees represented 42%, while the self-employed (workers on own account employers and others) represented 58% of the total full time equivalent jobs.

Furthermore, within total employees in tourism industries, 58 per cent were male while 42 per cent were female, whereas within the self-employed 68 per cent were male and 32 per cent female.

6.2 SECOND PERSPECTIVE: TOURISM EMPLOYMENT

The second perspective consists of imputing employment to the production associated with tourism consumption. This work was carried out using information of the employment matrix constructed for year 2005, the base year of national accounts. From this research, indicators of average production relating output and full-time equivalent jobs, by economic activity and according to the size of establishments were calculated.

Table 29 shows the results of the employment imputed for each of the industries producing goods and services for visitors.
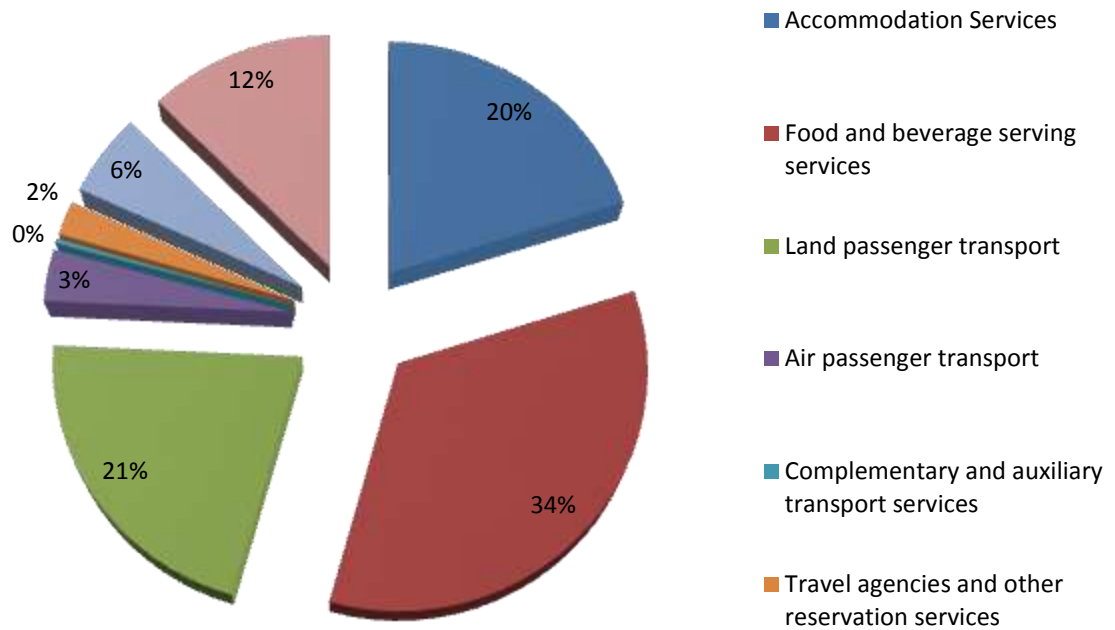
Table 29. Tourism Consumption and full time equivalent jobs 2005

Products	Tourism consumption (Thousand million pesos)	Average Production by worker (Million pesos)	Imputed Employment (Thousands of employment)
Total	12.829	ND	344
Accommodation for visitors	2.116	28	69
Food and beverage serving services	3.275	27	118
Land passenger transport	1.765	24	74
Air passenger transport	2.599	176	12
Complementary and auxiliary transport services	33	29	1
Travel agencies and other reservation services	212	25	8
Services of membership organizations, cultural, sports and other market services	547	28	20
Other non- tourism characteristic activities	2.282	68	43

Source: DANE, DSCN.

For year 2005, according to calculations derived from the imputation of employment, tourism generated between 330 and 360 thousand direct full time equivalent jobs: (figure 12) 34% of the employment was generated in food and beverage serving services, 20% in accommodation services, 21% in transport services (land, air and transport auxiliaries), 4% in air transport services, 2% in travel agencies and other reservation services and the remaining 13% in other non-tourism characteristic products. The share of tourism employment in the total employment generated in the economy in 2005 was around 2.3%.

