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## **PROCEEDINGS OF THE SECOND INTERNATIONAL FORUM ON TOURISM STATISTICS VENICE, MAY 30 - JUNE 2 1995**

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## OPENING SESSION

### **Welcome Address by Mr. Alberto Zuliani** (President of National Institute of Statistics)

It is a great pleasure for me to open this Second International Forum on Tourism Statistics that gathers, in this wonderful town, statisticians, economists and experts of the sector, delegates of national and international organizations coming from many different European and other countries.

The main theme of the Forum, which came out from the work teams of EUROSTAT and OCSE, is to create an occasion to compare the different experiences realized by the different countries in order to develop further tourism statistics.

This Forum in Venice is based on the same formula already successfully tested last year in Vienna. Its organization has been carried out by the National Institute for Statistics in Italy, whose functionaries give you their best greetings, together with OCSE, EUROSTAT and Ciset of Venice, the International Centre for Economic Studies on Tourism.

The great number of reports scheduled for the four coming days testifies the big interest raised by the event and is the valid answer to our expectations. The need of a trustful, exhaustive and immediate statistic information on tourism is deeply required as it is a phenomenon of high economic and social importance and, particularly, dynamic.

I think that it is not necessary to speak too much of the importance of a deep knowledge of this sector as contribution to the national income, the direct and indirect effects on employment, not to mention its contribution to the balance of payments and the effects, not always positive, on the environment, on the landscape and the cultural heritage.

The international tourism demand, from the 50's and the 90's, has grown every year about by 7% so that during 1993 a tourist flow of more than 500 million arrivals of foreign visitors occurred in the different countries. If we consider this flow from the economic point of view we can say that the volume of the monetary flow, started by the international tourism demand, according to the OMT estimate, is more than 300 milliard dollars with a growth rate of more than 12%.

The great increase of the international tourist flow is the result of many factors: increased income availability; creation of new transportation system networks that has reduced moving times from place to place drastically;

the development of telecommunications that make easier travel organization. Furthermore: a general trend of individuals and families to improve their life quality getting satisfaction from the travel and holidays market; improved spare time availability; a higher cultural level which is nowadays

more spread among the world population that is more interested in travelling.

The international tourist flow, even if it is still heavily overbalanced towards the European countries, is slowly changing its structure due to the new presence in the travel and holidays market of countries with high tourist attraction. From the beginning of the 80's, when Europe gathered two third of the world tourism and 59% of the money flow, now we have been registering a changing situation in which the arrivals in Europe and the tourist cost have sunk respectively to 60% and 52%.

The market quota withdrawn from Europe has been gained by the new countries such as those of East Asia and Pacific areas that have registered, in these last years, much higher growth rates than other macroregions: +9,4% of arrivals of foreign tourists and +14.9% of money flow.

The evolution of the tourist demand can be compared to the evolution of the offer. The increased trend of the world population toward travels and holidays has produced positive effects on those economic activities, directly or indirectly connected with tourism, which could consolidate, therefore, their own position.

The market of tourist undertaking, and especially the sectors concerning bedspace and tourist intermediation, has registered a worldwide increase. In the period 1988-1992 the international bedspace, measured on the base of available bedrooms, has increased by 9%.

The most increase has occurred in those areas, East Asia and Pacific areas, with a particularly dynamic tourist demand where an increase of 49% has occurred.

Tourist activity produces important effects on national economic systems and, in many countries, it represents the main development factor.

The situation in Italy, which is a traditional receiving country, is now also an important example of international tourism. 1994 the Italian industry in this sector has satisfied a demand of more of 23 million foreign tourists; in the balance of payments the item "abroad travel" has registered a surplus of more than 17 thousand milliard lira, that means a growth of 52% in comparison to 1993.

On the other hand, the positive evolution has occurred in the whole international tourist flow as a result of a favourable world economic situation. According to the OMT estimate, the tourist flow should increase, in the current year, in a rate of 4% e for 1996 a little higher growth of 4,5% is foreseen.

Tourist activities will have a guiding role in the world economic development in the coming 2000. This is what had already resulted from the Osaka Declaration of 3rd november 1994 during the World Congress of Tourism Ministries which was organized by OMT.

In the European Union the increased interest has been confirmed by the important initiatives started to support this sector, one of them is the new policy for tourism, which is now being defined, and the directive for the development of tourism statistics.

As a matter of fact the document of the Union on tourism, the so called "Green Book", is dated 4th April.

There are, thus, the conditions for a better and better corresponding tourism to the expectations of the people so that it can become more and more important in the formation of the gross national product. Consequently

the necessary statistic information has to be prepared as it is not able, at the moment, to supply, sufficiently, the whole variables that are typical features of the sector.

The objective difficulties in deepening the matter have boosted the international cooperation aimed at the standardization of concepts, definitions and classification and also at improving a matched development of statistics.

Our encountering in Venice is a further occasion to compare and reflect in this direction. Its title, actually, has not been chosen by chance:

“Understanding tourism, towards the building of a common information system”. The themes of the Congress are, thus, aimed at the evaluation of the developing situation of methodologies currently applied by the different national statistic systems in order to understand if there are the conditions to quicken that integration process that we all want.

The first session of the Forum gives the opportunity to the international Organizations, EUROSTAT, OCSE and OMT, to show all the purposes and activities applied by them concerning tourism.

After that, surveying problems concerning the impact of the tourist activity on the labour market will be analyzed more deeply.

One of the purposes is to define the suitable methodologies for the individuation of employment involved in tourism in other sectors of the economic activity: agriculture, industry and other services.

Other reports will give the occasion to open a discussion on the importance to have statistic information on tourism at microeconomic level.

Special attention will be paid to the way of improving the “performance” indicators in the different sections of tourism.

The methodologies adopted by the many Countries to quantify the impact of tourism in the macroeconomic context and the current limits of statistic information will be also deepened.

The third Forum day will be, then, dedicated to the tourist demand with special deepening of the main variables featuring, first of all, motivation and ways of travelling and the social-economic profile of visitors.

If we know them better we can also divide the tourist demand into segments.

Italy presents its national situation as a specific contribution to the Congress. This contribution will be presented by different authors who will show experiences and results of researches concerning tourism applied by public organizations, universities, associations and research centres. We think it is a useful contribution for the development of methodologies and instruments aimed at the building of statistic information systems on tourism.

In conclusion, I would like to give a special thank to OCSE and EUROSTAT for the importance of the work carried out during the promotion and the preparation of this Forum.

A special thank also to Ciset who gave its scientific support to the initiative.

I wish all the participants, today and for the coming days, a good job and a pleasant stay in this wonderful town of Venice that is an international symbol, let me say, of tourism.



**SESSION 1**  
**THE WORK OF INTERNATIONAL**  
**ORGANIZATIONS**



## INTRODUCTORY OPENING: THE WORK OF INTERNATIONAL ORGANIZATIONS

by Ulrich SPOREL

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*Federal Statistical Office, Germany*

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Rector Costa, President Zuliani, Ladies and Gentlemen, before starting the first session of this 2<sup>nd</sup> International Forum on Tourism Statistics I'd like to thank you Prof. Costa and you Prof. Zuliani for your warm and friendly words of welcome. But I'd also like to thank you for having invited this forum to this wonderful and fascinating city. There will be hardly found a better place to have a seminar on tourism even when it is held in that language which connects us ... the language of statistics.

Venice has a very long tradition as a center of international tourism. And for centuries it has inspired hundreds of poets and authors. I'm sure that in the literature of almost every country which is represented here you will find Venice as an issue for poets who have traveled here and who have written about their particular experience with the history, the arts and the specific atmosphere of this city.

Today times are more down to earth and more businesslike. We are living in the age of mass-tourism. Our common language unfortunately is not literature but statistics. And as we know it's the task of statistics to measure mass-phenomena. So the subject of our work is not the individual traveler of the last century on his Grand Tour through Italy but thousands and millions of people who are "traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes". This last sentence should be sufficient to prove that this is not at all a literary meeting.

But nevertheless I hope that this beautiful city which has been a source of inspiration for the literature of so many countries will also inspire this meeting in it's objective to improve our common language the language of statistics.

After this short deviation let me come to the issue of the first session the work of the international organizations which are involved in tourism statistics. On our agenda we have presentations of the World Tourism Organization, the OECD and Eurostat. As the work of WTO does not only affect the member countries but can also be regarded as a reference-point for the work of the other international organizations it's reasonable to start with this presentation. The only problem is that WTO is not represented here. Mr. Paci informed me that due to other overlapping commitments he was not able to take part in this forum. But he has transmitted his contribution by fax. And so I take on the job of presenting his paper so to say as a non-official representative of WTO.



# THE OECD STATISTICAL WORKING PARTY OF THE TOURISM COMMITTEE: ROLE, RECENT ACHIEVEMENTS, FUTURE ACTIVITIES CONCERNING TOURISM STATISTICS

by Alain DUPEYRAS

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*Administrator, OECD Tourism Policy Section*

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## **Introduction**

The Tourism Committee was part of the former OEEC and continued its activities as part of the OECD after its creation in 1961.

The Committee meets once a year to discuss major developments affecting the industry, takes action when required, assembles material on policies in its Annual Report and contributes to the work of other parts of the OECD.

Statistics within the OECD are traditionally decentralised and most statistical groups are linked to a plenary committee. This allows for a permanent dialogue between users (policy-makers) and producers of statistics (statisticians).

In this context, the Tourism Committee created a Statistical Working Party (hereafter called the Working Party) in 1971 whose main purpose is to provide the Committee and Member countries with the appropriate background material on which to base policy-making discussions and decisions. The Working Party meets once a year and is attended by people responsible for producing tourism statistics in national statistical offices, tourism ministries and tourism boards of OECD Member countries. An ad hoc group of experts also meets at the same time as the Working Party to discuss the implementation of the Manual on Tourism Economic Accounts.

Both groups benefit from the expertise of other structures devoted to statistics within the Organisation. Through the Secretariat, the exchange of information and requests for technical advice can be addressed to other OECD groups like 'National Accounts', 'Services Statistics', 'Balance of payments', etc. The Secretariat encourages the Tourism Committee and the Working Party to reinforce their co-operation both within the OECD and with other international institutions. This is intended to contribute to a better integration of tourism issues in the economic policies debate and increase the profile of the OECD Tourism Committee.

## **Objectives**

The objectives of the Working Party are:

-to provide Member countries with the best possible information to enable them to better assess the different options and take decisions accordingly;

-to develop a new system which enables the assessment of the importance of tourism as an economic activity in OECD Member countries by using the concepts and principles of the System of National Accounts;

-to develop methodology and to ensure the comparability and comprehensiveness of this information;

-to develop research in new areas where OECD Member countries can bring their experience.

In addition to these OECD objectives, co-ordinated objectives for developing tourism statistics are described in an integrated presentation taken from the international statistical work programmes of the World Tourism Organisation (WTO), Eurostat and the OECD.

"The development of a comprehensive, coherent and balanced system of tourism statistics capable of supporting government activities relating to developing and adjusting policy, and deepening the understanding of the determinants of tourism. Major components include the development of conceptual frameworks, common concepts and methodologies for measurement and integration of data. The information should also support the broad range of non-government interests (tourism industry, public) including research, and coherent linkages with other areas such as social, demographic, business, economic and environmental studies."

### **The main activities of the Statistical Working Party**

The Working Party concerns itself primarily with the development of new concepts and the collection, analysis and dissemination of high quality statistics.

The Working Party developed the Manual on Tourism Economic Accounts (hereafter called the Manual) which was derestricted by the OECD Council in April 1991. This Manual aims at developing an integrated statistical system to evaluate the economic importance of tourism in Member countries using, inter alia, the National Accounts concepts and definitions and the main international classifications (ISIC and CPC).

The Manual provides a base for assembling data on production, consumption, value added, gross fixed capital formation, and employment in tourism industries. It was presented at the International Conference on Travel and Tourism Statistics held in Ottawa in June 1991 where it was recognised as an essential tool for the improvement of the measurement of tourism.

The Working Party collects and analyses data on tourism economic accounts. For the second round of data collection, 17 countries replied to the questionnaire which is clearly a far better response (quantity and quality) than the previous round. A full report is under preparation which will include a description of the data received and an analysis which will look at data country per country from table to table. Analysis between countries will also be included, data permitting. The results of the study will provide figures on the workforce in tourism industries' output/GDP, the value added by tourism industry per employee, the return to capital versus return to labour by industry, the average earnings in tourism industries compared with the country average, the average capital in tourism industries compared with the country average.

In parallel, the Working Party has also initiated a discussion with the private sector about existing related concepts.

Two tourism databases have been developed. The first one, on international tourism, covers data from 1974 on: tourist flows to the OECD Member countries; accommodation; receipts and expenditure; fare payments; motives; transport; and prices. The second one, on national tourism, covers data from 1970 to 1986 on: net departure rate; total number of travellers; pleasure trips and nights spent; characteristics of travellers (age groups, socio-economic categories); and, characteristics of trips (modes of transportation, means of accommodation, purposes of trips, travel arrangements, main destinations).

Publications: For over 30 years, the Tourism Committee has published an annual report entitled "*Tourism Policy and International Tourism in Member Countries*". This report includes an analysis of recent trends in tourist flows and receipts and expenditure, as well as a comprehensive statistical annex on international tourism. Each March, the Tourism Committee issues a press release detailing recent trends in all OECD Member countries. This press release is traditionally presented at the International Tourismus Borse (ITB) in Berlin. In 1989, the Tourism Committee published a special historical issue on national and international tourism statistics dating back to 1970. The Manual on tourism economic accounts is available free of charge.

### **Proposed future orientations and priorities**

The Working Party of the Tourism Committee will continue to provide Member countries with appropriate background material on which to base policy-making discussions and decisions and to develop improved analytical tools.

In the coming years, the momentum on improving methodology and clarifying concepts in order to enhance international comparability will be maintained. For example, by using data covering both national and international tourism for analytical purposes.

The OECD's leadership was recognised in the tourism statistical area with the publication of the Manual. Indeed, it is the only system which exists on a comparable basis at the international level.

As the measurement of the economic importance of tourism is of primary importance for OECD governments, the Working Party will continue to promote its instrument amongst Member and non-Member countries. Particular attention will be devoted to macro-analysis of the data collected.

In addition, the Working Party envisages expanding the concepts described in the Manual in two directions:

- a tourism satellite account approach which implies a study of the relations between the OECD's tourism economic accounts and the new methodology proposed in SNA' 93;

- an analysis of the ways to make it possible for the components and results of the Manual to be used to calculate tourism's share of overall GDP in the various economies.

Several OECD countries are supporting this development, including Canada, Austria, Switzerland, France and Australia.

The development of the Manual will also have to take into consideration the new System of National Accounts adopted in 1993 and the new

classifications (Standard Industry Classification of Tourism Activities - SIC-TA) which will have an impact on its structure.

The Working Party is also planning to produce a publication in 1996 to show what can be done with the figures obtained from the implementation of the Manual.

Regarding the databases on national and international tourism, the Working Party proposes to carry out more work on the analysis of long-term trends using the OECD historical series.

Following a seminar on employment organised by the Tourism Committee in April 1994, the Working Party discussed initiatives to be taken in order to fill in certain statistical gaps. Proposed areas are the study of labour productivity, the development of indicators for vocational training, educational programmes, workforce skill levels, structure of the workforce and geographical distribution of employment. This forum will provide a new opportunity to discuss some of these topics and may be useful for providing some guidance for the future activities of the Working Party in this area.

In 1992 the Working Party started to develop a new project on Early Warning Indicators, aimed at providing the Tourism Committee with short-term indicators on the evolution of tourism industries. As it was not a top priority, this project is on hold for the time being.

The Working Party is also considering whether to examine the situation of OECD countries vis à vis the definitions and classifications adopted by the UN in 1993.

Other new areas of work like transportation, environment, social and urban tourism could also be considered at a later stage.

In all of the areas mentioned, the Working Party will continue and improve its dialogue with the industry.

The OECD will improve its means of dissemination of the statistical information. In particular, an on-line central database should be created and the electronic dissemination of statistics (CD-Rom, diskettes) will be generalised.

### **International statistical co-ordination**

The emphasis which the OECD Secretariat places on international statistical co-operation is motivated by three concerns:

- to develop more and better indicators which are both timely and internationally comparable and thus of greater relevance for policy making
- to relieve the burden on national administrations through international data reporting and attendance at international meetings
- to enhance the productivity of the international organisations by eliminating duplication and by exploiting each organisation's comparative advantage.

With regard to all areas of mutual interest, there is an on-going co-ordination of programmes between the UN Statistical and Economic Commission for Europe, Eurostat, the OECD and the World Tourism Organisation. There is always a designated "focal point" organisation for each area of activity and the OECD is currently serving as the focal point organisation for tourism. This involves:

- assessing the extent to which the activities planned to be undertaken by the various international organisations over the next two years will collectively contribute to the expected output and longer term objectives;

-identifying and including a small number of key issues concerning on-going or planned activities.

Beyond the activities described above, the Working Party is contributing to strengthening international co-operation and co-ordination in other ways, primarily with Eurostat and the WTO. The WTO and the Working Party worked together on the implementation of the Recommendations of the 1991 Ottawa Conference on International Travel and Tourism Statistics. With Eurostat, the Working Party is organising a joint forum on tourism statistics and is developing a common statistical questionnaire. The Working Party is also participating in the development of an EC methodological approach for tourism statistics.

It should not be forgotten that co-operation has to take into account the specific objectives of each organisation. However, there are several areas where co-operation and co-ordination can be improved and/or extended:

- data-sharing, including the development of common questionnaires;
- joint meetings, including the organisation of statistical forum;
- joint, project-oriented groups gathering data for interested countries (satellite accounts, industry performance, ...);
- inter-secretariat working groups (to develop joint projects, to provide technical assistance to non Member countries, etc.);



# SUMMARY OF EUROSTAT ACTIVITIES CONCERNING TOURISM STATISTICS

by J. JORDAN

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*Director European Commission - DG XXIII :Enterprise Policy, Distributive Trades, Tourism and Cooperatives*

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## The role of the Union

Firstly, I would like to express my appreciation of the Italian authorities initiatives in organising this seminar - their initiative represents a good example of the application of the principle of subsidiarity !

It also shows the common interest of the Member States, of the different international organisations and institutions, of the researchers, and I hope of professional and private actors in the sector, in working together, exchanging experiences and looking for practical solutions to be implemented at the most efficient and appropriate level.

Since Community Action in the field of Tourism began to take shape in the early 1980's the Commission has tried to create the conditions necessary for its development.

1995/1996 will represent **the turning point** of Community activity in Tourism :

1. 1995, is the last year of implementation of the first Community Action Plan and of the opening, and I hope the conclusion, of discussions on continuation of activities in this field.

