Tourism in National Accounting

The tourism sector is HETEROGENEOUS and PLURAL.

Can we meaningfully identify something called “tourism industry”? How can we successfully estimate its importance within the economic structure of a country?

It is not possible to identify a tourism industry in National Accounting.

(tourism activities are included in several different economic sectors)

Set of all tangible and intangible activities aimed at satisfying the need for holiday.

It is necessary to develop a system of satellite accounting.
Tourism in National Accounting

The standard methodology that is adopted to identify and assess the economic sectors of a country is not applicable to tourism.

The criteria used in Economics to identify an industry are:

- The *technological criterion*, for which an industry is a set of firms using a similar production technology.
- The *market criterion*, which identifies an industry according to the degree of similarity between goods, which is intended as whether the consumer possibly accepts to substitute one good with another.

The tourism industry does not exist in any national accounting system

The setting up of a statistical system aimed at measuring the economic impact of tourism is a complex task which can be tackled by two different approaches:

- the *supply-side* approach;
- the *demand-side* approach.
The Supply-Side Approach

It focuses on an ex ante definition of the tourism sector based on the structure of its supply:

Smith and Medlik (1988) identify two parts of the tourism supply:

- One part only supplies to tourists and that would not exist without tourism (hotels, travel agencies, etc.)
- The other part supplies to both tourists and non tourists (restaurants, taxis, etc.)

Distinction between:

- **Core services** (transportation, accommodation, catering, attractions, travel organization sector, destination management);
- **Complementary services** (tourism schools, infrastructures, banks, insurance companies, etc).

**Set of Departments** (Hospitality, Food & Beverage, Transport, Congress & Conferences, Catering, Leisure Management, Real Estate, Financial services, Infrastructure management, Trip planning and management, Travel Agencies, Education, Public Administration)
The Demand-Side Approach

It helps define the boundaries of the tourism sector by investigating tourism expenditure:

By observing the tourists’ spending, one can indirectly determine the amount of production (and its distribution among sectors) that is actually needed to satisfy the tourism demand, by implicitly estimating its economic impact.

Application of the *Input-Output Model* (model of intersectoral interdependence)

- allow an *endogenous definition of the tourism sector*, not just as a branch of the production system but actually as a product of different branches, in line with the heterogeneity of tourism
- The I–O method focuses on the economic structure of a country by recording the transactions between any given sector and the remaining sectors of the economy, and consists of a *two-way table* where each sector is represented as both a row and a column
The Input-Output Model

### Table 3.1 The I–O table: a numerical example

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Manufacturing</th>
<th>Services</th>
<th>Consumption</th>
<th>Sales, Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>–</td>
<td>20</td>
<td>30</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20</td>
<td>–</td>
<td>40</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Services</td>
<td>10</td>
<td>30</td>
<td>–</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>Purchasing, total</td>
<td>30</td>
<td>50</td>
<td>70</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>Value added</td>
<td>70</td>
<td>50</td>
<td>30</td>
<td></td>
<td>150</td>
</tr>
<tr>
<td>Total income</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>150</td>
<td>450</td>
</tr>
</tbody>
</table>

The *value added* within a given productive sector is the difference between its aggregate revenue and its aggregate expenditure on goods and services of the remaining sectors.

Given that each value-added measures the paid income within a sector (as wages and profits), their sum is the *aggregate income* generated in the economy (150 in our example).
Fig. 3.1 The supply-side approach

Through the monitoring of enterprises belonging to the tourism departments it is possible to measure aggregate production.

Fig. 3.2 The demand-side approach

Table of sectoral interdependence and Input-Output model.
National and Satellite Accounting

Data collection

ON THE DEMAND SIDE
Sample Surveys on Tourism

ON THE SUPPLY SIDE
National Accounting

SATELLITE ACCOUNTING

Methodology to combine data collected using both supply and demand side
The Tourism Satellite Accounting

“Satellite accounts are one way in which the System of National Accounts may be adapted to meet differing circumstances and needs. They are closely linked to the main system but are not bound to employ exactly the same concepts or restrict themselves to data expressed in monetary terms. Satellite accounts are intended for special purposes such as monitoring the community’s health or the state of the environment, or tourism activities” (Eurostat, 2011).

Satellite accounts integrate the national accounting system with monetary, physical, and geographical information, by mixing alternative statistical information (such as sample observation of tourists’ spending) in a coherent way with national statistics.

Two types of satellite accounts can be identified, according to the their relationship with the national systems:

- accounts that allow alternative analysis;
- accounts for special functions or objectives (such as tourism)
Building Tourism Satellite Accounts

Complex and time consuming statistical activity:

- Compute the value of production and income in the National Accounting;

- Identify the several sectors in National Accounting that are linked to tourism activity (e.g. Catering; Transport services; Recreational and Cultural Activities) → Supply-Side approach;

- Submit questionnaire to representative sample of tourists;

- Estimate the structure of tourism expenditure → Demand-Side approach

- Combine survey & national accounting in building the TSA
The Tourism Balance of Trade

The Balance of Payments is the accounting document that records all the transactions of a country vis-a`-vis the rest of the world:

Balance of Payments = Current Account + Capital Account

- Where Current Account = Trade Balance + Factor Income
- And where Trade Balance = Exports – Imports

- Tourism is in the Trade Balance

- Tourism Balance of Trade = Tourism Receipts – Tourism Expenditure

- Tourism Receipts are recorded as Exports
- Tourism Expenditure are recorded as Imports