Figure 12. Employment share in tourism activities 2005

Legend:
- Accommodation Services
- Food and beverage serving services
- Land passenger transport
- Air passenger transport
- Complementary and auxiliary transport services
- Travel agencies and other reservation services

Pie chart values: 20%, 34%, 21%, 3%, 0%, 2%, 6%, 12%

7. CONCLUSIONS

7.1 INTERNATIONAL TOURISM FLOWS

7.1.1. Airports.
Currently there is no information on international tourism flows through airports. The information available only refers to passenger flows by nationality, gender and in some cases, their migratory status.

In order to overcome the lack of data, the estimation done starts from the relationship between the flows of Colombians and foreigners who arrived in the country in year 2000 obtained from EVI, 2000 (I quarter) and its classification by country of residence, and that existing between visitors and other travelers.

Due to the lack of similar information for the other periods of the survey, it is assumed that the observed structures are also applicable to non-observed periods. Clearly, this assumption has many drawbacks since evidence shows that the tourism flows are affected by factors such as seasons, festivities, etc., not to mention the national and international news about the particular security conditions prevailing in the country.

Finally, the expenditure is directly proportional to the length of stay, so it is necessary to generate information on this variable. This could be derived from migration records, since the DAS is increasingly controlling the arrivals and departures dates of passengers at airports.

7.1.2. Flows at land borders

The data currently used is obtained from the research on land borders carried out on a quarterly basis by the Central Bank. Without underestimating the important value of this source of observation, as it is the only observation available on the phenomenon, it is necessary to reconsider this research for the detailed studies of these data have shown significant fluctuations of both flows and average expenditure. While they may reflect reality, they may also be due to the particularities of observation (one week of a quarter selected *a priori* as "representative" at a time of high irregularity; expenditure without minimum components of contrast [for instance, the length of stay is only known as whether an overnight stay is or not included]).

This means that in order to determine total expenditure, it is necessary to use these data. However, it remains unclear how to estimate the number of overnight stays, particularly in hotels, which are the central point of the reconciliation of demand with supply.

The Vice Ministry of Tourism has planned a new method for observing the flows of visitors at borders, which could help to contrast these data and replace them in long term.

7.1.3 Cruises

The present estimation has not included data on cruises: this segment of tourism activity should be subject to some statistical monitoring, especially given the high expectations that have arisen around this tourism activity.

7.2. DOMESTIC TOURISM

Current estimates on domestic tourism are very weak. The 2003 ETUR referred to an atypical period, it was deficient in terms of its reference period and the statistical unit used in many of its processing (the household, not the person, the trip regardless of the number of group members traveling together and not the trip-person, etc.), and it lacked contrast with the tourism modules applied to the National Households Survey (ENH), in the third quarter of 2006 and first quarter of 2007. Furthermore, the results of the latter were confusing due to the lack of consistent classifications of trips and expenditure (it did not identify the type of accommodation used and transportation expenses to get to the place visited). Additionally, tourist behaviors have a strong seasonal component, which must be taken into account when generating annual estimates.

In the present estimation, domestic tourism information was validated through the overnight stays at hotels, which were then cross checked- with the supply information that also has its weaknesses as the universes of reference have not been established accurately.

7.3. SUPPLY STATISTICS

Given the organization of the structural and short-term supply statistics, mainly services, which are still being analyzed by aggregated groups regardless of their particularities for each activity, statistics referring to tourism characteristic industries do not provide reliable information on reference levels neither a very coherent view of the changes, particularly when contrasting annual data with monthly or quarterly researches. However, it was necessary to use them, specifically in the case of hotels, since it is through the supply and demand analysis of this product, both in terms of non-monetary indicators (overnights stays) and of monetary indicators (amount paid), that it was possible to estimate the relative weight of the components of demand: inbound tourism, outbound tourism and domestic tourism.

It is worth underlining the importance of using and reviewing in detail the information on all means of passenger transport (land, air, water) and at the same time, being able to extract only the information related to tourism. This is left to be achieved in the future. It is also necessary to know more about the types of intervention and compensation of travel agencies in their commercial intermediation between travelers and travel services providers.

Finally, although this should have been done at the beginning, it is important to find out more about different types of accommodation services available to visitors. In Colombia, for the time being, there is no clear and statistically identifiable typology. Nevertheless, it is an important requirement made by the UNWTO, because prices and related services acquired as "packages" are often associated to the typology mentioned, and they also have influence on the basket of other products purchased outside this context.