2. 1995 also saw the submission to the Council of the first draft directive on Tourism statistics and finalisation of a methodological recommendation.

3. 1995, saw the adoption of the Green Paper on the role of the Union in the field of tourism.

4. 1996 will be the year of the Inter-Governmental Conference which will decide on whether a separate title should be included on tourism in the Treaty - this question having been left open at Maastricht.

The method and approach proposed by the Commission is shown by :

1. the intention to assess the results of the work already undertaken under the Action Plan and the willingness to rationalise Community activity on Tourism;

2. the need to consolidate the work achieved in the field of statistics with the definition of pragmatic tools;

3. the willingness to open and stimulate the widest possible discussion and consultation on the role of the Union in relation to Tourism, as set out in the Green Paper, with the view to the revision of the Treaty in 1996.

The rest of what I have to say will concentrate largely on the Green Paper and the Institutional possibilities. Before such an expert audience I leave it to others to deal in particular with the question of statistics.

The consultation and debate foreseen is necessary because of the various differing opinions in the Member States on which role the Union should play in Tourism and on the nature and scope of Community intervention, if any. Both the public and private operators in Tourism activities must contribute to the debate before the Institutional revision process of the Union takes place, particularly after more than ten years of Community activity - even if only at the level of experimentation - first informally and then over the last three years with the Action Plan. All the potential that Tourism can express in terms of growth, employment and European integration must be exploited in the common interest of the Union. I shall return to this latter point in the afternoon session.

The Union Treaty signed in 1992 in Maastricht, while recognising that the action of the Community could comprise measures in the field of Tourism for the achievement of the Treaty's objectives specifies neither the particular objectives nor the method of implementation of such measures. Formally, Tourism is simply mentioned as an activity, amongst others such as civil protection, in Article 3 but nothing further is said about it as is, for example, the case in relation to consumer affairs, which is now dealt with by a specific chapter. However, in Declaration No. 1 annexed to the Treaty the question of including a title on Tourism is postponed by the Member States to the Inter-Government Conference of 1996 on the further revision of the Treaty. The Commission was to report to the Council on the measures undertaken under the Action Plan by 30 June 1995. However, this date will not be achieved, for various reasons.

Without prejudging that report or the preparation of the IGC, the Green Paper provides an opportunity :

1. to describe all the activities undertaken by the Community directly in relation to Tourism as well as in other policy areas (transport, regional policy, environment, etc.)

2. to examine in detail the added value of a possible policy on Tourism implemented at Community level;

3. to present the development perspectives in the Tourism field, taking account of the options which may be contemplated in relation to any future role of the Union.

The objective of the Green Paper is, as I have said, to facilitate and stimulate general consideration on the role of the Union. This was the view expressed at the discussions of the informal meeting of the Ministers for Tourism in Athens in 1994 and also in the framework of recent and previous debates (in particular in the EP and the ESC and the Committee of the Regions) which have paralleled the development of Tourism activities in the Union. In fact I would like to say that Parliament has been, in my opinion, the most active of all Community institutions in promoting a Community Tourism Policy.

Against this background **the first section** of the Green Paper outlines the means which the Community is currently able to use in relation to Tourism and is accompanied with examples regarding their use. Here the Tourism statistics programme is one of the two direct measures undertaken by the Community to assist Tourism. - the other being the most important work of developing pilot innovative projects and ensuring that the approach un-

dertaken by the Commission in relation to other policies is coherent and consistent in so far as they relate to Tourism.

In the **second section** of the Green Paper the value added of the Community actions directly to assist Tourism is evaluated. Here regard is had, on the one hand, to the principal reasons which inspire and justify direct Community activity for Tourism while, on the other hand, account is taken of the fundamental aims to which future Community policy could respond :

1. to anticipate structural changes (Again, I will deal with this further in my second intervention this afternoon)

2. to help address the principle of sustainable development - a factor with respect to which Tourism interest to date have not given sufficient attention

3. to facilitate the implementation of a coherent approach of policies and instruments.

I might add that the objective is always underlined of achieving a balance and coherence relating to the three active poles on which Tourism interests focus : the industry, the tourist and the natural and cultural heritage. This means that we are not simply concerned with the short-term interests of the sector nor that we take the industries interests as paramount against the interests of the consumer or environment.

Work on Tourism statistics, developed at European, and indeed international, level, is one of the examples which clearly shows the added value and the multiplier effect of Community action as recognised by the majority of the Member States and by the industry.

The **third section** presents four options which facilitates identification of a possible role for the Union. This takes account of the perspectives for development of the sector. No options are ruled out or in !

Thus, the **first option** constitutes a reversal of the present situations in so far as tourism would only to continue to be concerned by measures developed under other different domains of activity without a specific programme for activity itself (transport, regional policy, etc. as already outlined above). As I have said Member States, have differing views and we have therefore tried to cover the whole spectrum of possible options.

The **second option** is to maintain the current framework and level of activity which has allowed the adoption and implementation of the Action Plan to assist Tourism. The Plan, although really only of an experimental nature, has provided a useful basis for stimulating dialogue with the industry and raising their interest, particularly in controlling the legislative aspects of other Community policies which affect the Tourism sector. It could be extended for a new period if all Member States agree.

The **third option** envisages a reinforcement of Community action on the basis of the existing Treaty. Such a reinforcement could possibly be backed up by a special Tourism section integrated into the policy procedures, programmes and measures for all other policies.

The **fourth option** sets out the case for a direct Community policy on Tourism, included in the Treaty, which can be based on the co-ordination of the different levels of policy required both at public and private level, directly for tourism, and on the integration of other policies which have an impact on tourism at regional, national or Community level.

The Green Paper aims at the widest possible consultation as already mentioned on the role of the Union with all interested parties, both public and private, and at regional, national or international level. All interested

parties are invited to inform the Commission by 30 June 1995 of their comments on the matters dealt with in the Paper and, more particularly, on the role which they consider that the Union should play in relation to Tourism.

I hope that this Forum and its different participants will provide us with remarks, suggestions and opinions which give the possibility to assess the interests of the statisticians and of the researchers in a Community action to improve knowledge of the sector and thus the prospects for development of European tourism.

# WORLD TOURISM ORGANIZATION (WTO): ROLE, ACTIVITIES AND PLANS IN THE FIELD OF TOURISM STATISTICS

by Enzo PACI

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*WTO: Chief, Statistics and Market Research*

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## **Role of WTO**

The World Tourism Organization functions as a clearing-house for all available information on international and domestic tourism, including statistical data, and is responsible for its systematic collection, analysis and dissemination.

In 1977 an agreement was concluded between the United Nations and WTO on cooperation and relationships between the two organizations. In the agreement, the United Nations recognized WTO as the appropriate organization for the collection, analysis, publication, standardization and improvement of tourism statistics worldwide.

The United Nations and the World Tourism Organization have agreed to combine their efforts to secure the greatest possible usefulness and utilization of such statistical information and to minimize the burden placed upon the national governments from which the information is collected.

One of the major tasks pursued by WTO is to standardize tourism statistics worldwide. In this respect, the Organization has prepared and published a number of methodological guidelines and international standards including definitions and classifications and sample survey methodologies for domestic and international tourism statistics.

The technical cooperation activities of WTO are aimed mainly at strengthening the capabilities of developing countries in the collection, compilation, processing and analysis of tourism statistics. In addition to the preparation of manuals and the organization of seminars and training courses, assistance is also provided by fielding expert missions and other short-term advisory assistance.

The standards and methods activities have culminated in the development of a set of "Recommendations on Tourism Statistics" which were issued from the "International Conference on Travel and Tourism Statistics" organized jointly by WTO and the government of Canada in Ottawa in June 1991. The "Recommendations on Tourism Statistics" were officially adopted by the United Nations Statistical Commission at its 27th session in March 1993. WTO/UN Recommendations on Tourism Statistics are now available in all six official languages of the United Nations (English, French, Spanish, Arabic, Russian and Chinese) and distributed as a joint UN/WTO publication.

## ***Activities and plans***

The World Tourism Organization (WTO) works on the basis of a biennial programme prepared by the Secretary-General and discussed and approved by the governing bodies of the Organization. WTO has just prepared its draft programme of work for the period 1996-1997 which will be submitted to the Eleventh session of the General Assembly to be held in Cairo (Egypt) from 17 to 22 October 1995.

The activities of WTO's programme of work for the period 1996-1997 which are of primary interest to the present Forum are those related to the area of "Statistics and Market Research". The following paragraphs will include a description of the major objectives, activities and outputs contemplated under each of these activity areas.

### ***Statistics***

WTO's major objective in the field of "Tourism Statistics", as set out in the draft programme of work for the period 1996-1997, is to develop a complete, consistent and balanced system of tourism statistics, in order to guide governments in their policy decisions on tourism planning and promotion, by enhancing awareness of the economic importance of tourism as well as of the factors that determine the development and structure of the tourism industry at national, regional and international levels.

This overall objective covers three major sub-programs:

#### ***Sub-programme 1:***

Follow-up on and implement the WTO Recommendations on Tourism Statistics adopted by the United Nations Statistical Commission in 1993, in order to improve the comparability of tourism statistics at national, regional and international levels.

#### ***Activities:***

The WTO/UN Recommendations provide also the general framework and plan of action for implementing the recommendations. These are included in the Annex. It is important to distinguish between national and international strategies of implementation. Countries are the ones deciding about policy and analytical needs, timing and scope of the recommendations to be implemented in their national territory (national strategy) and the international organizations provide the logical support through the preparation of technical manuals, training material and other support to seminars, further conceptual research to up-date the Recommendations for the future, as well as technical cooperation activities in individual countries (international strategy).

In the biennium 1996-1997, this sub-programme will include the following activities:

(a) Further dissemination of the WTO/UN Recommendations on Tourism Statistics among public and private sectors in the various countries of the world. A copy of the Recommendations may be obtained from WTO, the United Nations or any of the UN sales agencies upon request.

(b) Reproduction and distribution of the technical manuals. These manuals have been thoroughly discussed at subsequent meetings of the WTO

Steering Committee, as well as within other organizations such as the OECD and EUROSTAT. They also integrate comments received from outside experts and representatives of the tourism industry. The manuals cover the following subjects:

- Collection and Presentation of Tourism Statistics
- Concepts, Definitions and Classifications for Tourism Statistics
- Collection of Tourism Expenditure Statistics
- Collection of Domestic Tourism Statistics
- Tourism and the Balance of Payments (will be available in its draft form in June 1995).

(c) Organization of regional and sub-regional seminars. A "Seminar on Tourism Statistics in Central and Eastern European Countries" was held in Warsaw (Poland) from 13 to 15 February 1995. A report on the Warsaw Seminar was recently issued by WTO. A copy may be obtained upon request from WTO. A Seminar for the Middle East countries will be held in Damascus (Syrian Arab Republic) early September 1995. Other regional seminars are contemplated in Africa, Asia and the Americas over the next two years.

(d) Publication of analytical reports examining tourism statistics in terms of their compatibility and consistency with the concepts, definitions and classifications recommended internationally. In this context, the report prepared by "Tourism Canada" on "Conceptual and operational issues and implementations for Canadian Government Travel Surveys" will be distributed by WTO as a publication of the Organization. Similar studies have been conducted by the United States and Mexico. WTO encourages other countries to undertake in-depth reviews of the compatibilities and consistencies of concepts, definitions and classifications used in their ongoing visitor surveys with international standards.

(e) Preparation of technical reports on the use of administrative sources to measure physical and financial flows in the field of tourism.

(f) Monitor and evaluate the application of SICTA at the national and international levels and develop a SICTA-Product code classification in cooperation with other competent organizations such as the United Nations and EUROSTAT.

### *Sub-programme 2:*

Collect, process, evaluate and disseminate domestic and international tourism statistics that are more detailed, reliable, useful and up-to-date and as comparable as possible, in order to meet the needs of national and international users.

### *Activities:*

(a) The activities of WTO are focused on promoting a creative approach by national tourism administrations to the use of statistics as a tool of information, action, management and to encourage countries to collect more reliable and more complete tourism statistics in line with WTO definitions so as to improve their international comparability. WTO also emphasizes the need to speed up the production and publication of these statistics at the country level in order to provide the means of identifying tourism trends month by month and of fine-tuning promotion and marketing policy.

(b) The scope of tourism statistics is multi-fold and is composed of three principal fields: (1) inbound tourism (2) outbound tourism and (3) domestic tourism. The available statistics on tourism are far from complete and are largely concerned with inbound tourism. Countries should endeavour to collect data on outbound tourism and domestic tourism.

(c) The draft general programme of work of the Organization in the field of tourism statistics for the period 1996-1997 contemplates the continuation of the collection, processing and dissemination of tourism statistics worldwide. Starting in 1995, WTO will revise its annual statistical questionnaire to incorporate the new standard classifications included in the "Recommendations on Tourism Statistics". Moreover, particular emphasis is placed on improving data quality, reliability and international comparability. In many countries, economic and marketing studies are constrained by both the level and scope of available statistics. Much more comprehensive and accurate data are required regarding the segmentation of markets, visitor expenditure and foreign exchange earnings, accommodation capacity, occupancy rates and overnight stays, utilization of tourism amenities and attractions and tourism employment. Particular attention will be paid by WTO to respond to these needs.

(d) This sub-programme includes the preparation and distribution of the following recurrent publications:

- (i) Yearbook of Tourism Statistics
- (ii) Compendium of Tourism Statistics
- (iii) Travel and Tourism Barometer
- (iv) Tourism and Transport Indicators
- (v) Trends in the Development of the Accommodation Sector

(vi) Tourism market profile (presentation of initial estimated results of international tourism for the current year both worldwide and by region).

(e) In the biennium 1996-1997, the orientation of the programme will also be to:

(i) continue to give priority to developing cost-effective methods and systems for collecting, assessing and compiling data and their dissemination, using new technologies for preparing major data bases, publications and other statistical outputs.

(ii) disseminate international tourism statistics and indicators through media other than recurrent publications to meet a variety of users' needs and to respond to ad hoc requests for statistical information.

### *Sub-programme 3:*

Develop a consistent and comprehensive system of tourism economic statistics to enable a credible assessment to be made of the economic weight of tourism, both nationally and internationally, as well as of the performance of the various sectors of tourism compared to other sectors of economic activity. The outcome of these activities will be examined at an International Conference on the Economic Statistics of Tourism, which could be held in 1997, in accordance with resolution A/RES/316(X) of the General Assembly.

### *Activities:*

(a) The first methodological work at the international level on the mea-

surement of the economic importance of tourism was published by WTO in 1983 in its study entitled "Determination of the importance of tourism as an economic activity within the framework of the National Accounting System". This study served as a basis and a reference for all other similar work carried out by other Organizations. In this context, the objective of WTO is to strengthen the capabilities of national tourism administrations to assess the effects of tourism in their national economies and the use of these results for promoting the credibility of tourism nationally and internationally.

(b) This sub-programme includes the following specific activities:

(i) Development of "A satellite account for tourism". A draft manual on a satellite account for tourism has already been prepared by WTO. This manual is fully consistent with the new methodology proposed in the System of National Accounts (SNA 1993) of the United Nations. It also includes a special chapter describing the relationship between this manual and the OECD Manual. The WTO manual on "A satellite account for tourism" is now being circulated for comments to national and international users and entities. It will be placed on the Agenda for discussion by the next Steering Committee meeting, scheduled to be held at WTO Headquarters during the first quarter of 1996.

(ii) The measurement of tourism's contribution to GDP. This activity will involve an inventory and assessment of the various methods presently used in a selected number of countries as well as by other regional organizations and private firms and institutes. On the basis of this analysis, WTO plans to develop a technical manual with operational guidelines on how to evaluate the share of tourism in GDP, both in developed and in developing countries. This activity will necessitate close cooperation and coordination with other competent organizations and tourism industry representatives as well as national government agencies.

(iii) WTO has also finalized the preparation of a Tourism Economic Report which will be available in June 1995. This publication has been included as a regular activity in the next 1996-1997 biennial programme of work.

### **Market research**

WTO's major objective in "Market Research", as set out in the draft programme of work for the period 1996-1997 is to provide national tourism administrations and tourism professionals with quantitative and qualitative elements for assessing the development and pattern of tourism supply and demand at national, regional and world levels, in order to help them formulate development, promotional and marketing policies and strategies for their tourism products and services. This overall objective includes the following specific activities:

(a) Prepare concise analytical reports on recent developments in generating and receiving markets in the various world regions.

(b) Update the WTO study on "Global Tourism Forecasts to the Year 2000 and Beyond", from both the quantitative and qualitative standpoints.

(c) Disseminate information on promotional and advertising expenditure and activities in the various countries (a questionnaire on "Budgets and promotional activities of National Tourism Administrations" has already been mailed in March 1995).

(d) Promote a sharing of experience on the use of modern promotional and targeting techniques for the various segments of tourism demand.

### ***International statistical coordination***

The preparation of the 1991 Ottawa Conference and, subsequently, the Recommendations on Tourism Statistics have been achieved through a programme of international cooperation and has been a singular achievement. The cooperative arrangements that have governed past work have been well tested and provide a basis for future cooperation and coordination. The principle of burden sharing will continue to guide all activities of WTO for all the preparatory work of the 1997 new International Conference.

The Steering Committee, established by WTO after the 1991 Ottawa Conference, constitutes a most appropriate instrument for coordination of tourism statistical activities at the international level. The Steering Committee is the only mechanism which brings together representatives of Governments, international organizations and the tourism industry on a worldwide basis. WTO will ensure a properly balanced representation at the Steering Committee. Governments or other entities interested to participate at the work of the Steering Committee should contact WTO.

WTO's proposal for "A satellite account for tourism" represents a major area of coordination and cooperation between international organizations, governments and the tourism industry.

Other areas where coordination should also be strengthened include the dissemination and implementation of the WTO/UN Recommendations on Tourism Statistics, regional seminars, the development of standard classifications and data collection activities.

What will be the effects of the globalization of tourism demand and supply on future needs of tourism statistics? To what extent will traditional statistical tools and instruments respond to the profound changes in the nature and significance of tourism over the next decades? These problems are already being addressed in other statistical areas. They should also be of concern to the tourism industry. Globalization will certainly raise a number of coordination and cooperation issues among the producers and users of statistical information.

## SUMMARY TO THE INTRODUCTORY SESSION

by Ulrich SPOREL

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*Federal Statistical Office, Germany*

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The introductory session of the Forum dealt with the International Organizations, which presented a summary of their activities with particular attention to recent achievements and future plans in the field of interest.

