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• Key concepts, definitions and classifications
• Sources of information
• Country Examples

Dr. Nagore Uresandi Espinosa
### Why investing in TSA?

| Analyses tourism from an economic point of view | Fills the gap relating to role of tourism in economy |
| Internationally comparable | Calculates tourism value added and employment |
| Derives direct shares in GDP and Employment | Illustrates the interlinkages of tourism with other sectors |
Satellite Accounts

• Measure the size of economic sectors that are not defined in National Accounts

• Maintain loose relationship with NA, with boundaries expanded and reclassified.

• Prepared for certain types of transactions which are analyzed from expenditure side

• Output of sectors is measured as total produce/supply but for certain sectors, output is the value demanded by the consumer

Dr. Nagore Uresandi Espinosa
Tourism Satellite Account

To measure consumption of goods and services

- Associated with tourism
- Within the geographic boundary

according to internationally agreed standards (TSA RMF 2008), concepts, classifications and definitions
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- Table 2: Domestic tourism expenditure by products, classes of visitors and types of trips
- Table 3: Outbound tourism expenditure by products and classes of visitors
- Table 4: Internal tourism consumption by products
- Table 5: Production accounts of tourism industries and other industries (at basic prices)
- Table 6: Total domestic supply and internal tourism consumption (at purchasers' prices)
- Table 7: Employment in the tourism industries
- Table 8: Tourism gross fixed capital formation of tourism industries and other industries
- Table 9: Tourism collective consumption by products and levels of government
- Table 10: Non-monetary indicators

Tables 1 to 3 describe the most important component of tourism consumption: namely tourism expenditure, which includes not only what visitors pay for out of their own budget or pocket, but also what producers (businesses, governments and non-profit institutions serving households (NPISH)) or others spend for their benefit (transportation, accommodation, etc.), on which visitors are usually able to report fairly well.
<table>
<thead>
<tr>
<th>Tables</th>
<th>Description</th>
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<tbody>
<tr>
<td>Table 1: Inbound Tourism Expenditure</td>
<td>Expenditure incurred by visitors from other countries in the country of reference</td>
<td>Immigration, Surveys at the border, Accommodation surveys. Frequency....</td>
</tr>
<tr>
<td>Table 2: Domestic Tourism Expenditure</td>
<td>Expenditure incurred by a resident visitor within the economy of reference.</td>
<td>Tourism-specific survey; or attached to general household expenditure survey. Frequency...</td>
</tr>
<tr>
<td>Table 3: Outbound Tourism Expenditure</td>
<td>Expenditure incurred by the resident visitor outside the country of reference</td>
<td>Part of surveys done for Table 1 or for Table 2</td>
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</table>
What if reference years of surveys are different?
Possible ways to address it:

• Extrapolate using statistics available for all the reference years, like, number of tourist arrivals/trips

• Make price adjustment using inflation
## TSA Tables

<table>
<thead>
<tr>
<th>Expenditure aggregates</th>
<th>Description</th>
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<tr>
<td>National Tourism Expenditure</td>
<td>Expenditure by resident visitors – sum of domestic; and outbound expenditure</td>
</tr>
<tr>
<td>International Tourism Expenditure</td>
<td>Sum of inbound expenditure (activities of non-resident visitor within the country of reference); and</td>
</tr>
<tr>
<td></td>
<td>outbound expenditure (activities of resident visitor outside the country of reference)</td>
</tr>
<tr>
<td>Internal Tourism Expenditure</td>
<td>All expenditure incurred within the country of reference - sum of domestic; inbound; and pre-trip outbound expenditure</td>
</tr>
</tbody>
</table>
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Table 4 combines internal tourism expenditure, made up of inbound tourism expenditure from table 1 (column 1.3) and domestic tourism expenditure from table 2 (column 2.9), with the other components of tourism consumption. (para. 2.25) These other components constitute three broad categories:

- Services associated with vacation accommodation on own account,
- Tourism social transfers in kind (except refunds).
- Other imputed consumption.
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Table 5 presents the production accounts of tourism industries and other industries in the economy of reference. It conforms formally to the format established in the System of National Accounts 2008: output is broken down by product, is valued at basic prices (see SNA 2008, para. 6.51 (a)) and occupies a block of rows in the upper part of the table. Then, intermediate consumption (also called intermediate inputs) is presented (para. 4.17) valued at purchasers’ prices, (see SNA 2008, para. 6.64). The difference between these two values is called gross value added (GVA) at basic prices.
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Table 6 is the core of the Tourism Satellite Account system! It is where the confrontation and reconciliation between domestic supply and internal tourism consumption take place. It derives from the supply and use tables of the System of National Accounts 1993.
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<tr>
<td>Table 4: Total Internal Tourism Consumption</td>
<td>Most comprehensive measurement of tourism expenditure in the economy of reference. Can also include imputed tourism consumption.</td>
<td>Sum Total of Table 1, 2 and 3.</td>
</tr>
<tr>
<td>Table 5: Production Account of Tourism Industries</td>
<td>Conforms formally to the SNA format These are prepared using the Supply and Use Tables (SUTs).</td>
<td>National SUTs</td>
</tr>
<tr>
<td>Table 6: Tourism Industry Ratios and TDGVA</td>
<td>Core Table of TSA. Total supply is compared with internal tourism consumption. Tourism Product Ratios (TPR) and Tourism Industry Ratios (TIR) generated</td>
<td>Tables 4 and 5</td>
</tr>
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Table 7 contains an additional variable on the number of establishments for each tourism industry (information that is complemented in table 10 by a breakdown of this number according to the size of the establishments).
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- Table 8: Tourism gross fixed capital formation of tourism industries and other industries

The rows in table 8 show a proposed list of gross fixed capital formation items (annex 5) related to tourism, and the columns show different blocks.