7.4 RELATIONSHIP TO BALANCE OF PAYMENT

The BoP provides two aggregates whose values are closely related to the estimates of tourism expenditure, namely the items "travel" and "international passenger transport".

The "travel" item refers generally to direct expenditure made by non-residents in the country (excepting international transport - credit) and direct expenditure made by residents abroad (excepting international transport – debit) and also by others for their

benefit. Consequently, those expenses include those of visitors that are considered as outbound or inbound tourism expenditure (excluding international transport). Its coverage refers to travelers, a wider universe than that of visitors, which are limited by the purpose of trip and the fact that the journey must be made outside the usual environment.

Nevertheless, estimates currently made in the TSA pilot exercise are not globally consistent with estimates of the BoP since the existing differences cannot be explained by differences in coverage. There are several reasons for this, in terms of both flows and average expenditure associated with them, general and particular.

In case of flows at the airports, which are the most important in terms of expenditure, the Central Bank generates its calculations based on the estimates of the Administrative Unit of Civil Aeronautics (DAACA) of arrivals and departures. The next step is applying the rates of "residentiality"[21] derived from the DIAN´s foreign exchange/currency declaration form that each passenger must fill at arrival. The methodology presented here starts from the DAS data (systematically higher in level and trend that DAAC data). The reason why the Central Bank chose this source is its timelines and availability for some years of the series.

For average expenditure, the Central Bank uses information from the DIAN exchange/currency declaration form, in which each passenger is required to report his/her total expenditure, excluding transportation and package, an actual information for residents that return to the country or an expected expenditure for non-residents who arrive in the country, as well as his/her actual or expected length of stay. This information is then processed; the median total expenditure is calculated and applied to the number of travelers. Apparently, calculation is very general, and does not take into consideration the structure of the flow of travelers, such as their nationality, country of residence or length of stay.

Additionally, and given that the average expenditure obtained through this method seems to be systematically undervalued, the average estimated expenditure on accommodation is added under the assumption that it is broadly undervalued by travelers; which in turn results from studies on the expenditure on accommodation and package tours, data provided by travel agencies.

This method is very different from the method used in the TSA that starts with survey data calculated for a certain date, which are then extrapolated under the assumption that at constant prices and according to the characteristics of visitors, the expenditure is constant.

It would be interesting to review the anonymized database, derived from the form, process them at a detailed level of country of origin and length of stay, to check whether there is any relation with the data calculated with the method used for the TSA. If this were the case, it would provide a basis for an estimate for future years.

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[21] Residentiality refers to the share of residents within a given number of passengers.

The differences between the two estimates are shown below:

Table 30. Comparisons of flows and inbound tourism expenditure (TSA) and Travel credit (BoP) at the airports

2000-2005

Concepts	2000	2001	2002	2003	2004	2005
Flows						
Arrivals (DAAC)	1.378.953	1.446.477	1.429.892	1.460.918	1.619.944	1.911.627
National Companies	691.379	762.397	753.503	736.761	780.883	873.507
Foreign Companies	687.574	684.080	676.389	724.157	839.061	1.038.120
Balance of Payments						
% Non-residents	-	-	-	50.38%	49.76%	52.30%
% Residents	-	-	-	49.62%	50.24%	47.70%
BoP: Flow of non-resident travelers (estimated flow)	-	-	-	736.010	806.084	999.781
DAS	1.509.740	1.714.176	1.708.417	1.685.856	2.065.498	2.345.320
DAS Colombian	952.459	1.098.553	1.141.656	1.060.947	1.274.558	1.412.076
DAS foreign	557.281	615.623	566.761	624.909	790.940	933.244
% of total DAS that enters by air	93.40%	89.17%	88.65%	88.12%	88.61%	89.32%
Calculation DAS airports	1.410.109	1.528.589	1.514.434	1.485.534	1.830.340	2.094.781
Difference DAS -DAAC -	31.156	82.112	84.542	24.616	210.396	183.154
TSA visitors inbound tourism	607.345	646.429	573.637	635.769	803.069	951.881
Expenditure						
BoP						
Average expenditure per person (US$)	-	-	-	879,95	984,51	941,43
Total expenditure (Million US$)	600,36	616,05	612,32	647,65	793,60	941,22
TSA						
Average expenditure per person (US$)	938,4	962,2	979,7	1.001, 9	1.022, 3	1.047, 4
Total expenditure (million US$)	569,9	622,0	562,0	637,0	821,0	997,0

Source: DANE, DSCN.
the average expenditure per person of TSA excludes international transport
Data BoP only correspond to total values and % residents/non-residents
Calculations: DANE, DSCN.