WTO, which unfortunately was not present at the meeting, had transmitted a paper by Mr. Enzo Paci on the role, activities and plans of the organization which was presented by the chairman of the session. In this contribution the role of WTO was defined as clearing-house for all available information on international and domestic tourism. The document stressed the importance of the Recommendations on Tourism Statistics which were issued by the International Conference on Travel and Tourism Statistics in Ottawa/Canada in June 1991.

The statistical activity programme of WTO comprises three major subprogrammes. The first concerns the implementation of the WTO-Recommendations on Tourism Statistics. The main activities in this field are the widest possible dissemination of the Recommendations among public and private sectors in the various countries of the world and the preparation of five technical manuals on selected issues of tourism statistics.

The second subprogramme concerns the data collection and publication activities. WTO will continue the preparation and dissemination of its recurrent statistical publications such as the Yearbook of Tourism Statistics, the Compendium of Tourism Statistics and the Travel and Tourism Barometer.

The third subprogramme concerns the development of tourism economic indicators. In this field of activities WTO has prepared a draft manual on a satellite account for tourism which is fully consistent with the new System of National Accounts (SNA). WTO has also planned to make an inventory of the various methods used to measure the tourism contribution to GDP. The participants were also informed on the Tourism Economic Report which has just been finalized.

WTO briefly mentioned market research as a second major area of activity. Various analytical reports on tourism trends and forecasts were listed particularly the Global Tourism Forecasts of the year 2000 and beyond and the survey on Budgets and promotional activities of National Tourism Administrations.

In the second contribution to the session Mr. Alain Dupeyras reported on the role, recent achievements, future activities and international cooperation of the OECD Tourism Committee's Statistical Working Party. The de-

velopment of new concepts and the collection, analysis and dissemination of high quality statistics were mentioned as the main activities. In the field of data collection and dissemination OECD has developed two databases, one on international tourism and a second one on national tourism. The conceptual work of OECD focused on the development of the Manual on Tourism Economic Accounts (TEA) which was presented at the International Conference on Travel and Tourism Statistics in Ottawa in June 1991. It provides a basis for assembling data on production, consumption, value added, gross fixed capital formation, and employment in tourism industries. The work with the Manual now is at the stage of practical application. In the second round of data collection 17 countries have replied to the questionnaire. A report on the methodological and conceptual basis of the Manual and the statistical results of the data collection is under preparation.

One part of the future activities of OECD is the improvement of the electronic dissemination of statistics. In the field of the TEA the Working Party intends to expand the conceptual work with the Manual in two directions, first to examine the relations between the OECD's TEA-Manual and second to analyse methods of using results of the TEA for calculating tourism's share in the overall GDP in the various economies. Following a seminar on employment organized by the Tourism Committee in April 1994 the Working Party intends to deal with particular aspects of statistics on this issue in the tourism industry.

The next speaker of the session was Mr. John Jordan, director in the DG XXIII of the European Commission. His contribution focused on the *Green Paper* of the Commission, aiming at facilitating and stimulating general consideration on the role of the Union in the field of tourism policy. The Green Paper outlines in a first section the means which the Community is currently able to use in relation to tourism. In a second section the value added of the Community actions directly to assist tourism is evaluated. The third section presents four options with different levels of intensity concerning the engagement of the Union in the field of tourism policy. At the end of his speech Mr. Jordan mentioned that the Commission invited all interested parties for comments on the matters dealt with in the Green Paper and, more particularly, on the role which they consider the Union should play in relation to tourism.

At the end of the session Mr. Marco Lancetti gave a summary of the Eurostat activities concerning tourism statistics. He mentioned the council decision of December 1990 on a two year programme which aimed at the analysis and evaluation of the long-term needs of the main users, the collection and dissemination of existing statistical systems in the member countries, and the preparation of a community methodological manual for the compilation of tourism statistics. Furthermore Mr. Lancetti gave a review on the project of the council directive on tourism statistics, which contains a set of information to be provided by the EU member countries at a regular basis. In view of an information system on tourism at European level one of the objectives of Eurostat is to implement the uniform definitions and the methods of data collecting. A comprehensive methodology on tourism statistics is planned to be implemented in the short term future in the form of a council recommendation. Presentation and dissemination of this methodology will be more and more directed to interactive multimedia techniques, of which Eurostat presented a first example.

**SESSION 2**  
**THE INFLUENCE OF TOURISM**  
**ON THE LABOUR MARKET**



# INTRODUCTORY OPENING: THE INFLUENCE OF TOURISM ON THE LABOUR MARKET - FROM THE POINT OF VIEW OF HIGHLY DEVELOPED NATIONAL ECONOMIES

by Prof. Peter KELLER

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## 1. The economic policy aspects

Despite the economic recovery, there are 30 million unemployed in the OECD member states today. As yet, no one has been able to find a magic formula to solve this thorny problem. Full employment requires a growth rate which is no longer possible in our highly developed national economies. Given the already high standard of living, it would in any case be problematic from the ecological point of view.

Economic policy does not consider continued growth in the tourism sector as the magic success formula. It is a well established fact that tourism contributes to the creation of jobs in peripheral regions. In the final balance however, the jobs created by tourism are generally considered to be low in productivity. The feeling is that too many of the jobs created are for workers with little or no qualifications.

In highly developed economies, when we speak of the development of a "service society", we do not refer to an increase in services of a personalised nature. The age of domestic servants ended long ago. No, what we mean is computer-assisted consultancy services, which in highly developed economies have shouldered aside the traditional industries (Table 1). The new leading sectors offer what the most comfortably off citizens require: high salaries and attractive jobs.

## 2. The changing face of tourism

This image of tourism has its origins in the glass towers and marble palaces of holding companies in the industrial and service sector. It no longer corresponds to reality. Tourism today has ceased to be a cottage industry made up of small companies. It is a thoroughly modern sector of the economy, which is increasingly run on an industrial scale by professionals. Tourism is no longer simply a matter of guest consumers, whose spending trickles down through the economy. Although it does not appear in the statistics as a self-contained sector of the economy, there is such a thing today as the tourism industry. A great many economic sectors benefit from the spen-

ding habits of tourist consumers. To what extent, can only be revealed by comprehensive, detailed statistical analysis down to the three or four digit level. There are however only a few economic sectors which depend heavily on tourism.

Increasing competition on the demand side of the market, and on the basis of marginal production factors, is however forcing the tourism dependent companies to grow and cooperate. Hotels are joining together in groups, and multiplying the number of rooms, in the search for economies of scale. Just as important is the need to fend off competition from the major players, the airlines, the big hotel chains and the global travel companies, which sell standardised products in electronic markets on an industrial scale. Looked at from this horizontal point of view, tourism appears as a heterogeneous economic sector. It is both an area of small businesses, and of large industries, labour intensive and with high productivity.

The sum of tourism dependent sectors does not however add up to a tourism industry. Suppliers of tourism services must address themselves to the market. What counts above all for the visitor is the complete package of tourism services on offer. By offering the package as a whole, the tourism dependant suppliers form really an industry in the classical sense. That is why vertical integration of individual tourism dependent sectors of the economy is important. This requires cooperation between independent operators, in order to develop and market the product together, in order to gain economies of scope (Table 2).

### **3. The importance of tourism to the national economy**

A new economic evaluation of tourism as an industry, based on statistical research carried out in individual OECD countries, has demonstrated a tendency to underestimate the importance of the tourism industry to the national economy. The fact is that nations depend on tourism more than they like to think. The contribution which tourism makes to the gross domestic product (GDP) in the OECD countries is roughly on a par with that of the building industry or the retail trade. Even those OECD nations which do not evidence a particularly noticeable degree of international specialisation rely on tourism to a significant extent, around 4-6%, for their economy's total value-added.

The areas which in the OECD classification qualify as tourism sectors, profiting directly and significantly from the spending of tourists, account for only half of the tourism related value-added in highly developed tourism countries with attractive destinations. There are other sectors of the economy, not considered *a priori* as "tourism dependent" (Table 3), which do in fact rely significantly on tourism (road haulage, the retail trade, banks, the PTT).

When considering the matter from the broadest economic viewpoint, we must equally bear in mind that certain localities and regions are heavily tourism dependent. In such cases, when between 50-80% of income and employment depend on tourism activities, there are usually few economic alternatives.

### **4. Strengths and weaknesses of the tourism labour market**

Being a relatively labour intensive sector of the economy, tourism is

an exceptionally effective way of creating employment. It is among the largest employers in the OECD, if we take all tourism dependent job sectors into account. There are 10 OECD member countries, including even a major economy like the USA, in which tourism dependent jobs amount to over 5% of the total. The figure is even higher in the traditional tourism countries, reaching over 8% (Table 4). Roughly half of the tourism dependent jobs are in the hotel and catering trades. Considered as a whole, the transportation sector provides employment to 15% of all tourism employees. The vertical tourism sectors in contrast offer relatively few jobs. Travel agents for example account for between 3% and 5%.

The strengths of the tourism labour market derive from the fact that it is relatively crisis proof. This is due to steadily rising demand. Tourism is an essential component of highly developed societies. Moreover, there is considerable diversification of supply, and this has a stabilising effect. Hotels and restaurants are of course subject to business cycle fluctuations. During a period of economic recovery however, renewed spending by tourists has a strong direct effect on employment. Better use can be made of existing installations, and new jobs are created. Tourism clearly has the effect of accelerating development of the national economy. It stimulates economic growth and assists the integration of national economies into the global economy.

Below average productivity, and the fact that tourism is a comparatively labour intensive sector, is the greatest weakness of this area of the labour market (Table 5). This is due to the relatively high proportion of HoReCa jobs. This branch suffers from the so-called "cost disease". Working conditions are in any case no worse than is found in industry. But the jobs are among the most demanding and physically strenuous. This together with the seasonal nature of tourism demand, which leads to temporary unemployment of a structural nature, accounts for the high turnover of staff typical of this industry.

## **5. Opportunities in the tourism labour market from the point of view of economic policy**

The generalised fear of unemployment has improved recruitment in tourism in many countries today. Tourism is now a recognised growth sector. Expansion of the market worldwide will also be beneficial for the traditional tourism countries. Employment is expected to grow in all branches of tourism. The importance of part time work is increasingly recognised. It is a way of giving young people, students and married women easier access to the job market. This fits in perfectly with the extra flexibility required in the labour market of a leisure society.

It has also become clearer to many that jobs in the front line of tourism help create a number of more highly qualified jobs in specialised fields, in management and marketing. Thanks to such people, there is no need in tourism for costly investments in research and development in order to create new products. Finally, it is worth mentioning that tourism is able to offer attractive and relatively well paid jobs in the extensively rationalised and industrially run "outgoing business" sector.

Tourism also results in labour market distortions. In the highly developed economies, it is increasingly difficult to find native born candidates ready to accept the less qualified jobs. The more developed the economy, the grea-

ter its need to recruit foreign workers. The proportion of foreign workers employed in the hotel and catering sectors in the leading OECD countries ranges between 15% and 45%. Immigration leads to a segmented labour market, while lowering the rate of productivity of the economy as a whole (Table 6).

However, we must consider more than just productivity when we make our assessment of tourism. From the competitive standpoint, the important thing is to be able to sell and to earn, and this is clearly possible with a growing tourism industry. In contrast, it seems pointless to encourage an elite in its desire to produce high-tech products, if no one wants to buy the things they produce. In any case, an economy cannot be made to work exclusively on the basis of highly paid and highly qualified jobs. There will always be a need for activities of a more humble nature.

## **6. What economic and tourism policymakers expect from the statisticians**

Investigating the importance of tourism as a source of employment represents a real challenge for the statistician — of that there is no doubt. There has been progress in tourism statistics in recent years, on the theoretical level at least. The World Tourism Organisation (WTO) together with the UN, has come up with a truly state of the art recommendation. For the first time ever, traditional tourism statistical assessments are being matched with assessments of the industrial economy. This amounts to establishing a link between supply and demand, allowing us to see the whole tourism economy and the employment created by tourism in perspective.

It is at the level of implementation that the trouble begins. The Standard International Classification of Tourism Activities (SICTA) is costly to put into practice. Budgetary restrictions stand in the way of the need to conduct research to within three or four digits. Government statisticians are expected to find solutions which are as internationally comparable and simple as possible. In this context, it would be a good idea to begin a dialogue with the private sector, whose own research efforts increasingly compete with the official statistics.

Finally we come to the last important question: what statistical information on the tourism labour market would be helpful to economic and tourism policymakers? Ideally, they should be able to consult data on the number of employees and independent operators, sector by sector, with information on their qualifications, contract conditions (employed full time the year round, part-time, or as a seasonal worker), and their nationality (national or foreign). Also useful would be information on productivity in each of the various tourism dependent sectors.

Our research, which is not yet sufficiently focused, should be able to provide such information on the tourism labour market on a regular basis, helping to answer a number of questions of importance to economic policymakers and to tourism policymakers:

- How significant are the effects of tourism on employment in the industrial nations?
- Which groups and which areas supply the labour market?
- Does tourism really contribute to employment growth?
- What effect does growth in tourism employment have on other sectors of the labour market, and on wage levels?

-Is the promotion of tourism - for example state support for destination marketing - a valid way of protecting jobs or creating them?

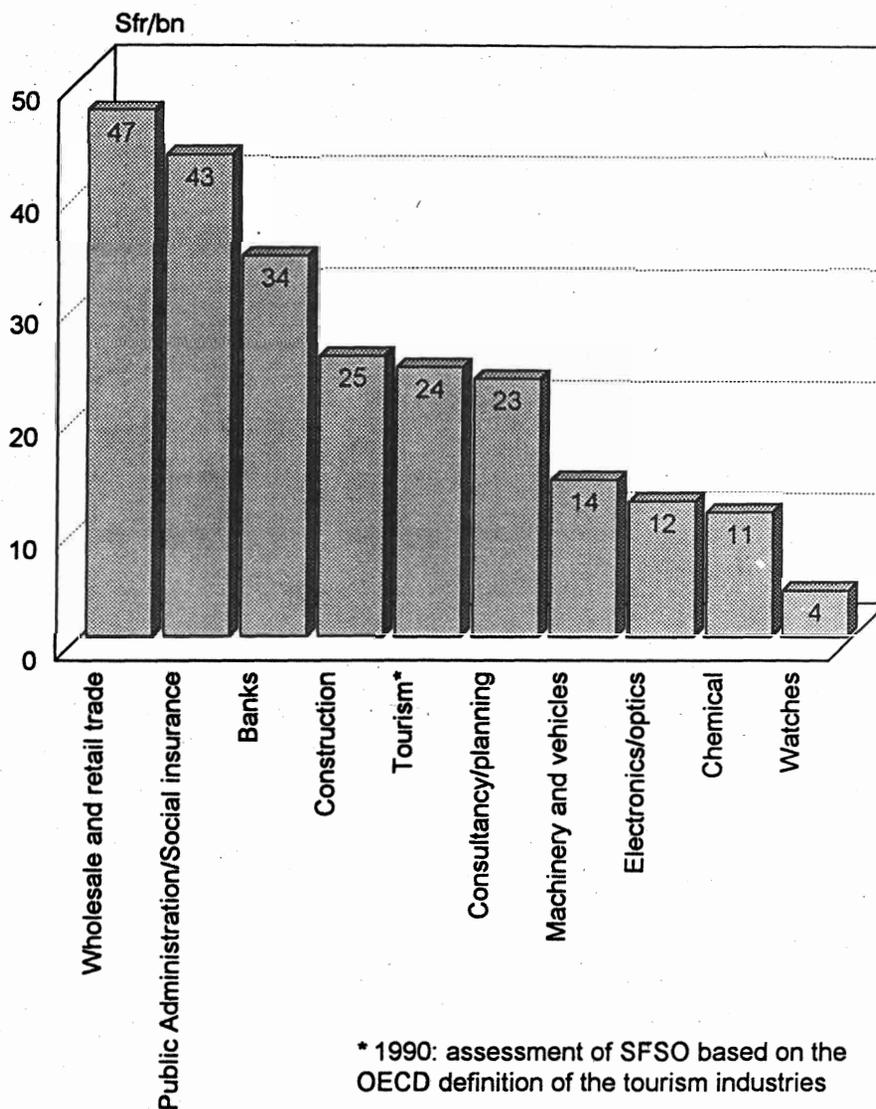
-Can tourism really create jobs in rural areas and in depressed industrial areas?