- Table 9: Tourism collective consumption by products and levels of government
- Table 10: Non monetary indicators
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<td>Table 7: Tourism Employment</td>
<td>Total number of jobs and number of people employed in the tourism specific industries</td>
<td>Nationally conducted household surveys</td>
</tr>
<tr>
<td>Table 8: Tourism Gross Fixed Capital Formation</td>
<td>Tourism related assets and infrastructure. Assets like railway passenger coaches, sightseeing buses, hotels etc. Infrastructure like development of a beach.</td>
<td>National Accounts – GFCF (Gross Fixed Capital Formation) by assets</td>
</tr>
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</table>
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The rows in table 9 show a proposed list of non-market services that are to be considered as tourism collective non-market services in terms of the corresponding CPC subclasses (annex 5).
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Table 10 presents a few quantitative indicators that are related to the previous tables and are important for the interpretation of the monetary information presented.
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<td>Table 9: Tourism</td>
<td>Govt’s collective services that can be simultaneously delivered to every member or community. Govt incurs these additional expenditures from its own resources. The GFCE is divided into two components: • Individual – consumer is household – part of PFCE • Collective – consumer is community</td>
<td>General government expenditures according to economic and purpose classifications</td>
</tr>
<tr>
<td>Table 10: Non-monetary Indicators</td>
<td>All Quantitative indicators</td>
<td>Tourism Statistics</td>
</tr>
</tbody>
</table>
TSA methodology estimates two types of economic impacts

**Direct**
- The Tourism Satellite Account: Recommended Methodological Framework 2008, an international standard adopted by the UN Statistical Commission and elaborated by UNWTO, OECD and EUROSTAT.
- Involves preparation of 10 Tables

**Indirect**
- While no mandate as per RMF but gives importance to estimate using appropriate economic modelling techniques.
- For example, India or Spain use the Input-Output Models for obtaining the indirect contribution.
Measuring tourism demand – Tables 1 to 4
Main Variables: Tourism arrivals, departures, domestic Tourism trips, and their expenditures

Measuring Tourism supply – Tables 5 and 6
Main variables: on Tourism products and Tourism industries, as classified in the International Recommendations for Tourism Statistics 2008
Key TSA aggregates

- **Gross value added of tourism industries (GVATI)**
  - Sum of GVA of tourism industries (considers entire GVA irrespective of whether the produce is sold to tourists or others)

- **Tourism direct gross value added (TDGVA)**
  - Sum of the part of gross value added of all industries that relates to providing goods and services to tourists (only that output which is sold to tourists is considered here, but the domain includes all industries in the economy)

- **Tourism direct gross domestic product (TDGDP)**
  - TDGVA + net indirect taxes

- **Tourism direct employment**
  - Number of jobs in Tourism characteristic industries
Tourists make expenditures on products in the domestic economy;
Domestic production and imports supply to meet these expenditures;
Confrontation of the two sets of statistics is done to match supplies and expenditures;
This enables estimating the proportion of domestic production that is involved in supplying the products to tourists’ purchases
And estimate the share of TDGVA and TDGDP in the total economy
This is the direct contribution of tourism to the economy.

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TSA
Tourism
Direct contribution to GDP

• Sum of the part of gross value added (at basic prices) generated by all industries in response to internal tourism consumption

plus

• the amount of net taxes on products and imports included within the value of this expenditure at purchasers’ prices.

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How to obtain TDGVA:

The “total GVA” column is the “total GVA” row in Table 5, and the “tourism ratios” column is the “tourism ratios” column from Table 6. These values are then multiplied together to create the TDGVA.

Source: Office of National Statistics, UK
- TSA measures only the direct effects of tourism consumption on output and value added of tourism industries and other industries serving them.

- However, several producers do not serve the tourists directly, but they provide goods and services to tourists indirectly through tourism industries.

- By using I-O table and I-O models, it is possible to estimate the indirect contribution of tourism consumption and tourism aggregates to the economy.

- The estimates of direct and indirect shares of tourism aggregates in the total economy facilitate a more realistic impact of tourism activity on the economy.
TSA
Tourism
Indirect contribution to GDP

Tourism component extracted from each row and column of 24X24 SUT using TPR and TIR

Additional row and column, representing Tourism separately, generated

Resultant 25X25 SUT converted to 25X25 IO Table

Output and Employment multipliers derived from Leontief Inverse Matrix

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Thank you

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