Table 31. Comparisons of flows and outbound tourism expenditure (TSA) and Travel debit (BoP) at the airports
2000-2005

Concepts	2000	2001	2002	2003	2004	2005
Flows						
Departures (DAAC)	1.546.676	1.604.786	1.455.982	1.485.008	1.686.622	1.979.076
National Companies	761.451	825.712	760.397	742.761	810.470	903.228
Foreign Companies	785.225	779.074	695.585	742.247	876.152	1.075.848
Balance of Payments						
% Non-residents	-	-	-	50.38%	49.76%	52.30%
% Residents	-	-	-	49.62%	50.24%	47.70%
Flow of resident travelers (Estimated value)	-	-	-	736.861	847.359	944.019
DAS	1.623.550	1.734.889	1.618.011	1.517.463	1.870.529	2.179.771
DAS Colombian	1.104.504	1.191.269	1.072.856	970.773	1.177.027	1.354.861
DAS foreign	519.046	543.620	545.155	546.690	693.502	824.910
Percentage of total DAS flows that leaves by air (Colombian)	89.45%	86.26%	84.00%	82.46%	83.76%	87.25%
Calculation DAS airports	1.452.263	1.496.504	1.359.130	1.251.348	1.566.826	1.901.799
Difference DAS-DAAC	(94.413)	(108.282)	(96.852)	(233.660)	(119.796)	(77.277)
TSA flow of outbound visitors	780.404	841.525	782.382	680.466	816.055	930.485
Expenditure						
BoP						
Average expenditure per person (US$)	-	-	-	1.293, 15	1.144, 38	1.019, 74
Total expenditure (million US$)	896,18	960,62	925,15	952,87	969,70	962,66
TSA						
Average expenditure average per person (US$)	1.272, 8	1.305, 6	1.329, 7	1.358, 6	1.390, 6	1.421, 8
Total expenditure (million US$)	993,3	1.098, 7	1.040, 3	924,5	1.134, 8	1.323, 0

Source: DANE, DSCN.
Average expenditure per person TSA excludes international transport
BoP data only correspond to total value and % residents/non residents
Calculations: DANE, DSCN.

7.5 RELATIONSHIP TO NATIONAL ACCOUNTS

Although the two measurements are performed in the same Technical Direction of DANE, there are certain discrepancies that should be solved in the future by a common study of the existing information sources and recording principles. These principles are complex, in particular the general recommendation for recording transactions in goods and services within the central framework of national accounts. The general recommendation is not fully adapted to the case of the commercial trade on services, as it is the case of travel agencies services. (The present central frame only accepts commercial trade in goods, not on services).

One of these discrepancies is derived from the direct use of data from the BoP related to "travel" and "international passengers transport" items in the national accounts: since these data are not consistent with data calculated in the TSA, the conciliation with the national accounts is not possible.

Additionally, the compilation of the TSA revealed a deficiency in the treatment of travel expenses of employees on behalf of businesses that employ them. From an industry perspective, national accounts consider these expenditures as intermediate consumption, not as final consumption. This is in particular the case for trips abroad. Nevertheless, the global adjustment for direct consumption abroad or direct consumption of non-resident in the territory that is done in the national accounts considers implicitly those expenditure as final consumption expenditure.

Moreover, the share of expenditure in hotels corresponding to intermediate consumption, that is to business travelers, is not consistent with the information on tourism demand. Solving these inconsistencies between the National accounts data and the TSA results presents a challenge for both estimation processes. A further reflection on how to represent in the national accounts acquisitions made by residents abroad and non-residents in the country will lead to improving both National accounts and the TSA.