Source: Keller, P., Tourism and Employment, Basic Report, Tourism Committee, OECD, Paris 1994/95

Table 1

## Value added

(in key sectors of the Swiss economy in 1992)

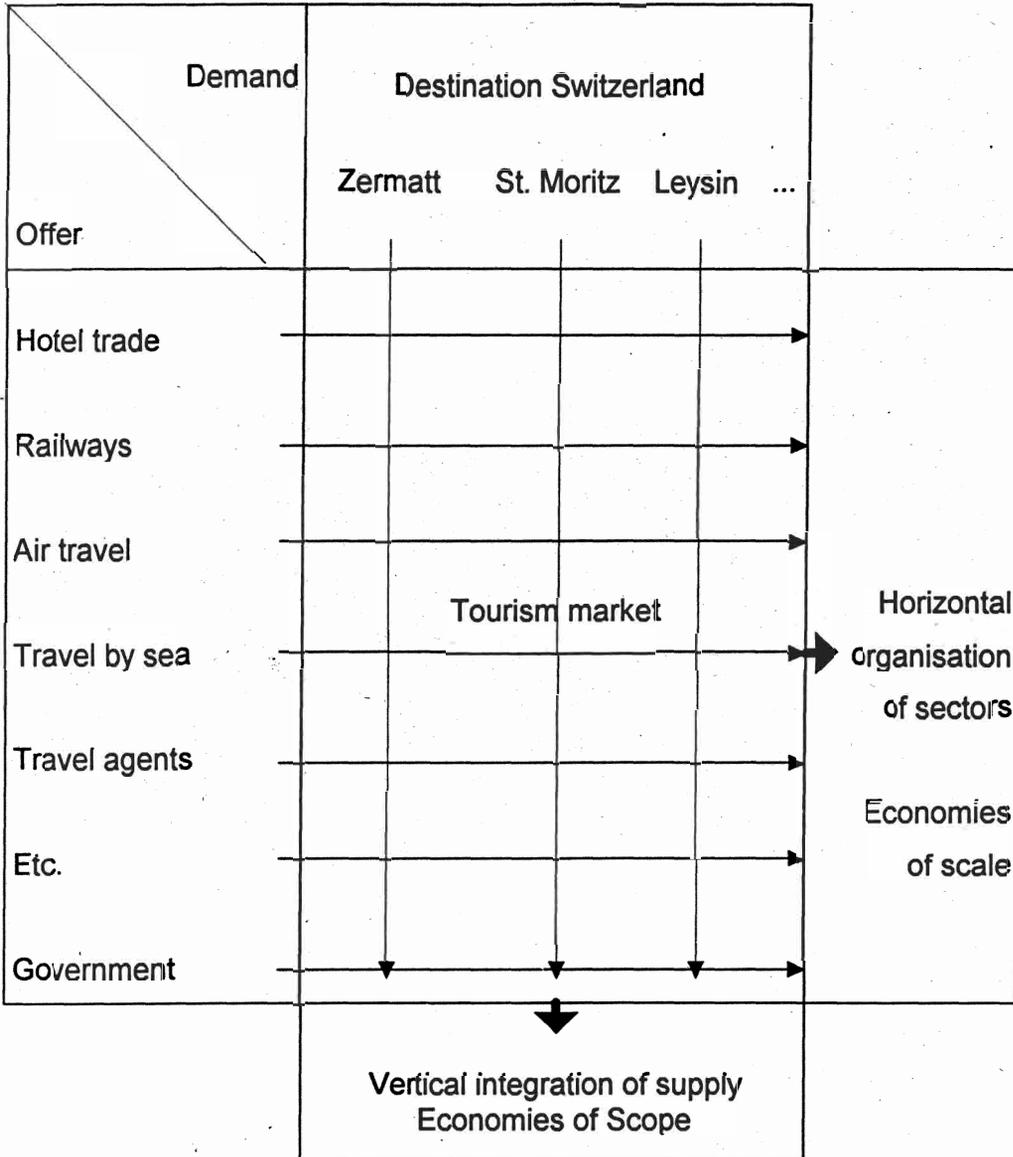


Source: FEDERAL OFFICE FOR INDUSTRY AND LABOUR, Division of tourism

[hg/ref/brwsb92e.prs/100395](http://hg/ref/brwsb92e.prs/100395)

Table 2

**Cooperation as a competitive advantage**



Source: FEDERAL OFFICE FOR INDUSTRY AND LABOUR, Division of tourism

**Table 3 - Tourism and the economy: the case of Switzerland (CH)**

	CH	percentage % Grisons
<b>1. Tourism industry (SICTA)</b>		
Travel agencies	100	100
Cable cars	83	96
Hotels	79	90
Airlines	69	-
Restaurants	35	85
Road transport	32	60
Railways	29	61
Navigation	25	-
Culture, sport	89	0
<b>2. Other tourism related sectors</b>		
Education	16	18
Rental of holiday apartments	7	95
Retail trade	5	66
Health care	5	30
Personal services	5	45
Post, telegraph and telephone services	4	52
Insurance companies	1	45
Banking	0,5	45

Source: FEDERAL OFFICE FOR INDUSTRY AND LABOUR, Division of tourism

**Tab 4 - Importance of tourism for employment and gross domestic product (GDP) 1994 estimates**

	total employment in thousands	in % of employment	in% of
Germany	1'800	6,5	5,6
Spain	1'400	9,1	8,0
France	1'200	4,9	2,6
Greece	360	10,0	8,0
Netherlands	199	2,8	2,1
Switzerland	293	8,1	5,6

Source: OECD Tourism Committee, 1994

**Tab. 5 - Productivity or value added per employee in 1991**

Sectors	Sfr
Hotels	56'000
Restaurants	57'000
Railways	77'000
Lake cruises	84'000
Parahotel (Caisse suisse de voyage)	125'000
Civil aviation	147'000
Tourism	89'000
Swiss economy	102'000
Banks	260'000

Source: FEDERAL OFFICE FOR INDUSTRY AND LABOUR, Division of tourism

**Tab 6 - Percentage of foreign workers in the hotel and restaurant sectors**

Austria	31 %
Denmark	20 %
France	14 %
Germany	27 %
Japar	20 %
Sweden	20 %
Switzerland	45 %

Source: OECD Tourism Committee, April 1994

# TOURISM EMPLOYMENT AND THE LABOUR MARKET

by J.JORDAN

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## Background

Tourism activities provide a significant contribution to employment. Approximately nine million persons are estimated to work in the tourist industry in the Community, accounting for almost 6 % of total employment in terms of jobs directly linked to tourism products and activities. In addition, the recent work of the OECD seems to confirm the tourism industries potential for contributing directly to reducing unemployment and creating new jobs via the generation of tourist flows and income.

The identification of tourism as one of the ways forward into the 21st century is consistent with the Commission thinking on employment set out in its White Paper on Growth, Competitiveness and Employment of December 1993. Interestingly, however, the word "tourism" is not mentioned in that paper. However various activities which relate to tourism such as transport, environment, etc. are specifically mentioned and one is bound to pose the question as to whether there has been a phobia about regarding jobs in tourism as real jobs. This is, however, I believe, rapidly being overcome and there is an increasing acknowledgement that tourism and the leisure sector are potential sources of significant future employment.

This is borne out by the results of recent European Councils in their calls for the rapid implementation of an Action Plan on the White Paper. In these plans tourism is specifically identified as one of the 17 major fields where the prospects for expanding employment in the medium term are perceived positively and this particularly in the light of changes in habits, living standards and the technologies which can be used. Further evidence of commitment to the development of tourism can be seen in the fact that the commitments to direct investment in tourism in the generation of Regional Support Frameworks under the Structural Funds which ended in 1994 already spent to 3 million ECU directly on tourism related investments whereas the Support Frameworks under the subsequent plans (1994-1999) foresee increased expenditure.

At the European Council in Essen the Commission presented the results of surveys which analyse the nature of the many innovative local initiatives to create jobs (as well as the obstacles thereto and the conditions which seemed to ensure success). The common guidelines which emerge for the development of the local initiatives regard tourism and those enga-

ged therein as protagonists in the desired changes towards a society of initiatives based on the cohesion of the social partners at all levels and on the capacity to develop networks of associated co-operation projects. The establishment, as called for by the Corfu and Essen European Councils, of a framework for more coherent actions in favour of local employment, together with the development initiatives can also contribute towards exploiting the potential for creating new jobs in tourism.

But we are still at the level of intuition, sometimes supported by local investigations, which give a partial vision of the development of the labour market. The various segments of the tourism industry are still appreciated in terms of employment without a clear and reliable framework of reference acceptable to all. Whoever wants to analyse in depth the phenomenon has to jump over the lack of information and of methods to which a partial answer is being provided by the Community work which of course has been developed jointly with OECD, WTO and the EEA Member States.

### ***Employment in the Tourism industry and its links with the specificity of the work involved and the organisation of the tourism industry***

Because of the nature of the tourist industry which is based mainly on supplying services in discontinuous periods of time, often alternating with activity in other economic sectors, working and employment conditions are very specific and requires specific tools of investigation. They involve seasonal work, weekend working and long working days with all these factors having repercussions on each other. In particular, the seasonal nature of the work, which means that employment is precarious and a factor in the instability of incomes, tends to produce a distribution of work throughout the year which is different from the usual pattern in the economy. These features have certain consequences. The rapid turnover or, perhaps more importantly from the employees point of view, the precarious nature of employment can act as a disincentive from acquiring skills and qualifications in certain branches of the industry. This is at the very time when the increasing accent on quality requires more professional standards and it can even lead to shortages of labour which hinder the expansion of employment in tourism. Indeed it is these aspects which may in fact give rise to the phobia of regarding jobs in tourism as real jobs which I already mentioned.

According to experts in the field, the common factor covering the main features of employment is the seasonal nature of the industry. This often implies that the workers recruited into the tourist industry, like those in most seasonal activities have few qualification and receive only little training, particularly for acquiring formal qualifications, both because of lack of time and of motivation from both the employer and employee point of view. Yet it is clear that these aspects are a key factor in managing businesses, and in establishing a brand-image of the sector and indeed in strengthening its position in the face of competition from other regions, nationally and globally. This is particularly true in the SME sector of the industry. These specific characteristics may indeed also explain, and in some cases cause the lack of statistical and other information available on the industry.

The analysis of the job profiles in the industry, their evolution and the appropriateness of educational and vocational training systems are fragile aspects of research at European level. The work of CEDEFOP and the work developed in the framework of the FORCE programme have tried to give

some answers but these remain partial. The fact that employment is so seasonal and precarious requires the development of a specific methodology for monitoring employment characteristics and performance as a relevant part of the general system of observations of the tourism phenomenon. There is probably a need to study in greater details the rights and obligations of employers and employees vis-à-vis each other in employment of this type - indeed it might be suggested that this would be well worth doing as other sectors may gradually move towards short-term more flexible employment contracts similar to those existing in the tourism industry. The work achieved to date represents a good step towards clarifying matters but the results are still unsatisfactory.

The lack of information and analysis probably reflects a problem of resources at Community as well as national and regional level. I am aware that everybody looks for such data and derivatives but nobody seems ready to pay for it. Nevertheless I am not convinced that the lack of resources is always the basic problem. I have the impression that there is much information in existence, albeit in various formats collected for various purposes and with different origins. What is still lacking in an efficient network which would co-ordinate this information into a useful format in a worthwhile and generally accepted framework. There is, for example, much data in the private sector through the use of information systems used in the course of their normal work which is available but seldom used - at least in conjunction with data collected through public means.

The directive on tourism statistics will however represent a good start on the implementation of a structured data policy but we are all aware that it is not enough - especially in so far as the investigation of employment and labour market conditions are concerned. In spite of its deficiencies I am convinced that we must now start with the adoption and implementation of that directive - if we wait to achieve a perfect system we risk postponing all effective work for a considerable period of time whereas the use of some reliable data is at this stage essential. The Commission services are therefore hopeful of having the statistics directive adopted shortly and in this field I believe that the saying "a good start is half the work", is particularly true.

The information technology now available also gives us the possibility of going over the technical barriers which have hindered work in the statistical and data aspects of this sector to date. They can not only reduce the cost of production of the data but also its collection and dissemination. The Community is working towards the establishment of an information society in general, as reinforced in the Brussels G7 summit. Tourism could be one of the major areas of development in this regard provided that a common project is developed at local and national level in the various countries. All the actors and decision makers in the sector, both at private and public level, must be associated with such efforts to ensure that they go in the right direction. This approach will, however, remain only an idea or an action which will benefit only the larger sectoral interests if all actors do not try to take an active part in it. If they do so it will clearly be for the benefit of all and the results will be there to show it.

I would now like to make some observations on the link between Community policies and employment in the tourism sector.

Firstly, I should admit that there has been much criticism of the effects of the Community social legislation on the sector. However, if we believe in social systems and flexible working arrangements there is a logic in deci-

ding that above a certain threshold of hours worked per week employees should be entitled to certain benefits. This may prove costly for the industry but it is of course, to some extent, always open to Member States authorities do decide whether this should be a charge on the employee, the employer or in certain circumstances, the state. (Indeed, the inclusion of more workers in the social system may reduce any doubts regarding the status of jobs, as a side-effect, and become a useful source of statistical data.) Secondly there can be little or no doubt that the development of tourism contributes significantly to the social and economic cohesion of the Community and to the objective of regional development. This is self evident as many of the more touristic areas are ones which have as their sole natural advantage factors which attract tourism. Thirdly, employment in the sector has traditionally been high in relation to youth and female employment. These are of course two of the categories which the Community and practically all Member States have identified as worthy of preferential treatment as they have traditionally been identified with high rates of unemployment.

Fourthly, as I have already mentioned the part-time and/or flexible nature of employment in the sector is one which many see as being a pattern which will also develop in other sectors and to that extent the tourism employment scenario can, if properly handled and analysed, serve as a possible blueprint for an ordered approach to other sectors.

Finally I would like to make some personal remarks on the overall employment situation as I see it and its relevance for tourism. Some people argue that attempting to produce a White Book on employment as well as on growth and competitiveness was too ambitious for the Commission. I am not sure that this is correct but it does seem to me that we could perhaps have been more realistic in relation to the employment situation. Investments which relate to growth and improvement in competitiveness will in most cases mean a decrease in employment. Moreover, some of the less developed countries are rapidly catching up with us in more labour intensive sectors whether in Europe, Japan or the USA. We should perhaps have acknowledged this more clearly and indeed accepted that this is their absolute right.

With this global sea-change it may be that at least for the long term unemployed and the younger population who are not sufficiently educated and trained we must look for an alternative approach to employment. I deliberately say "must" as if we do not solve this situation we risk a massive social explosion. This indeed was the theme of the Easter sermon by the Archbishop of Canterbury, Dr. Carey last year. He spoke of families who for two generations had not experienced any prospect of employment and he pointed to the social injustice of this situation. A further contrast was drawn by Anne Appelbaum, the Editor of the Spectator Magazine, where she spoke of the old British concept of employment, where those upstairs were the leisured richer classes and those downstairs did all the work. She observed that this situation is now reversed where those in employment and earning good incomes, the "richer" classes, are working harder than ever whereas the jobs which were previously downstairs no longer exist and the equivalent classes are now the leisured classes but have only state benefits in which to enjoy that leisure.

It seems to me therefore that what we should be envisaging in the future is the take up of the unemployment in a manner which will improve the quality of life for all. Thus, those who are unemployed can be trained rela-

tively easily in the provision of services which can add to the quality of life of those who are already employed (it is certainly true that they can be so trained much more easily for these than for the high-tech services of which we hear so much but for which without the necessary education which most of them have missed provide them with little or no hope). Many such services can be in the tourism and leisure sector. Once these jobs pay a reasonable differential over the social benefit it is probable that the unemployed will be interested in taking them up. Thus the overall quality of life for all may be improved by such an approach. It would however require that these jobs in the tourism and leisure services are acknowledged as real jobs and be seen as making a real contribution to society in general, which I believe they would.

At least with such an approach we should be able to avoid the risk of the social explosion which was central to Dr. Carey's address. It would also return some dignity to those he identified as the excluded classes and is probably the basis of an approach which we will have to consider more and more in the future. We are now coming to recognise that our future will involve, to an increasing extent, the abolition of the concept of maintaining one job throughout our lifetimes and our educational and training systems will have to prepare people for such a background with broad basic education and the acceptance of the concept of continual training throughout our lifetime. This can I believe be achieved and moreover will probably be essential. Both the World Bank and the retiring chairman of GATT, Mr. Peter Sutherland, are on record as saying that within the next fifteen years at least nine of the biggest economies in the world will be those of countries which we currently regard as under-developed.

We are certainly living in a time of global change in patterns of employment. I believe that as long as we recognise these changes we are in a position to adapt to them. There is little doubt in my mind that services which aim at improving the quality of life, and tourism and leisure services in particular, provide one of the best possibilities, at least in the short-term and perhaps even in the long-term, of meeting this challenge successfully.



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# TOURISM AND EMPLOYMENT IN THE NETHERLANDS: METHODOLOGY AND SOME RESULTS

by N.M. HEERSCHAP

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## 1. Introduction.

'Employment' is in the centre of attention in the tourism sector. Because tourism is seen as an (international) growth sector and is considered to be labour-intensive, policy-makers (e.g. politicians) like to see the development of this sector as one of the means to tackle unemployment in their region. This is especially the case for unemployed persons at the bottom of the labour market, such as women, immigrants and young people with low educational attainment. In the Netherlands this idea is applied in the big cities, like Amsterdam and The Hague, where unemployment rates are high. But also in some rural areas, where there is less work for farmers, policy-makers like to propagate the development of (ecological) tourism. Secondly knowledge of the tourism labour market is considered important because this provides opportunities to improve the professionalism in this sector. In the light of the growing (inter)national competition, improvement of professionalism is considered necessary. Finally more and more attention is given to the economical importance of the tourism industry and hence the number of jobs it creates. The WTTC even predicts that in the year 2005 1 out of every 9 jobs is tourism related. It cannot be denied that a lot of this attention comes out of self interest. This often leads to the circulation of questionable data and stereo-types. Statistics should play an important role to uncover these stereo-types and monitor developments.

## 2. Methodology.

As 'employment and tourism' are in the centre of attention, it is surprising to find only a few studies in the Netherlands on this subject. Studies which have been done are often fragmented, regional and usually limited to the branch of hotels, restaurants and cafes. But more importantly these studies often start out from the demand side, that is the expenditure of tourists and holiday-makers. In these cases always some variant of the multiplier-method or input-output analysis (among which: employment coefficients) are used. This only provides some insight in the development of the number of jobs in the (different segments of) the tourism labour market. Such studies cannot say anything about the structure of the tourism labour market. If insight is desired in the structure of the tourism labour market, the sup-

ply side, that is: the employment in enterprises and institutions which offer products and services to tourists and holiday-makers, should be the starting point of the study.

If this is done, however, a rather complicated situation is created. Not only is there the problem of defining 'tourism' from a supply side perspective, one also has to deal with other problems as well. To name just a few:

- Even if there is something like 'a tourism industry', 'the tourism labour market' does not exist. Totally different segments of the tourism labour market are involved. Within these different segments, such as: travel agencies, accommodations and transport, different factors play a role.

Even on the level of jobs in a particular segment different factors have to be taken into consideration;

- Besides the distinction into segments and jobs there are other complicatory factors, such as: differences per region, differences in the stage tourism is in in that particular region, the general factors of the labour market as a whole and of course the developments in the demand side of the tourism market place;

- Not only 'tourism', but also 'employment' should be defined from a statistical point of view. What are we talking about here? Are jobs from less than 4 hours included? Are we talking about fulltime-equivalents or about the number of fulltime and parttime jobs? What about people on call, seasonal employment and informal labour? Are indirect and induced labour included? Are we only talking about employees or also about self-employed people and their relatives, who help out? And what is the source of the data? In the Dutch situation the different sources for employment figures (e.g. labour force survey, enterprise survey and registrations) often supply different figures.

- The availability of reliable statistical data.

In view of the complexity of the subject, the study on 'Tourism and employment in the Netherlands' from Statistics Netherlands (CBS) was deliberately set up in a simple way. The goals of the study were:

- to find a flexible way to define 'tourism' from a supply side perspective;
- to investigate whether data from the employment statistics can be used;
- and whether a statistical system could be set up to monitor employment in tourism;

To define 'tourism' a number of groups and classes were selected from the NACE/ISIC-classification. For this selection the following criteria were used: association with the WTO definition of tourism, the degree of tourism specialization of the group or class (e.g. tourism driven versus tourism related by the use of turnover), availability of reliable statistical data and direct contact between enterprise and tourist. This last criterium means that indirect and induced employment were left out.

The actual aim of the study was to present data in a flexible system of groups and classes on the lowest level possible from the NACE/ISIC. With such a system readers would be able to compile their own definition or core of tourism. With the available employment statistics in the Netherlands this was not entirely possible. Only figures from classes on a NACE/ISIC 2 or sometimes 3 digit level could be used as reliable data.

The selection eventually led to the following five groups: 'Travel agencies and tour operators', 'Accommodations', 'Food and beverages' (i.c. restaurants and bars), 'Culture, recreation and amusement' and 'Transportation'.

It is clear that not only tourism but also recreation was taken into account in this study. From a supply side perspective it is very hard to make a distinction between these two segments. It is also clear that only parts of the employment in the group 'Transportation' can be allocated to 'tourism and recreation'. Therefore, in the end results, a maximum variant, including 'Transportation', and a minimum variant excluding 'Transportation', are presented. The actual number of jobs in the tourism and recreation sector in the Netherlands is calculated on the basis of these two variants.

The use of official employment statistics meant that informal labour (of course), seasonality and jobs from less than 4 hours were excluded and that figures only could be presented on a national level. Also employment in groups, like souvenir-shops, insurance companies, information services etc., was left out due to the fact that these groups were too small to obtain reliable data.

### 3. Some results.

The main results are presented in the table below.

In 1993 the size of the employment in the tourism and recreation sector in the Netherlands was around 294.000 full-time and part-time jobs. That is about 5% of the total employment in the Netherlands. This means that roughly 1 in every 22 jobs is generated by the tourism and recreation activities. The development in the number of jobs in the tourism and recreation sector in the period 1987-1993 matches the trend in the total services sector: that is strong growth. In this period 62.000 more jobs were created in the tourism and recreation sector. This rise has been slowing down in recent years though. Noticeable in these developments are: the increase in part-time and flexible jobs and the number of women (re-)entering the (tourism and recreation) labour market.

In comparison with the general employment situation in the Netherlands, the employment structure in tourism and recreation is roughly characterized by: slightly more women, more immigrants, more part-time and flexible jobs, a relatively young labour force, more people with low educational attainment and more self-employed people.

The size, developments and structure of the employment in the distinguished groups and classes in the tourism and recreation sector, however, differ greatly. It is clear that every group and class has its own specific characteristics. Especially the employment in the groups 'Transportation' and 'Travel agencies and tour operators' provides quite a different structure. These differences per group and class can of course also vary strongly per region. It is clear, as mentioned above, that 'the tourism and recreation labour market' does not exist at all. For some groups standard statements about tourism, like: growth, creation of jobs for people at the bottom of the labour market and labour intensive, are simply not valid any more.

If our study is compared with a another recent study on employment in tourism and recreation in the Netherlands, using a demand side perspective, there is a great difference in the number of jobs. This study, done by the research institute NRIT, presented a number of about 190.000 jobs direct employment in tourism and recreation in the Netherlands in 1992. This difference of about 100.000 jobs is not easy to explain. Explanations could be:

- on the part of the study of the NRIT: the use of estimates for the spendings of groups of tourists, implicit modelling (e.g. employment coeffi-

clients), the underestimation of the percentage of parttime jobs and the underestimation of day-trippers;

■ on our part: overestimation due to the 100% allocation to tourism and recreation of jobs in segments like restaurants, bars, culture and sports.

Tab. 5 - Employment in the tourism and recreation sector in the Netherlands

	Tou- rism in ge- neral	Travel- ag. and Tour op- erators	Accom- moda- tions	Food and Beve- rages	Culture, Recrea- tion and Amusement	Trans- porta- tion	Nether- lands Total
<b>SIZE, 1993:</b>							
	x 1000						
<b>Number of jobs (1):</b>							
Maximum (incl. Transportation)	379	11	49	119	76	124	6478
Calculated size	294	11	49	119	76	39	6478
Minimum (excl. Transportation)	255	11	49	119	76	-	6478
<b>DEVELOPMENTS (maximum variant):</b>							
	%						
<b>Jobs(1) (average growth p/a):</b>							
1987-1990	3.7	15.6	5.0	4.9	2.9	1.7	2.4
1990-1993	2.4	-0.9	5.0	2.6	2.0	1.7	1.1
<b>STRUCTURE (average 1991-1993. maximum variant):</b>							
<b>Sex:</b>							
women	41.0	71.8	51.4	49.1	52.9	20.5	38.1
<b>Age:</b>							
15-24	22.9	27.5	28.8	36.9	17.4	10.8	17.8
25-44	55.3	57.5	53.2	48.5	57.0	61.2	56.8
45+	21.7	15.1	17.9	14.6	25.5	28.0	25.4
<b>Education:</b>							
low	12.5	2.2	13.4	16.1	9.4	11.7	10.5
middle	75.1	76.1	79.6	78.9	67.0	74.6	68.2
high	12.3	21.7	7.0	4.7	23.6	13.6	21.2
<b>Nationality:</b>							
immigrants	11.6	11.0	13.5	16.4	7.2	9.3	7.3
<b>Working hours:</b>							
20- jobs	22.7	8.3	21.8	29.4	37.4	8.8	16.4
<b>Work associates:</b>							
self-employed	13.8	7.5	12.6	28.3	10.4	3.5	12.4
employee	86.2	92.5	87.3	71.7	89.6	96.5	87.6

Source: Statistics Netherlands

(1) Jobs of more than 4 hours

Source: FEDERAL OFFICE FOR INDUSTRY AND LABOUR, Division of tourism

#### 4. Possible further developments.

In the light of the complexity of the subject, the way this study was set up was rather simple. But it is easier to start simple and elaborate afterwards than to try to tackle the whole problem at once. Furthermore the first step of statistics is to monitor and describe the present situation. Only the next step is to provide explanations.

The conducted study can be improved in several ways. For example:

■ Improvement of the definition of tourism and recreation. For example,

by adding more groups and classes (on a lower level of the NACE/ISIC). Examples are: the tourism information sector, insurance companies, but also large parts of the retail trade. The possibility of international comparison should be kept in mind here, although the use of the SICTA is doubtful (too detailed);

- By incorporating indirect employment (e.g. intermediates, distributors and suppliers) in the system. 'Potter's value chain' can for example be used as an instrument here;

The use of ratios to allocate proportions of the employment in the distinguished groups and classes (see the SICTA) to the different segments in and types of tourism and recreation. These ratios can also differ in time and per region. Not much research has been done on these ratios;

- By taking more variables into account. To name a few:

- \* wages and labour costs (incl. tips etc.);
- \* seniority;
- \* occupation;
- \* job vacancies;
- \* working conditions (incl. informal and 'black' labour);
- \* trade union membership.

■ The last step is to make a more elaborate analysis of the labour markets in the different groups and classes of the tourism and recreation sector.

At this moment this goal is still too far away. There are too many factors to do this properly, and these factors are often determined by the local situation (contingency theory).

Some factors are, for example: all kinds of developments on the demand side of tourism (e.g. different markets, new products), all kinds of developments on the supply side of tourism (e.g. number and types of enterprises entering and leaving the segments of tourism, turnover, rentability, competitiveness, investments and level of automation) and the situation on the different (local) labour markets (e.g. supply and demand of labour, labour conditions, unemployment, productivity, vacancies, wages). Besides these factors seasonality (two labour markets) and informal labour play an important role here.



**SESSION 3**  
**THE TOURISM INDUSTRY:**  
**INTEGRATED STATISTICAL INFORMATION AT A**  
**MICROECONOMIC LEVEL**



# INTRODUCTORY OPENING: THE TOURISM INDUSTRY: INTEGRATED STATISTICAL INFORMATION AT A MICROECONOMIC LEVEL

by M. Giovanna Mamberti Pedullà

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*Director of National Statistical Institute, Italy*

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Studies and observations presented in session 3, dedicated to the theme "The Tourism Industry: Statistical information integrated at the micro-economic level", have revealed the ways in which tourist activity is, perhaps more than other productive activities, both multi-dimensional and transversal, and how full understanding of it is possible only through the integration of statistical information about the related economic and social context.

The complexity of subjects confronted in this session and the high level of in-depth research of the contributions guarantee suitable reflection on the problems connected with the measurement and representation of these activities.

In recognition I would like to thank the co-ordinators, EUROSTAT and ISTAT, for an event so highly stimulating, when considered from a scientific point of view.

The phenomenon of tourism is found where there is a potential for touristic "supply", where there are the natural "goods" (climate, natural beauty, environment), recreational structures; where one can benefit from a wealth of landscape and cultural "goods".

A condition for the development of tourism is that the latter be accessible, and so an adequate transport network is present along with order and security.

More efficient tourist offerings are required by a demand that is constantly becoming more dynamic and diversified in time with the growth in leisure time and income.

From an economic perspective this determines a shift of income used for consumption between regions of different countries or between regions of the same country.

The transfer of income among regions of different countries is measured in the international Balance of Payments, the transfer of income between regions of one should be measured by an inter-regional balance. The analyses of two balances would allow the measurement of how the travel industry contributes to bring about the development of areas with a touristic vocation. This shift in income has, in fact, led to a natural process of economic development in such areas, causing a sharp increase in productive

sectors that respond with increasing energy to the new requirements of demand.

The whole of such inter-relations constitutes an income multiplier, with varying effects also on investments and employment.

In this process various service sectors have particularly benefited. Hotels and comparable hospitality units, bars, restaurants and other commercial concerns, commercial distribution, means of transport, various institutions of the public administration, and indirectly, many industrial and craft sectors, private construction and public works, in particular agriculture, where forms of integration like farm holidays have developed.

Tourist expenditures increase the speed of circulation of the money supply and the economic effects appear evident, especially when tourist consumption is in strong currency.

In order for all these aspects of the phenomenon to be adequately represented, it is necessary to inter-relate them in an organic system.

Therefore it is necessary to project a whole set of surveys in view of creating a system communicating among them, by adopting concepts, definitions, classifications and methods of treatment in common.

This is useful to micro-economic analyses and arrangement of the empirical evidence derived from very limited territorial spheres (census sections), which are characterised by interaction among different aspects of the social and economic reality. This permits us to measure the impact of the phenomenon and its effect on other activities, to understand why territories potentially endowed with touristic possibilities show a sharp separation between potential and the real product. This allows us: to obtain information on the businesses operating in the tourist sector by size, kind of services offered, quality and price of services delivered, the kind of management and category of membership; to intersect this direct information about businesses with that concerning the area where they work, which is in turn characterised by more or less adequate infrastructures, by other private operators and by public operators who are more or less present with policies for the protection of the artistic and environmental patrimony. In other words, with that complex network of externalities that alone can define the potential of the tourism supply of an area, the potential profitability and capacity of a geographic area to create wealth; and finally to inter-relate the structure and the organisation of supply to the demand, in its turn characterised by sex, age, profession, income, etc..

The synthesis of this information can be expressed in a satellite account that integrates all this information in a macro-economic framework.

In such a way the information becomes an important instrument for policy, for decisions and for knowledge.

# THE MICROECONOMIC APPROACH AS FORM OF INVESTMENT FOR STATISTICAL INFORMATION ON TOURISM

by Mario Antonio GRECO

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*National Statistical Institute, Italy*

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I'd like to give undivided attention to some ideas stated by Mrs. Pedullà.

Our main purpose is to stimulate reflections on the evaluation of microeconomic information on tourism.

I think that this has to be intended as an investment in growth of the whole information in order to have also a macroeconomic view of the phenomenon.

We know from the everyday experience that economic studies and researches, in general, are deeply influenced by the available basic statistical information. This latter also represents, to certain extent, the funds standard set aside by Governments for public statistics functions.

In the last times some of the circumstances common to Countries with advanced economics have pointed out following situations:

1. fund reduction in real terms. This is specially due to budget policies devoted to control the General Government deficit;

2. an exponential increase of the information demand. From another point of view this situation can be intended as a clear acknowledgment of the rule and the function of the statistical information;

3. the necessity to reduce the statistical costs charged to the enterprises;

4. the reduction of human resources, too. In Italy, due to the present bonds (real veto on hirings), the problem has been faced by means great investments projects in new computer technologies (hardware and software);

5. in this situation it is also important to improve quality in order that information can recover its own space, its true role, i.e. statistical information in the proper sense. From this point of view it is necessary to reflect, to gain clearness by recovering the methodological transparency, the contents and the precise limits of the information range.

All these demands have brought, in Italy, to a deep analysis of the situation.

The result is summarized in a middle-long term strategic message: methodological and organization plans have to be developed to **change the productive process of the statistical information** into economic forms and modern forms (i.e. by using telematic instruments seems to be very interesting).

This is where the need, recalled by Mrs. Pedullà, of the so-called **integrated system of the economic statistics** comes from: it consists of a series of statistical information coming from a net of matched surveys and researches developed according to a microeconomic logic.

These surveys are based on the well known economic rules, on common interpretative patterns, on definitions and classifications.

In these researches every data is strongly and logically related to other data by transparent economic relationships. Starting the project "integrated system" will not be painless. It will surely involve great problems of matching and communication among the different researches, also taking into consideration that they have been planned by different people in different times and made by the different Istat all over the world.

At the moment this project can be, probably, the only way to assure compatibility, starting synergies, between the fall-off of resources and the need of widening the information base.

The wide and integrated statistical information is also becoming more and more interesting. The kind of approaching, as already said above, can only be microeconomic in order to organize the integrated system.

As a matter of fact it is physiological for the system: it underlines decisions, behaviours, and emphasizes the individual usefulness of the operators and the territory.

What we have said can also be extended to tourism whose traditional authentic expression features the localization of the effects.

The organization of the integrated information range on tourism at microeconomic level seems to be the logical reference pattern which we can work with.

In this pattern the obtained economic information interfaces other information and other variables. In this context every basic statistical information compares with its corresponding "counterpart" information (the buying operator corresponds to the selling enterprise, the endowing organization corresponds to the payee enterprise of public funds, etc.).

But what does an integrated system of the economic information, in this case adapted to tourism, mean? It enables a more advanced reading and interpretation of the information and, furthermore, makes possible a better distribution of the resources devoted to the sector. The integrated system is based on two points:

- \* the first one consists of the theoretical project on information: it is an interpretative pattern based on the microeconomic approach where the information can be placed. Its premise is represented by the correspondence of concepts and definitions to the traditional ones described in Economic Handbooks.

- \* the second one consists of all the methodological and organization operations necessary for the realization of the integrated system of the tourist information.

The microeconomic basis of the theoretical project is:

1. the balance game of supply-demand;
2. the evaluation of the counterpart information;
3. the distribution analysis of the information.

The balance game of supply and demand actually means to test, in every possible occasion, according to the territorial detail and to the deepest analysis, the correspondence between the surveyed statistical information in relation to the offer and the surveyed information in relation to the demand. The balance has to be searched and tested not only within one

survey but, as far as possible, also by the comparison of two or more surveys. This feature leads to the autovalidation of the information but needs also a great matching of the surveys themselves.

As far as concerns the evaluation of the counterpart information it consists of the use, as we have already said, of a simple survey technique and questioning and, of course, of data reading. From this point of view two statistical information will be put into the integrated system: the former is the directly surveyed information after being checked on the base of its consistency; the latter is turned over (for example: if it has been surveyed that a local hotel has endowed a local tourist organization the resulting amount has to be registered twice. The first registration pertains to the economic account of the hotels as current transfer to General Administration; the second registration pertains to the economic account of the local public organization in the current transfers from enterprises). The principle to be adopted is exactly that of the double entry or double registration of the information. Therefore the typology of demands with possible turn over needs to be increased.

As regards, finally, the distribution analysis of the information we think it better to reduce data demands to minimum. It is more convenient, actually, to aim mainly at the most important and useful information of the whole reading of the tourist information. This means that certain limits can't be overwhelmed so that the statistical costs charged to the enterprises can be controlled as much as possible. The theoretical project of the statistical information on tourism bases itself on two data lines:

1. territory
2. identity supply-demand.

The territory represents an item that cannot be given up. The territory is not only a strategic item concerning tourism but, within the integrated system, it is really the essential object for the economical and social analysis. It represents, then, the common reference of the integrated system.

The identity supply-demand must model the following main information routes: from the point of view of the demand the statistical information should develop mainly according to the following items:

A. tourist identity (nationality, age, sex, cultural level, profession, life style, income)

B. the choice to make tourism and which kind of tourism (reasons for choice, personal choice or related to other reasons such as "advertisement" etc.)

C. where and when to make tourism (reasons for choice, personal choice or related to other reasons such as "advertisement", past tourist experiences, future tourist plans etc.)

D. chosen organization solutions (organized travel, independent travel, other kinds)

E. tourist costs (kinds of costs, different kind of costs with reference to the kind of chosen tourism etc.)

F. after-tourism (grade of satisfaction, global opinion about the bought tourist services, correspondence of foreseen and final costs, diffusion effects, etc.) from the point of view of supply the most important information is as follows:

A. environment quality (care of territory, cleanness, hygiene, road conditions)

B. bedspace and performance (variety of bedspaces, including unofficial private bedspace, from the most important to the cheapest ones in terms

of rooms, bedspace, quality of sanitary services, accessories, parks and gardens, indoor garages. As regards performance: number of clients, their nationality, number of overnight stays)

C. easy access to the main national and international transport networks (distance of the tourist place from the connecting points to the national and international transport networks both for outward and return journey and for middle range trips)

D. availability of general cultural structures (museums, libraries, swimming pools, other sport equipment etc.)

E. welcome level or local reception (behaviour of local people, collaboration and kindness towards tourists)

F. public services and other local services (quality level of restaurants, availability of shops to buy goods and services, local travel agencies, information centres about local visits, guided visits etc.)

G. local prices, change and bank facilities

If we take into consideration the supply analysis, just to remain in our assigned field, we can remark that the matched information system about tourism can reach integration with the general economic information system through:

1. a vertical development of the statistical information where the enterprises operating in the sector are not considered in relation to their tourist feature but are treated in the same way as other services or industrial enterprises.

2. a horizontal functional structure of the activity of the enterprises in the point of view of tourism, which we are interested in. This means particularly to plan and organize structural survey and, in some case, also connected with the current economic situation:

a) about economic accounts of hotels and other official hotels;

b) about accounts of unofficial hotels;

c) about economic accounts of travel agencies and restaurants, bars, cafès etc.

d) about features also related to the quality of the supplied services in the hotel and outside the hotel (restaurants, bars etc.)

e) about the flow of clients in the hotels (also in conjunctural sense)

f) about quality of environment (territory, parks, gardens, rides, cycle paths, etc. cleanness level, public hygiene, features of urban and extra-urban road conditions)

g) about easy access to the main national and international transport networks according to the different ways of transportation and in terms of distance of the resort from the connecting points to the network)

h) about availability of general cultural structures (museums, libraries, courts and sport equipment, cinemas, theatres, discos, etc.) and their opening times

i) about welcome and reception level

l) about public services and other local services (availability of shops to buy goods and services, local travel agencies, information centres about local visits, guided visits, urban and extra-urban public transport, hospitals, etc.).

As regards the theoretical reference patterns of the statistical information to be developed as a whole, I think that in the microeconomic approach to the supply the information range should be firmly based on information items which enable to develop analysis of the supply curve, of the costs and

proceeds in the different situations, of the prices according to the different features of the operating enterprises in the market.