RECOMMENDATIONS

On the basis of the experience of the TSA pilot exercise, it is important to consider the following recommendations for future calculations.

• It is important to be able to rely on data on flows, at least on a quarterly basis for international tourism, as there is no doubt that international movements including their migratory status are influenced by the period of the year (seasonal influences). The non-residents without family ties in the economy will be more influenced by the vacation periods or climatic differences between Colombia and their country of residence, whereas the non-residents with family ties may tend to visit Colombia during the holidays and periods for traditional family reunions.

• It is important to have information on the country of residence, in particular for Colombians, given that for foreigners that factor is not so crucial. Nevertheless, it remains important since the information on their immigration status in many cases can help to exclude at least those who are residents in Colombia.

• It is important to accurately establish the characteristics of visitors in terms of type of accommodation (further characterization), purpose of trip and length of stay. Furthermore, to specify the scope of expenditure that not only includes the direct purchases of goods and services by the visitor herself/himself, but also all those that are part of their acquisition or purchased by others for their benefit.

• The cruises activity should be measured due to the expectation generated by this field of tourism activity and its possible economic impact.

• Health tourism is another phenomenon that can be relevant within the Colombian tourism sector. Therefore, a specific work plan should be designed in order to quantify the extent of this phenomenon.

• In order to properly measure domestic tourism, it is essential to accurately define the information needs, thus improve its quality and its possible use in the description of the tourism activity in the country.

• Following the recommendations of the BoP Manual 6 compilation guide, the estimates of the travel item in BoP and TSA should be calculated in a coordinated way.

• It is necessary to improve the information sources on supply estimations of tourism industries, in particular in the case of restaurants, travel agencies, vehicle rentals and also to determine with major consistency their consumptions by different productive activities, in particular their mutual coherence. This could be achieved by strengthening the work between different entities and areas, working in the tourism sector.

The present calculation of the TSA is a pilot exercise following international recommendation, which encourages countries to try to develop a Tourism Satellite Account. Its goal is not only to collect the results, but rather to test the

variety of information that exist on tourism, to try to organize it, to look for its logic and to use the compilation process as a main element of the constructive criticism of the System of Tourism Statistics in order to improve it in the short, medium and long term.

The results presented in this exercise should not be taken for granted. Instead, they should rather be used as a reference for any future work aiming at the improving the information system on tourism.

GLOSSARY OF TERMS

Activity/activities
In tourism statistics, the term *"activities"* represents the actions and behaviors of people in preparation for and during a trip in their capacity as consumers.

Country of reference
The *country of reference* refers to the country for which the measurement is conducted.

Country of residence
The *country of residence* of a household is determined according to the *center of predominant economic interest* of its members. If a person resides (or intends to reside) for more than one year in a given country and has there his/her *center of economic interest* (for example, where the predominant amount of time is spent), he/she is considered as a *resident* of this country.

Destination (main destination of a trip)
The *main destination of a tourism trip* is defined as the place visited that is central to the decision to take the trip.

Domestic tourism
Domestic tourism comprises the activities of a *resident visitor* within the *country of reference,* either as part of a *domestic tourism trip* or part of an *outbound tourism trip.*

Domestic tourism consumption
Domestic tourism consumption is the tourism consumption of a resident visitor within the economy of reference.

Domestic tourism expenditure
Domestic tourism expenditure is the *tourism expenditure* of a *resident visitor* within the *economy of reference.*

Domestic visitor
As a *visitor travels* within his/her *country of residence*, he/she is a *domestic visitor* and his/her activities are part of *domestic tourism.*

Employment in tourism industries
Employment in tourism industries can be measured as a number of persons employed in tourism industries at any position, as a number of persons employed in *tourism industries* on their main *job*, or as a number of *jobs* in *tourism industries.*

Inbound tourism
Inbound tourism comprises the *activities* of a *non-resident visitor* within the *country of reference* on an *inbound tourism trip.*

Inbound tourism consumption
Inbound tourism consumption is the tourism consumption of a nonresident visitor within the economy of reference.