This situation needs, therefore, a varied availability of information about tourist enterprises, enterprise estate and about the features of its main economic activity, about their dimensions and supply capability, about their costs and proceeds and about occupation.

Such information items can lay emphasis on the individual usefulness, on choices and decision behaviour of the economic operators.

Anyway all this can't be sufficient if the market, where enterprises operate, hasn't been analysed in a suitable way. It is therefore necessary to know the territory not only in its immediate extension but also in the widest economic sense in the light of the important role nowadays played by transport and communication that have reduced distances so drastically.

I'd like to limit my report to the consideration, from this particular aspect, of the economic accounts, which are basic information items regarding the above analysis.

Everything has to be done in view of reducing the statistical costs charged to the enterprises.

It's not, actually, so simple to follow this principle so we have to turn our attention to the business economic account.

This choice makes the answer of the enterprise easier as it can gather the required statistical items (almost) directly from its own balance simply and, chiefly, with the same language. The statistician has, then, the task to translate the business language into a general economic language which has to be real, matched and locally integrated: this can happen by asking the enterprise for some more items referring to the balance items.

In short, the business balance sheet itself is the basis of the structure of the statistical information.

Beyond the theoretical project I think it's useful to give mention of the whole necessary methodological and organization operations to put into practise the integrated system of the tourist information.

The programm of ISTAT for the next three years 1996-1998 gives me the chance to explain some of these aspects.

The integrated system of the tourist information which can be easily extended to other economic sectors is mainly based on the following points:

1. organization of a reference statistical file for operating enterprises. It makes possible to survey, in real time, everything's happening in the tourist market also concerning the demography of enterprises. This file is a subset of ASIA, the general reference file of ISTAT valid for economy;
2. great use of statistical-administration data about hotel system so that it's possible to have a panoramic view of the already acquired data by Public Organizations (data on direct taxation, IVA (= English VAT Value Added Tax) return, social insurance taxes)
3. standardization of definitions of the existing survey schedules on tourism, excluding redundances;
4. matching of concepts and classifications which have to be as nearer as possible to the language of the tourist enterprises;
5. development of standardized techniques which have to be anyway referable to the same methodological lines so that the basic data can be treated and controlled in their quality;
6. introduction of microeconomic analysis methods;
7. experimentation of telematic data acquisition from the tourist enter-

prises, when it's possible, by means of policies intended to give back the aggregated statistical information to the same units and to the Category Associations through the telematic method;

8. development of account system of every tourist enterprises including those of little dimensions;

9. standardization of methodologies so that partial and total missing survey data on tourism can be integrated. Also about this point, trying to solve the problem of partial and total missing answers, a unique methodological line can be adopted so that integration and comparability of data can be obtained;

10. production of conjunctural information on tourism based on the definition of a unique sample of enterprises with main tourist activity, which has to be selected according to the business dimension, kind of economic activity and territory. Only one valid schedule can be expressed for each case.

In conclusion I'd like to take the hint from the integrated system to present, as an example, some notes to stimulate valid studies on the vertical integration.

I mean, first of all, the traditional approach to measure the tourist flow from the point of view of supply.

I have to make a premise: as everybody knows, on one hand, statistical information gives consistency items of hotels whose bedspace can be determined for every pre-selected resort. On the other hand, in front of hotel and bedspace, at clients' disposal, statistical information is related to the demand and to the use of the structures (clients presence, number of overnights).

For example, from the relationship between number of overnights and bedspace it's possible to get the use level.

This is an important information, from the point of view of tourism, not only as regards the local situation but also larger territories.

The obtained statistical information is generally relevant in itself, but it often leaves some important questions unanswered.

For example we can wonder what tourists did and where they have been when instead of going to a hotel they went to unofficial residences or to friends' or relatives' houses etc.

Hotel information can't be used in general, though it is relevant, to represent all the tourism of the examined place; as a matter of fact the so called tourism of passage, about which we don't know anything, has to be added to the controlled tourism on the base of bedspace.

From this particular angle official statistical information seems to be lacking because it is actually difficult to localize this flow exactly.

It is necessary that we face the problem.

The frontier controll of the foreign visitors give a general picture of the phenomenon at national level, but it can add very little to what we know about the distribution of the foreigners in the different regions in Italy or in the different places.

Furthermore, this information is very weak if we compare it to the international situation, as different experiences in other countries have proved. Homogeneous information between two countries with the same tourist flow is not absolutely sure. We have to face this aspect through a better evaluation of other available information in order to read the phenomenon in a better way and more deeply.

This is how a vertical integration of the tourist phenomenon becomes possible. A contribution to the widening of the local tourist information can come from statistics on passenger transport.

At the moment the Statistical Institutes don't pay much attention to the data use about transport aimed at this tourist analysis: they are only considered as accessory information. We have to remark, anyway, that specially at international level new proposals are being made to realize sample survey about transport based on interviews to families so that we can survey their movements, periods, reasons, origins and destinations, used means etc.

I think it is important to develop studies for a better modelling of the relationship between tourism and transport.

As regards the local situation, at least in Italy, a lot of data outlined as historical monthly series on passengers movements are available according to the different kind of transport. I am talking about transport by sea (from port to port: disembarked and embarked both Italian and foreign passengers), transport by railroad (from railway station to another railway station) and many others can be acquired, against payment, from the information given by the motorway network (historical series of light vehicles between tollbooths etc.).

Other important data can be surveyed with the help of air statistics (from airport to airport). In this case it is probably better that the information is integrated with sample surveys about transported passengers giving data, at least, about nationality and purpose of travel. Other information makes possible to define, in a univocal way, the kind of travel when the origin (or destination) place itself is a resort. Further data will be available in a short time in Italy thanks to the automatized monitoring of road traffic made by ANAS and by other Public Administrations owners of road networks.

These Organizations are obliged, according to the New Rules of the road 1993, to monitor road traffic.

It means that the main road conditions are surveyed thanks to special sensors along road networks, which are connected to a personal computer, in hundreds of important points on the national territory: passed vehicles, their silhouettes, days and times of transit and other important information.

Data about transport are generally available in the place where transport has started and where it stopped.

If these data are read following their monthly variation they will provide information about the influence of the season on local transport, that is probably due to tourists. If it is also possible to have, as it often occurs, monthly and quite long point-to-point series, building of models to be used for an interpretative reading of the evolution components is surely simplified. It seems actually possible, by the integration of the information range with weighed sample surveys, to isolate the systematic local movements (such as home-work-school and back) and to estimate the tourist component also with reference to its evolution during the year.

In any case I think I have given a possible information evolution line intended as vertical integration between tourism and transport.

I think, in conclusion, that it's convenient to evaluate these themes in an international session starting methodological reflections about statistical problems connected with the analysis of transport data related to the tourist flow.



# THE SURVEY ON THE ECONOMIC STRUCTURE OF TOURISM IN SPAIN

by Caridad Nieto RODRIGUEZ

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*INE, Tourism Statistics*

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The economic studies of INE on tourism: sector supply of tourism graphics on (enterprises, personal, production), Structural survey: Statistical units

Personal, Expenses, Incomes, Economic results.

General results: Enterprises, Establishments, Personal, Expenses and taxes Economic results. Graphics: sector restaurants, hotels and travel agencies]

INE must cover the needs of information of tourist activity for the national and international users with the guidelines given by EUROSTAT and the recommendations of the WORLD TOURISM ORGANIZATION and the OCDE, also the needs of private users and business corporations.

When INE studies the activities of the production branches it also approaches tourism and its present impact on economic activity and its contribution as a sector of the general productions of the country. The structural surveys are very useful to study that impact.

The classification of economic activity provides a supply-side structure and permits the identification of the main activities or products that comprise tourism.

INE carries out conjunctural surveys and structural surveys, on the supply-side of tourism.

Some indicators can be obtained with conjunctural surveys which combined with the result of the structural surveys enable us to make a yearly projection and thus obtain information about behaviour of the sector.

This task will give us an approach to structural surveys.

INE has a CENTRAL DIRECTORY OF COMPANIES according to the NACE REV 3 as framework surveys.

The conjunctural surveys are based on a monthly reference and the structural surveys are based on an annual reference and are carried out every five years.

To study tourism supply it must be taken into account that "the production of goods and services becomes a tourism supply when it is a part of the demand made by tourists".

The branches of the production that satisfy in a specific form the tourist consumer and are studied in INE by structural surveys are:

1 accommodation

Hotels and similar establishments

campsites (a future project)

tourists' apartments (a future project)

2 Restuarants, cafes, bars,  
 Catering  
 3 Travel agencies and tour operators  
 4 Transport  
 airtransportation  
 scheduled flights  
 non-scheduled flights  
 land transportation  
 railways  
 coaches,buses and other road transport  
 waterway transportation  
 (I'm not going to speak here about the transport survey)  
**STRUCTURAL SURVEYS**  
 Variables in the sector

When an approach is made in this way we must begin by:

## **1 Statistical units**

### **1.1 Enterprises**

- Present legal status
  - sole propietorship
  - partnership
  - enterprises limited by shares or by guarantee
  - non-profit organizations
  - others(state companies, etc)
- Secondaries activities (complementary to the principal activity) and others
- Years of activity
  - months of activity during the year
  - number of establishments
- control or non-control by domestic enterprises by foreign E U enterprises by foreign non-E U enterprises

### **1.2 establishments**

- category
- capacity (places, beds and bedrooms)
- surface
- services available
  - services that are managed by the same enterprise
- legal status of the enterprise propietor
- control or not of capital of the enterprise
- years of activity
  - months of activity during the year
- organizations (work with other enterprise groups)
- number of persons employed
- turnover
- expenses

## 2 Personal

(to study this variable it is necessary to opt for a finer breakdown of classes of persons employed)

- number of persons employed
- number of persons employed on part time basis
- numbers of wage and salary earners
- numbers of female persons employed
- numbers of salaried hours worked
- quarter references
- variables relating to personnel qualification level

The treatment of economic variables is made with the guidelines of "Plan of Accounting for Enterprises" according to the Directive of the EU in this field.

## 3 Expenses

- labour costs
  - gross wages and salaries
  - employer's compulsory social security contributions
  - others labour costs
- purchases of goods and services
- taxes
- depreciation
- investments
  - inmaterial investments (patents, licensed production...etc)
  - material investments:
    - ground
    - building and constructions
    - equipment, furniture
    - elements of transport, etc

## 4 Income

- Turnover and its distribution by activity
- other incomes
- operating subsidies
- sales of capital goods

## 5 Economic results

- production
- purchases of goods and external services
- variation in stocks
- Gross added value market prices
- taxes
- operating subsidies
- gross added value factor prices
- labour costs
- gross excedent of exploitation
- depreciation
- net excedent of exploitation

## GENERAL RESULTS OF STRUCTURAL SURVEYS

They are obtained with reference to:

### 1 enterprises

enterprises by geographical distribution and

- main activity
- present legal status
- number of persons employed
- number of wage / salary earners
- turnover
- control or non- control

enterprises and turnover by

- number of persons employed
- numbers of wage and salary earners

### 2 establishment

establishment by category (or activity) and present legal status

- services available
  - years of activity
  - months of activity
- establishment by geographical distribution and
- services available
  - years of activity
  - months of activity

### 2 Personal

personal for labour relation and sex by  
(for enterprises)

- geographical distribution
- present legal status
- turnover
- number of local units
- main activity of enterprise
- Time in number of years, of activity of the enterprise
- number of months of activity personal for class of contract (for enterprises)
- geographical distribution (for local units)
- category
- capacity (places and bedrooms)
- surface
- months of activity
- organization
- turnover

### 3 costs and taxes

(for enterprises)

- geographical distribution
- present legal status
- turnover
- control or non-control of the enterprise by domestic enterprise by foreign EU enterprise by foreign non-EU enterprise
- months of activity

- organization (form part in other enterprise group)
- number of persons employed  
(for establishment)
- category
- capacity
- surface
- services availables
- organization
- type of contract with their clients

#### 4 Incomes

- (enterprises)
- geographical distribution
- present legal status
- control or non-control of enterprise
- turnover
- main activity
- numbers of persons employed
- numbers of wages and salary earners
- numbers of local units  
(local establishments)
- categorie
- capacity
- surface
- services availables
- organization
- form of contract with their clients

#### 5 Economic results

- (enterprises)
- geographical distribution
- present legal status
- control or non-control of the/by the enterprise
- months of activity
- numbers of persons employed
- numbers of wages and salary earners  
(establishment)
- category
- capacity
- services supply
- months of activity
- organization



# TOWARDS THE BUILDING OF AN INTEGRATED STATISTICAL SYSTEM ON TOURISM IN THE LIGHT OF THE FUTURE COMMUNITY DIRECTIVE

by Claudia CINGOLANI and Roberto GISMONDI

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1. Community Directive about Tourism Statistics
2. Some notes on the Directive
3. Directive: premise for the building of an integrated statistical system
4. Answers to the Community Directive:
  - information on arrivals and monthly presences
  - business trips
  - *a sampling project among hotels*

## **1. Community Directive about Tourism Statistics**

As everybody knows one of the most important points of the program of the European Union concerning tourism is to promote a matched development of statistics in this sector at international level. The fundamental premise of the standardisation process of concepts, definitions and classifications is the building of a reference model to which the different methodologies applied by the Member States has to be brought nearer. The main purpose is the organisation of new statistics or the evaluation of the existing data in order to put into practise an uptodate and comparable community information system about the main components of supply and demand.

Though nowadays definitions, classifications and collecting methods concerning tourism in the Community States are very different, the Council of the European Union has made a proposal to put into practise a Directive to collect statistical information on tourism whose project is in the process of being approved in the meantime. Starting from an evaluation with a few broad lines of the community plan it is possible to point out three inspiration items of the Directive:

- users of public and private services need to have, in short time, reliable and comparable statistical data on tourist supply and demand, at community level: a reliable observation of the structure and of the evolution of demand and supply in tourism cannot be realised in every single member state outside a suitable and recognised community framework. Moreover, it has to be taken into consideration that a community integrated survey system can produce range economies giving to each state a great information return.

- Tourism industry competitiveness in the Community has to be evaluated on the basis of more knowledge about the volume of tourist movements, features of travels, kind of tourist, tourist costs, regional dynamics according to uniform survey patterns which can be comparable in time and in space.

- It is also necessary to have monthly data in order to estimate the influence of seasons on demand of bedspace so that we can help economic operators to develop more suitable strategies and policies which can support a wider seasonal distribution of holidays and promote tourist activities.

The great complexity of the examined sector and the many cognitive targets proposed by the Directive don't make easy the realisation of the operating programme under European coordination: the complexity of the concepts of the economic sector "tourism", including many different economic activities, directly or indirectly, connected with the tourist demand, doesn't enable a clear and univocal definition of all the supplying enterprises nor an easy surveying of which kind and how strong the demand is. As a consequence it is actually difficult to survey, at microeconomic level, the hotel sector and the too much widespread trend in the wide section of services to give a dimension to structure and performance of this sector using industrial account patterns that are generally too much inflexible and unable to get the quality dynamics of the market.

## 2. Some notes on the Directive

From the strategic-political and methodological point of view it is easy to understand that the European Union has the opportunity not to limit the Member States to strict rules about survey techniques for the surveying of the required data. But, on the other hand, the lack of uniform principles could hinder the unifying impulse of the project and not eliminate the inconsistency that sometimes occurs when observing data provided by National Institutes.

International statistics on single countries, processed by WTO and OCDE, are generally not homogeneous as in some case data about international flows come from the frontiers, in some other cases from houses and the two surveying methods can also provide different results. The Directive should, then, be supported by a coordination plan among national Statistical Institutes on the basis of a definition of uniform methodologies enabling the consolidation of international data without great lack of information quality. For example, the necessity of having information on the different tourism typologies (single and family tourism, business tourism, social tourism) concerning quite uncommon phenomena, or limited to the national territory, could raise reliability problems if the corresponding survey is made on the basis of indirect estimates or sample surveys and/or traditional surveys.

Another aspect concerns the integration of information targets of the project and the cognitive requirements of every State of the European Union which are related to the particular situation of every single country. It is sufficient to mention Bed & Breakfast in Great Britain, private rooms rented to tourists in Italy, regularly registered to REC (Register of Commerce Traders). The omission of a clear normative law in the Directive, in this respect, can influence the representativeness of the data to be processed and could create big differences between the flow data provided by frontiers and data provided by hotels, furthermore it could underestimate inland tourism very much.

Finally, we have to remark that a theme that has become more and more important in the last years, and that is not included in the project, concerns an organised production of middle-term estimations about inland and toward abroad tourist flow. The many tourist estimations can't help, in general, to outline clear information framework, not especially for the possible lacking techniques of the used estimation procedure, but for unavailability of relevant microeconomic data both about territory and typology, which are organised in a panel. In other terms wideness and variability of tourist supply range suggests to the private and public Research Institutes the necessity of special observers composed of a subset of operators representing the inland market trends. But without a specific regulation the risks of double estimations, structural mistakes and partiality of the collected information might play the opposite role of creating a systematic and integrated view of tourism.

In expectation of coming into force of the new regulation of the European Union on conjunctural indicators also on the section of hotel and public operations (section H NACE Rev. 1) that, starting from 1998, would bring to surveying variables such as turnover and number of agents every month or every three months, the integrated survey system should match the information collecting methods to prevent duplications and to optimise the efficiency of procedures. The organisation problems concerning the necessity of implementing the many specific sample surveys are not the same in the Community States, but they have to be faced from the beginning and evaluated as regards the necessary costs and hours/man very carefully.

### **3. Directive: premise for the building of an integrated statistical system**

The coming into force of the Community Directive will have a great impact on the national statistical systems and will force the Statistics Institute to check, or to integrate, the present surveying system. This event, beyond the charge on the development of the coming work programmes, as it strictly matches supply and demand, because of the uniformity of reference period and data diffusion, because of the minimum quantity levels and the territory detail of the required data, is a great catalyst for a new approach to the sector and strengthens the more and more general conviction that we have to accept the viewpoint of integrated information systems.

The fundamental new element of the project urges to overcome the rooted formulation in many countries, among them also Italy, according to which the information supplying about supplies sometimes happens in very different ways that can be hardly matched with the demand. If we want to summarise the new importance of this proposal expressed in the Directive we could say that the main purpose is the building of an integrated information system representing a theoretical reference framework for the final users; integration means, chiefly, to add items to a system in order to make it more complete and efficient; efficiency means, inevitably, the target to be reached. Strictly speaking it is not a matter of a simple integration in itself but of an aimed integration and a wider and continuous information flow from agents and users of the statistical data. In order that such an important project will be successful we have to state a clear and, at the same time, flexible definition of final users who receive data, that is the necessary pre-

mise to weigh the initial choices and to check the quality or the expected results. This aspect is much more relevant when we have limited time and resources, as these factors require, indeed, precise choices and give the hint to take into consideration all the possible benefits of an integrated management of information at the same priority level.

In the past years the necessity of wider and wider and upto date quantity analysis on tourism has made chaotic the statistics development of this sector and have created the best conditions for the increase of official and unofficial information sources based on direct, indirect surveys or estimations. This event has favoured confrontations and discussions giving a great boost to the sector but, on the other hand, has also made confusion so that the Statistics Insitute was recalled to its role as maker of "independent" and "authoritative" basic data in service of the public.

At the moment Istat can dispose of different surveys on tourism organised as follows: the basic structural features of hotel and the inland Italian and foreign tourist flows are surveyed during surveying the tourist supply, realised by the Central Direction of Statistics on Organisations and Enterprises, while people (and their movements) who declared to spend or to have spent holiday periods during the year are being studied by the Central Direction of Statistics on Population and Territory. Collecting times and ways and data publication are very different: though the surveys are made at good quality level, the surveys on supply reveal clear conjunctural data and still suffer from the delay in the data diffusion, while as regards demand we only have an ex-post framework of features which could have influenced the willingness to travel of the italian citizens.

#### **4. Answers to the Community Directive**

Community requirements integrate themselves with national requirements. The future coming into force of the Directive has urged a rixamination of the existing survey plans to start a betterationalisation or better integration of current activities. Within this framework, though knowing the engagement required by the project, there is a common interest expressed by national users in the required variables. The current survey systems are limited and lacking about some aspects that urge to be clarified and answered. In the following sections we have tried to answer some themes which the most of users are interested in.

##### ***A. INFORMATION ON ARRIVALS AND MONTHLY PRESENCES***

A first priority information set, as stated in the Directive project and supported by national users, comes from surveys on arrivals and presences in hotels. These data enable the monitoring of sector performance by quantifying the use level of hotel supply by inland and foreign tourism demand. These data are very important for market operators as they outline trends and provide useful indicators for market operators. The survey makes use of a complex collecting plan to which more than 500 Insitutions and Organisations on the whole national territory take part every month. It consists, furthermore, of a detailed information supplying about clients flows, given by all the hotels, making very difficult the different processing phase. One of the weakest point of the system is often that the enterprises, cooperating with Istat for the realisation of the project, don't submit their schedules

within the time limit. This forces us to make use of a quick estimation of lacking information. In order to assure temporary and final monthly and every three months data transmission within the time limit required by the Directive (respectively three and six months from the reference period), Istat is processing some simple procedures to integrate lacking data as follows.

To make easier the adjustment of the actual revelation system of tourist flows towards a greater swiftness in the data transmission procedure, as steered in Article 7, point (2) of the project of Directive (quarterly provisional data must be transmitted in 3 months from the end of the period of reference, definitive data in 6 months), Istat is planning the use of some simple procedures to estimate missing values occurring in current conjunctural surveys. For a better understanding, we will define with  $Y_{mi}$  the value for variable  $Y$  on the  $i$ -th unit in month  $m$ , and with  $n^1$  the number of units ( $\leq n$ ) on which this variable can be observed every month. By the way, it could be proposed a simple imputation technique by which, supposing a  $n \times 12$  matrix where rows contain units and columns are the 12 months, missing values are simulated on the basis of the following multiplicative model:

$$\text{imputation} = (\text{row effect}) \times (\text{column effect}) \times (\text{residual effect}).$$

In practice, for every year under observation the imputation procedure is structured in the following way:

(a) 12 column effects are calculated (monthly effects for every month  $m$ ), for units responding in all 12 months of the year only, given by the relation:

$$c_m = \frac{12\bar{Y}_m^{-1}}{\sum_{m=1}^{12} \bar{Y}_m^{-1}} \quad \text{where we have:} \quad \bar{Y}_m^{-1} = \sum_{i=1}^{n^1} \frac{Y_{mi}}{n^1},$$

given by the ratio between the  $Y$ -variable mean value calculated only on respondents in month  $m$  and the yearly average of monthly averages;

(b) then row effects are calculated (unit effects both for respondents and not respondents):

$$\bar{Y}^{(i)} = \sum_{m=1}^{m_i} \frac{Y_{mi}}{m_i c_m}$$

where the sum regards the only months when the  $i$ -th unit responds and is the previous monthly effect;

(c) units are ordered by increasing values  $\bar{Y}^{(i)}$  and the  $i$ -th incomplete case is linked to the nearest unit responding in every month, labelling with  $h$ ;

(d) the missing value  $Y_{mi}$  for every month  $m$  in which the  $i$ -th unit doesn't answer is estimated by the relation:

$$\hat{Y}_{mi} = [\bar{Y}^{(i)}] [c_m] \left[ \frac{Y_{ml}}{\bar{Y}^{(l)} c_m} \right] = Y_{ml} \frac{\bar{Y}^{(i)}}{\bar{Y}^{(l)}}$$

where in the 3 square brackets are shown *row*, *column* and *residual* effects respectively.

In this way, the method consists in a *matching* procedure by which a complete case is coupled to every incomplete case on the basis of the ownership of similar longitudinal characteristics. Because of its internal structure, this technique should be affected by a structural underestimation of missing values effects, being missing data rebuilt by the use of information coming from available answers only. Nevertheless, this method has some interesting properties:

1. the estimated values include trend effects (column effects) and individual effects (row effects) in a natural way;
2. this method doesn't need a particular subjective modelization for any subset of missing data, because of the unique treatment of every subset;
3. it's particularly easy to implement.

A simple adjustment of this procedure, that doesn't need particular complications, consists in sharing previously the panel units in homogeneous clusters (with a low variability inside), the most different as possible each other for what concerns the seasonal effects. Inside every stratum, among the  $r$  strata identified in this way, we will repeat separately the above mentioned techniques 1 or 2: so  $r$  series of seasonal parameters  $c_m$  will be calculated and the donor selection will occur among the only units without any missing value belonging to the same stratum. If a previous stratification is not carried out, very inexact estimations could affect the overall quality of procedures, for example because of different proceedings of seasonality effects on donor and receiving units, of possible changes of seasonality effects during the time and of an excessive number of months in which the receiving unit present missing values. In these cases is often better not to use any imputation technique for missing values, because the biasedness of estimates could increase highly as regards the case of simple removal of every unit with missing values before calculating the Y averages. Another improvement of the previous techniques is necessary if during the analysed year no answer for unit  $i$ -th is available. In this case 2 possibilities should be compared:

1. if at least one answer is available for unit  $i$ -th referring to the previous year, every monthly value for the actual year will be estimated by the formula:

$$\hat{Y}_{Ymi} = Y_{Ymi} \frac{\bar{Y}^{(Y-1,i)}}{\bar{Y}^{(Y-1,i)}}$$

where the 2 row effects in the ratio are calculated by using information of year (Y-1);

2. on the contrary, if the value regarding an additional variable Z is known in the actual year both for respondent and non respondent units (this variable could be expressed by the number of bed places), an estimate of the ratio type could be expressed by:

$$\hat{Y}_{mi} = Y_{ml} \frac{Z_i}{Z_l}$$

In the first case better result should be obtained if seasonality effects keep steady during the 2 years; in the second case good estimates will be obtained only if correlation among the variable object of estimate and the auxiliary variable is strong and, at the same time, with the same sign in every month. If more than one variable is studied (say, for example,  $k$ ), as frequent in real circumstances, the donor technique can work in different ways: donor could be selected in so many manners as the number of variables to estimate, with the consequence that for the same  $k$ -dimensional receiving unit  $k$  different donors could be selected. This could cause logical contrasts among estimated values: for example, if we need to estimate both the number of bed places and the global monthly arrivals, the latter could result higher than the global number of bed places available in that particular month. Another possibility consists in choosing one donor only, taking into account the variable considered of main interest among  $k$ . Frequently the donor  $l$  is selected if unit  $l$  minimises the overall loss function:

$$\sum_{h=1}^k [\bar{Y}_h^{(i)} - \bar{Y}_h^{(l)}]^2$$

The last method is however dangerous if even one only variable can affect strongly on the values of this loss function. Surely a general doubt remain on the reliability of a system in which the influence of few donor units could condition the estimates of all non respondent units. Another very simple and diffused method of estimation of missing values, able to reduce the variability of estimates and the risks of unpleasant distortions, is the *average firm method*, that involves for every non respondent unit at time  $t$  but respondent in  $(t-1)$  the substitution of the missing value with a value obtained applying to the previous available value the mean variation occurred between the 2 periods and measured on respondent units only. The underlying hypothesis is that respondents' average variation expresses the global trend of the analysed group (respondents and not), so that it becomes fundamental the choice of a correct stratification of observed units, in order to find the right compromise between a too detailed fragmentation (that could produce strata without any available observation inside) and the identification of clusters very different each others and homogeneous inside. In symbols, the method operates in this way: if  $Y_{SYmi}$  is the estimate of the missing value for month  $m$  and year  $Y$ , regarding the  $i$ -th unit belonging to stratum  $S$ , and the values with the lines above indicate the correspondent averages, if the observation for this unit in the same month of the previous year is available, we will have:

$$\hat{Y}_{SYmi} = Y_{S,Y-1,mi} \left( 1 + \frac{\bar{Y}_{SYm} - \bar{Y}_{S,Y-1,m}}{\bar{Y}_{S,Y-1,m}} \right) = Y_{S,Y-1,mi} \left( \frac{\bar{Y}_{SYm}}{\bar{Y}_{S,Y-1,m}} \right)$$

while if this observation is not available we could simply suppose:

$$\hat{Y}_{SYmi} = \bar{Y}_{SYm}$$

Tables 1 and 2 show an application of the 2 techniques regarding Italians' tourist flows referred to 1993; in particular it has been observed the variable *number of nights spent by Italians in the hotels*, measured monthly by territorial administrative bodies, that receive data from all the tourist structures in their own geographic area of competence, and send them to Istat with different procedures (mail, floppy disks, etc.). Among 530 administrative bodies we have considered only the 403 of which we could know *true* data for every month of 1993. For every month we have blanked the true values for about the 30% of units, choosing with an higher probability of selection administrative bodies including hotels with an higher number of tourists. In this way in every month we have simulated missing values for 120 units. Then we have taken into account the strong link between geographic localisation and seasonality of tourist flows: in other words we have tried to guarantee with the simulation a similar not response rate for every type of locality (the 8 types of localities are listed in the tables). Both the estimation techniques have been experimented with and without stratification. On the basis of available information, a good subdivision of administrative bodies included in the experiment revealed to be the following:

1.4 geographic areas: North/West, North/East, Centrum and South/Islands;

2.4 territorial types: sea or lakes, hills or mountains or spa, artistic or chief towns, other localities;

3.3 classes of bed places: from 1 to 1.000, from 1.001 to 5.000, more than 5.000.

We must underline that, even if nights spent in the same month of the previous year are not available, (about 10% of missing cases), the formula used for estimation has been adapted to the particular tourist frame by the following scheme:

$$\text{NIGHTS SPENT}_{SYmi}^{\wedge} = \overline{\text{NIGHTS SPENT}_{SYm}} \frac{\text{BEDS}_{SYi}}{\text{BEDS}_{SY}}$$

Shortly, these are the main results obtained:

1. the stratification by the previous scheme causes one only empty stratum among 58, 9 strata with less than 5 units, of which 4 only with a share higher than the 5% of nights spent in their own geographic area, and 21 strata with at least 10 units (table 2);

2. the mean monthly error of estimation expressed in absolute values (table 2) has been equal to 2,7% and to 2,6% respectively using the average firm and the donor method, while the arithmetic mean of the 12 monthly errors of estimation has been equal to +2,1% and -2,5% respectively; without the use of any preliminary stratification we would have obtained absolute mean monthly errors equal to 6,0% and to 5,6%, and the average of 12 monthly errors would have been equal to +2,1% and to +5,1%. Quarterly estimates are characterised by an absolute average error equal to 2,5% quite apart from the method used, and this value is very near to those oc-

curred in the monthly estimates; in the case of a complete lack of a respondents' stratification (in some cases this stratification is not possible) the quarterly estimates obtained with the average firm method would reveal to be more efficient on the average: the absolute mean error for the 4 quarters would be equal to 3,4% against the 5,0% regarding the donor method. Using the average firm method monthly estimates obtained respectively without and with stratification are affected by an error higher than 3% respectively in 9 and 5 cases on 12, while in the case of donor method these cases are 12 and 6. This confirms the idea that the average firm method is characterised by a higher reliability and can be run out more easily than the donor method.

3. The estimates by type of locality are affected, as it could be foreseen, by an estimation error quite higher, ranging at a mean yearly level from the minimum of 2,3% for other localities (with the average firm method), to the maximum of 8,8% for hills (in the case of the donor method). On the whole, quarterly estimates always keep the average yearly error under the threshold of 5% in the case of the donor method (except for spa localities) while with the average firm method this threshold is exceeded 3 times: for lake localities, artistic and chief towns. The estimates by type of locality obtained without stratification (not included in any tables) would produce estimates affected by an error level higher of 1,5 percent points on the average.

We must remark that, in the case of missing values for the whole 12 months of 1993, the donor method could have been lightly modified by using an auxiliary variable  $Z$  given by the number of bed places, available both for respondent and not respondent units: the underlying hypothesis is that bed places utilisation levels are fairly similar at least inside the same type of locality. In every case, a fundamental element for choosing the more reliable technique should be, at least for tourist flows, the minimisation of the number of cases for which the single error exceeds a fixed threshold. From a practical point of view the use of simple imputation techniques, instead of more complex regression ones, allows to calculate the estimates even with spreadsheets for personal computers, keeping *on line* the last 2 or 3 years only.

### *B. Business trip*

The coming into force of the Community Directive will have a great impact on the national statistical systems especially as regards inland demand and, in particular, holidays and other trips. Though Istat can dispose of official survey plans based on behaviour and habits of the Italian population concerning many social fields (health, readings, use of spare time, sport practise, holidays etc.), the information reach required by the Community programme on specific sections of the tourist demand, such as business trip and the disposal of performance every three months, can hardly be satisfied.

anyway, thinking over the cognitive purposes of the Directive, the return in a national framework of the results of a renewed statistical activity seems to be quite favourable. The economic operators both on national and regional scale are very much interested in receiving information on the tourist market as they want to know, in real time, what happens with reference to the tourist demand and, especially, to the tourist target that is one of their greatest interests. This interpretation analysis and research

function aims at providing information, proposals and suggestions about the complex welcome world, starting from the premise of building integrated data file on supply and demand.

If we limit our attention only to the section of the tourist demand of hotels it is possible to study a regular collecting method on the tourist user so to observe its dynamics in the time by means of a longitudinal analysis of the kind of motivation based on a hotel panel. Among the wide range of typologies of the hotel clients we can limit those sections of the demand we want to survey, first of all the business trip.

The reason is that this phenomenon, though it is easier to outline tourist identikit and travel features, due to its frequency and short duration of staying, requires an information collecting system in a very close time to the event. This is necessary to prevent the answers from forgetting details.

The already done experience through a survey on holidays and tourist costs of the Italian population, made with a sample of more than 24 thousand resident families, has proved that only one month later the answers wasn't able to give details on business trip. The longer the time of the interview from the trip became the more the risk of incomplete answers increased. The dimension of this phenomenon, whose traffic is spread all over the national territory, and the economic impact produced on the reception industry of the country are, anyway, of such a great interest that volume and performance are consequently monitored.

During the only month of October 1993 more than 700 thousand resident people has made at least one business trip. More than 70% of them had made two or more trips, while the whole spent days were more than 2 million. Taking into consideration the Incidence of October on the whole year as one twelfth of the whole (August is likely the lowest and is compensated by other winter months when trips are more concentrated), in Italy the volume of presences related to the section "business" is more than 25 million days. If we consider the hotel as the best kind of accommodation as regards the kind of trip and the used organisation we can easily suppose how advantageous the approach to the "working" tourist is, as it doesn't come from a family survey but from an enterprise survey. The necessary premise for this kind of project is the availability of a survey line structured to monitor hotels which could hand over a schedule to their clients. As regards Italy it is possible to start a feasibility test by exploiting an already made survey inserted in the current working programmes devoted to sample hotels directly contacted by Istat every year. The survey makes use of a sample of about 3 thousand hotels on the whole national territory. The survey units have been chosen on the basis of some key variables which can represent the structure of the hotel phenomenon. Priority indicator is the bedspace which is estimated on the number of beds: this variable is generally connected with other informations such as nights spent, turnover, occupation and hotel category. Another important item is the position on the territory, which is identified by the belonging region: this variable is essential as hotel supply on national territory is so different and tourist system is so specific in every single geographic area. Further stratification item has been found in the kind of resort considering structure features, functioning systems and similar performances for similar resorts, where the seasonal element plays its important role. The weighed sample for the structural survey on hotel corresponds to cognitive purposes

certainly oriented to find out the supply but not the demand. The information content of the survey gives, anyway, a series of essential indicators enabling the selection of an enterprise panel which can be used as point of view for a survey on the demand. The choice of 2 "standard" hotel which can receive business clients can occur, as a matter of fact, by the identification of structural features and supplies of some systems and services which can be provided by the survey on the supply. Among the available information the survey takes indicators concerning efficiency, service quality and especially:

1. hotel equipment such as systems, structures which are placed at clients' disposal and are used as accessory services. Equipment includes: conference hall equipped or not equipped with simultaneous translation, restaurant, parking place and other structures;

2. technical and computer equipment used by the hotel management for the whole production operations in the best and functional way, i.e. automatised procedures for inner management or centralised booking systems;

3. hotel category and, of course, fares charged by hotels; this parameter has to be considered as clients' standard are generally middle-high, due to work reasons.

4. accommodation, as a hotel has to provide capability and bedspace in order to satisfy the requirements of this specific section of the market that is particularly concentrated during certain periods of the year and certain days of the week.

### *B1. A sampling project among hotel*

In order to carry out, within ways and time limit, the cognitive requirements of the Directive, Istat is planning a hotel panel to whom information on flow amount and client features can be asked so that the development of an integrated information system can be favoured as it is now lacking in this sector. The choice of the panel could be based on the following essential principles:

1. to allow the repetition of the interview at regular short intervals as specific flows such as the business trip flow with high temporal and spatial variability has to be estimated;

2. to enable an automatised data transmission;

3. to enable the dimensioning of the sample within suitable limits as it is necessary to provide information every three months and it is not recommended to make use of sample high dimensioned plans.