Inbound tourism expenditure
Inbound tourism expenditure is the *tourism expenditure* of a *non-resident visitor* within the *economy of reference.*

Internal tourism
Internal tourism comprises *domestic tourism* and *inbound tourism*, that is to say, the *activities* of *resident* and *non-resident visitors* within the *country of reference* as part of *domestic* or *international tourism trips*

Internal tourism consumption
Internal tourism consumption is the tourism consumption of both resident and non-resident visitors within the economy of reference. It is the sum of domestic tourism consumption and inbound tourism consumption

Internal tourism expenditure
Internal tourism expenditure comprises all *tourism expenditure* of *visitors*, both *resident* and *non-resident*, within the *economy of reference*. It is the sum of *domestic tourism expenditure* and *inbound tourism expenditure*. It includes acquisition of goods and services imported into the *country of reference* and sold to *visitors*. This indicator provides the most comprehensive measurement of *tourism expenditure* in the *economy of reference.*

Outbound tourism
Outbound tourism comprises the *activities* of a *resident visitor* outside the *country of reference,* either as part of an *outbound tourism trip* or as part of a *domestic tourism trip.*

Outbound tourism consumption
Outbound tourism consumption is the tourism consumption of a resident visitor outside the economy of reference.

Outbound tourism expenditure
Outbound tourism expenditure is the *tourism expenditure* of a *resident visitor* outside the *economy of reference.*

Purpose of a tourism trip (main)
The *main purpose* of a *tourism trip* is defined as the purpose in the absence of which the *trip* would not have taken place.

Residents/non-residents
The *residents* of a country are individuals whose *center of predominant economic interest* is located in its *economic territory.* For a country, the *non-residents* are individuals whose *center of predominant economic interest* is located outside its *economic territory.*

Same-day visitor (or excursionist)
A *visitor* (*domestic*, *inbound* or *outbound*) is classified as a *tourist* (*or overnight visitor*), if his/her *trip* includes an overnight stay, or as a *same-day visitor* (*or excursionist*) otherwise.

Tourism
Tourism refers to the *activity* of *visitors* (IRTS 2008 para. 2.9).

Tourism characteristic activities
Tourism characteristic activities are the activities that typically produce *tourism characteristic products*. As the industrial origin of a product (the ISIC industry that produces it) is not a criterion for the aggregation of products within a similar CPC category, there is no strict one-to-one relationship between products and the industries producing them as their principal outputs.

Tourism characteristic products
Tourism characteristic products are those that satisfy one or both of the following criteria:
(a) Tourism expenditure on the product should represent a significant share of total tourism expenditure (share-of-expenditure/demand condition);
(b) Tourism expenditure on the product should represent a significant share of the supply of the product in the economy (share-of-supply condition). This criterion implies that the supply of a tourism characteristic product would cease to exist in meaningful quantity in the absence of visitors.

Tourism consumption
Tourism consumption has the same formal definition as tourism expenditure. Nevertheless, the concept of tourism consumption used in the Tourism Satellite Account goes beyond that of tourism expenditure. Actually, besides the amount paid for the acquisition of consumption goods and services, as well as valuables for own use or to give away, for and during tourism trips, which corresponds to monetary transactions (the focus of tourism expenditure), it also includes services associated with vacation accommodation on own account, tourism social transfers in kind and other imputed consumption. These transactions need to be estimated using sources different from information collected directly from the visitors, such as reports on home exchanges, estimations of rents associated with vacation homes, calculations of financial intermediation services indirectly measured (FISIM), etc.

Tourism expenditure
Tourism expenditure refers to the amount paid for the acquisition of consumption goods and services, as well as valuables, for own use or to give away, for and during tourism trips. It includes expenditures by visitors themselves, as well as expenses that are paid for or reimbursed by others.

Tourism trip
Trips taken by *visitors* are *tourism trips*.

Tourist (or overnight visitor)
A *visitor* (*domestic*, *inbound* or *outbound*) is classified as a *tourist* (or *overnight visitor*), if his/her *trip* includes an overnight stay, or as a *same-day visitor* (or *excursionist*) otherwise (IRTS 2008, para. 2.13).

Travel / traveler
Travel refers to the *activity* of *travelers*. A *traveler* is someone who moves between different geographic locations, for any purpose and any duration.

Usual environment
The *usual environment* of an individual, a key concept in *tourism*, is defined as the geographical area (though not necessarily a contiguous one) within which an individual conducts his/her regular life routines.

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