It is, then, necessary to choose hotels that can offer in every period of the year and most likely all the tourist typologies and are also equipped with suitable computer supports. Furthermore, the risk of lacking answers could be easily avoided by asking the same hotels which have already cooperated satisfactorily with Istat in the past so that the whole quality of the survey can be increased. As concerns this last point we have supposed to apply the sample of 2.819 hotels already used, with good results, for the HORECA survey in 1992, whose structural and economic features are already known. From the point of view of a reduced and aimed sub-sample of hotels, with reference to point 3, and of a good feature estimation of all the main tourist typologies, and especially business trips, (whose incidence should be 20% on the whole turnover of the hotels,

as it resulted from the above mentioned survey), we have tried to identify those variables, among the available ones, which could better outline the different middle levels of such typology incidence on turnover.

The different average incidence on turnover of business trips has been studied referring to the variables number of stars, number of beds, area, geographic position, number of opening terms, opening periods, restaurant and different typologies of technical-computer equipment, systems and structures. The analysis of variance has been estimated for each explanatory variable (tables 4 and 5), on the basis of which star class (R square equal to 0,103) and translation equipment have been determining factors. Technical and computer equipment has been important in the average with an explained variance almost more than 5%. The explained variance figures, little on the whole, are proof of the difficulty to identify determining factors of a more or less presence in hotels of this kind of tourism. We have to notice that closing periods are not relevant for determining the incidence of business trips, which are quite constant independently of seasonal effects, and that these periods decrease when stars increase (table 6). Though the Directive doesn't require information on typologies of tourist flows in the regions, national users' requirements need that the variable territory is included in the stratification plan, though this variable is not so relevant from the point of view of statistics concerning business trips. The selection of the panel can be realised by selecting from the same sample used for the HORECA survey, our reference universe, a sub-sample of hotels, which are stratified as for geographical area and number of stars, with personal computers or a CED (DPC), or a telefax (they all are 1.617, i.e. 57,4% of total) and a conference hall or translation equipment: this further condition reduces the number of hotels to 619 (22,0%) that are the final panel to be used for the survey. We have to notice, too, that, in this way, the panel hotels have an average incidence of business trips of 24,2% against an average 10,4% of the reference universe; in particular two stars hotels have an average 7,8% against only 4,9% of the universe (table 8) The little number of two stars hotels included in the panel (42, i.e. 6,8%) could bring to a widening of sample units in favour of this category or to a reallocation, at least partial, of the units to be surveyed, as it is summarised in table 7. The enclosed tables show a stratification plan that is surely not optimum, as it is traditionally intended, but it is efficient in terms of reducing time for data transmission and availability of clients with some unusual features. The use of already proved sample of hotels should improve the survey quality furthermore, which requires a frequent and direct contact with the hotel. In any case, the proposed stratification should be preferred instead of alternative stratifications: if we assume, as in this case, a little surveyed fraction in every stratum and the same number of strata, the most necessary numerosity for each cell of the alternative stratification to assure the same efficiency in comparison with the proposed stratification should be directly proportional to the ratio between variances of the two compared strata, that in some cases can have big dimensions. Anyway, we have to notice that, as the total sample numerosity is fixed and assuming that we want to estimate the average incidence of business trips on total turnover, the assignment of sample numerosities, such as proposed, should give an estimation error about 2,4 times higher than the one by assuming units to strata according to the known Neyman model (error estimations

of sampling for average incidences are respectively 1,246 and 0,518). On the other hand, if we put in the theoretical sample more one or two stars hotels, as Neyman's technique suggests, we could have the same problem of difficulty of the collected data and the necessity of more estimations every months: as a matter of fact, while only 33,1% of at least four stars hotels has stated in the HORECA survey 1992 no incidence on turnover connected with business trip, this amount was 61,9% in the three stars hotels and 83,2% in less than three stars hotels, where as the phenomenon to be studied is unusual it would mean much more work for managers, probably impossible to be supposed. Another problem concerns the impossibility to check by means of this technique those tourist flows that never or seldom go to hotels, about whom it is possible to assume less costs than the general average and that could cause overestimation of the whole amount of the studied phenomena (overnights, number of trips, total tourist costs). The extension of the survey to complementary structures can be assumed only after checking the efficiency in bigger hotels. Furthermore many particular aspects have to be defined concerning data surveying: first of all we have to define how many times every three months, who can be interviewed and how to use the collected data in order to extrapolate them from the universe. The following technique might answer the last question at least as it considers the difficulty of controlling the always changing business tourists universe. If  $H$  is the total number of hotels,  $T$  is the total number of periods during the term ( $T \cong 90$  if days),  $N_{ht}$  is the total number of tourists in the  $h$ -th hotel in the time  $t$ ,  $\alpha_{hti}$  is a variable equal to 0, unless the tourist is on business trip (in this case it is 1) and  $Y_{hti}$  is the variable (0 or 1) connected with the particular way of business trip (for example female sex, so the variable is 1 if the person is a woman, otherwise it is 0), the consequence is that the corresponding number of woman travellers against the total presences of business trips registered in every hotel during the examined term, unknown and object of the estimation, will be:

$$\bar{Y} = \frac{\sum_{h=1}^H \sum_{t=1}^T \sum_{i=1}^{N_{ht}} Y_{hti}}{\sum_{h=1}^H \sum_{t=1}^T \sum_{i=1}^{N_{ht}} \alpha_{hti}}$$

By a sample design realised including  $H_s$  hotel in  $T_s$  days with  $n_{ht}$  interviewed clients of every hotel included in the sample in the time  $t$ , the consequence is that a consistent sample estimation of the previous quantity is given by the following Horvitz-Thompson relation:

$$\bar{y} = \frac{\sum_{h=1}^{H_s} \sum_{t=1}^{T_s} \sum_{i=1}^{n_{ht}} \pi_{hti} Y_{hti}}{\sum_{h=1}^{H_s} \sum_{t=1}^{T_s} \sum_{i=1}^{n_{ht}} \pi_{hti} \alpha_{hti}} E_H E_T$$

where  $\pi_{hti}$  is the inclusion probability of the  $i$ -th client while the two factors on the right indicate respectively the effect of the choice of the sample hotels and the effect of the choice of data surveying. The variance of the previous estimator can be obtained by the known lining forms. If the two mentioned effects are equal to unit and the inclusion probability are equal to all the units, so they are equal to the simply casual design without repetition, the previous quantity is simple equal to the average sample of the studied variable. In particular the effect  $E_H$  could not be equal to 1 if the choice of the sample of hotels would be rounded off or up against the studied variable, and it will have to be weighed by the researcher: for example, an unbalance of the sample in favour of the more expensive hotels could result in an overestimation of the average costs of the business tourists, so in order to balance this error the corrective effect should be less than 1 (the effect could be calculated relating to average fare of a single room in the season of the interview of two stars hotels and those with at least three stars). Viceversa, the effect  $E_T$  has to be estimated on the basis of the experience of hotel-keepers and of the specific conditions concerning the survey site: if we want to estimate the tourist cost, an interview made during pre-holiday days could round up the estimation. A cautious choice of single clients could actually makes us overlook this corrective factor: selecting clients on the basis of a model with unequal probability of the kind PPS, where the dimension could be the number of foreseen days or the incidence of business clients of every nationality on total business tourists in the hotel, it could a further useful stratification of primary units complicating, on the other side, the calculation of sampling error of the final estimator. An estimator of total amount of character  $Y$  of the whole population of hotel clients in the examined term (population is related to arrivals or overnight according to specific necessity) will be given by the relation:

$$y = \bar{y} \left( \frac{\sum_{h=1}^{H_s} \sum_{t=1}^{T_s} \sum_{i=1}^{n_{ht}} \alpha_{hti}}{\sum_{h=1}^{H_s} \sum_{t=1}^{T_s} n_{ht}} \right) \sum_{h=1}^H \sum_{t=1}^T N_{ht}$$

where quantity within brackets represents the percent quota of business tourists on total sample tourists while the factor on the right is the total number of arrived clients (or overnights) in every hotel of the universe during the examined term, known and derived from the survey itself or from the currently made survey by Istat on tourist flow within the Italian hotels.

As regards the data transmission system we have to notice that according to Art.7 of the project of the Directive, The European Commission involves itself to make the information transmission procedures easy giving special standard telematic procedures for this specific purpose. The telematic techniques, as they reduce costs and time, should also assure a better data quality. The use of information exchange via telematics is at the moment very frequent in those productive sectors that, due to their specific features, need more of all this kind of approach whose capital/work

ratio is much higher than the average: this is the case, in Italy, of the communication sector among all services the most average increasing of the added value per each employee at constant prices in the period 1980-1992. On the opposite site, excluding family and enterprises services, a real worrying decrease of the added value per each employee, year average -0,6%, has been noticed just in hotels and public services according to the clear territorial and dimensional differences still featuring Italian hotels, as it results from the HORECA survey referred to 1992.

From the above table it is clear that the greatest average dimension of hotels decreases from the North to the South and the incidence in the Centre/North of structures with at least three stars decreases too. Nevertheless the average proceeds per each bed is minimum in the South, where the biggest structures with a higher number of stars are generally found. The necessity of further development and improvement in the South against the North is outlined exactly by the average share of investment per hotel in the South; computer equipment is more in the Centre/South and also this result depends on the special territorial configuration of the supply. This aspect has to be estimated carefully in the light of surveys completely made by computer. At the moment more than 200 surveys are currently made by Istat but, among these, only in 12 cases data transmission techniques are systematically made via cable or teleprocessing, these surveys are conducted by the division Education and Cultural Statistics and by the division Agricultural Statistics.

Like the 1994 Forum the 2<sup>nd</sup> Forum has again provided a special presentation and discussion of tourism (T.) in the macroeconomic perspective. The obvious interest in both contributing to the session as well as in subsequent discussion clearly demonstrated the usefulness of this topic (which may that way become a more or less fixed part of the Forum series). This time it was attempted to put the accent on figures on the impact rather than on mere design, although - largely determining analyses - the basic compulsory structures may not be ignored, and still there are misunderstandings.

For remedy of the latter, and to provide an overall reference frame the Chairman started with a short presentation of the main features of the OECD's Tourism Economic Accounts Manual (MTEA). Deriving from a few basic notions of accounts (central commodity account, production account, resident household consumption account and an r.o.w. account) the 5 standard Tables of the MTEA were recalled (characteristic T.; commodity flows; characteristic production; T. consumption by function; employment and investment), mutually interlinked by classification symmetries. As a more novel concern, the OECD accounts can be easily identified or embedded in more comprehensive frameworks like the SNA satellite accounts. [A summary of this diagrammatic presentation is given in the Annex.]

The then following presentations partly dealt with more specific requirements of compilation, partly with implementation and evaluation of more comprehensive or "made to measure"-systems. Most typically the former are now concentrating in fields where traditional statistical reference is gradually getting lost, due to liberalisation/integration. The best example is the T. data needed for BOP and beyond that, for most significant analyses of r.o.w. flows connected with T., and no longer available from usual banking statistics [R. Meyer (C.H.)]. EUROSTAT is now going to engage in develo-

ping data collection systems based on other tools („survey method“, in combination with physical flows e.g.).

A group of ISTAT authors (F. Di Leo et al.) considers a wide range of issues, starting from the classification and ending with satellites. There, some discussion can be found on the topical classification and NA concepts with a view to T. The focus, however, is on the present situation with its variety of accounting and classification concepts to deal with T. in statistical terms. The authors particularly address the still vexing basic questions of appropriate statistical units, accounting links, population(s). The overall conclusion is that standards (like TEA) may be maintained but at the same time benefit from linking to other satellite type reference, e.g. in the social field or physical data contexts.

Likely, the Canadians have developed the most ambitious T. satellite at all, starting this work several years ago already. It has favourably fertilized various other pertinent initiatives like the WTO recommendations, standard classification and also the TEA (OECD). Just now the complete system has become available, and is impressive enough by detail, formal rigor, clearness of structure and potential of analytical evaluation and interlinking. Even this system, however, cannot avoid to start from a couple of basic assumptions and methodological conventions, and above all, with its present comprehensiveness it cannot easily be duplicated elsewhere.

Other contributions were more closely addressed to evaluation in its own right. A most interesting paper was contributed by Ciset, investigating the regional economic implications on the basis of a multiregional - multi-sectoral IO-model, designed for Italy (10 regions, 8 sectors). That way they calculate interregional multipliers, regional VA, employment, etc. Even within this relatively aggregate set they can demonstrate that in various instances major benefits are drawn from tourism in regions not so touristic as such, due to different patterns of industrialisation.

A rather simplistic impact model was presented by Austria, using traditional IO-technique to derive multipliers and subsequent key figures on impact. However, as a matter of fact this kind of models keeps its vitality, as a practical tool of quick answers (provided IO and T. vectors are readily at hand). Indeed, IO turns out as a tool not easily replaced by any other technique when overall impact of T. is at issue. This being so the rency of IO-Tables assumes major importance here also. In addition, the standardized calculation of BIP impact etc. requires certain clarification in other fields, too, e.g. whether touristic investment or non-market promotion activities are to be taken into account, or delinention of particularly complex sectors, e.g. railway systems.

Such alternatives would often not seem to be answered by economic dogmatic solutions but to require more flexible solutions, the building blocks being provided in an utmost standardized way. There are many other particular features which may not be ignored in such models even if macro-economic e.g. the hidden portion of T., or the differentiation due to subsidisation, the often difficult quantification of certain expenditure segments (e.g. retail sales purchases). It seems, that a next occasion of this kind would usefully concentrate on interlinks of macro-systems to other related reference, and how to increase the analytical potential that way; at the same time particular statistical problem areas arising within such overall framework might be usefully addressed.



TABLE 2 - COMPARISON BETWEEN THE AVERAGE FIRM METHOD AND THE DONOR METHOD  
 QUARTERLY AND YEARLY PERCENT DIFFERENCES AMONG TRUE AND ESTIMATED NUMBER OF NIGHTS SPENT

AVERAGE FIRM METHOD										
TYPE OF LOCALITY	1 <sup>quar.</sup>		2 <sup>quar.</sup>		3 <sup>quar.</sup>		4 <sup>quar.</sup>		Yearly mean	Absolute errors
	Mean	Maximum	Mean	Maximum	Mean	Maximum	Mean	Maximum		
ARTISTIC TOWNS	6,1%	9,2%	7,9%	7,9%	5,2%	6,9%	1,4%	13,8%	5,7%	5,2%
CHIEF TOWNS	7,1%	8,3%	4,0%	4,1%	4,4%	5,8%	-7,4%	-12,1%	2,0%	5,7%
HILLS	4,8%	6,7%	-1,0%	-2,0%	-1,3%	-4,1%	3,1%	5,3%	0,8%	2,5%
LAKES	8,7%	15,1%	3,6%	3,9%	5,0%	17,6%	-7,0%	-12,7%	3,2%	6,1%
SEA	3,5%	6,0%	2,1%	2,2%	0,9%	7,2%	-4,3%	-5,9%	0,4%	2,7%
MOUNTAIN	-3,5%	-6,3%	3,8%	4,0%	1,8%	4,9%	-5,2%	-6,4%	-0,8%	3,6%
SPA	-0,3%	-8,6%	0,7%	0,9%	0,0%	0,5%	-3,9%	-7,1%	-0,5%	1,2%
OTHER LOCALITIES	1,0%	2,3%	1,5%	1,6%	1,0%	3,1%	4,8%	5,5%	1,9%	2,1%
TOTAL	3,0%	3,5%	3,7%	3,8%	2,2%	4,8%	-1,1%	-2,4%	2,1%	2,5%
TOTAL WITHOUT STRATIFICATION	4,5%	17,5%	7,0%	4,3%	0,9%	5,1%	1,4%	2,5%	4,1%	3,4%
DONOR METHOD										
TYPE OF LOCALITY	1 <sup>quar.</sup>		2 <sup>quar.</sup>		3 <sup>quar.</sup>		4 <sup>quar.</sup>		Yearly mean	Absolute errors
	Mean	Maximum	Mean	Maximum	Mean	Maximum	Mean	Maximum		
ARTISTIC TOWNS	-4,8%	-7,0%	-7,4%	-7,9%	-3,6%	-11,3%	-1,3%	-5,1%	-4,7%	4,3%
CHIEF TOWNS	-1,9%	-6,4%	6,4%	12,0%	2,0%	3,8%	4,5%	6,7%	2,8%	3,7%
HILLS	1,9%	-8,7%	3,8%	26,0%	10,1%	25,4%	2,1%	5,7%	5,1%	4,5%
LAKES	-3,5%	-4,8%	-0,4%	-3,5%	-4,4%	-10,7%	6,7%	14,0%	-1,2%	3,8%
SEA	-6,3%	-9,8%	-2,5%	-7,8%	-4,2%	-9,3%	-2,1%	8,7%	-3,5%	3,8%
MOUNTAIN	-1,0%	-3,8%	-3,5%	-7,8%	0,9%	13,0%	-2,2%	9,0%	-0,8%	1,9%
SPA	2,4%	13,5%	-1,6%	-11,4%	-9,8%	-23,1%	11,0%	13,7%	-2,2%	6,2%
OTHER LOCALITIES	-3,8%	-7,5%	-4,8%	-10,1%	-2,4%	-4,5%	-6,0%	-15,7%	-4,1%	4,3%
TOTAL	-3,3%	-4,7%	-3,0%	-6,6%	-2,4%	-6,2%	-1,1%	-5,0%	-2,5%	2,5%
TOTAL WITHOUT STRATIFICATION	5,9%	8,3%	7,7%	9,1%	4,0%	5,1%	2,5%	3,4%	6,2%	5,0%

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Table 3 - Some main territorial indicators regarding Italian hotels - 1992

Geographic area	Share of hotels with 1 or 2 stars	Bed places per hotel	Incomes per bed places	Investments per hotel	Share of hotels with personal computers
NORTH	68,9%	43,3	13,1	85	19,5%
CENTRE	58,7%	51,6	16,5	132	21,1%
SOUTH	54,8%	69,9	12,0	135	26,9%
ITALY	64,9%	48,7	13,5	101	20,9%

Note: data refer to universe.

TABLE 4 - SHARE ON TURNOVER OF DIFFERENT TYPES OF TOURISM BY SOME MAIN VARIABLES

	NUMBERS	SINGLES-FAMILIES	ORGANIZED TOURISM	BUSINESS TOURISM	OTHER TYPES
<b>AVERAGE:</b>		70,7	12,9	10,4	6,0
<b>CLASS OF STARS</b>					
1-2	52,4	82,3	6,5	4,9	6,3
3	31,5	63,5	18,5	11,6	6,4
4-5	16,1	46,7	23,0	25,9	4,4
SIGN. F		0,000	0,000	0,000	0,057
R-SQUARE		0,162	0,195	0,103	0,002
<b>CLASS OF BED PLACES</b>					
1-20	16,2	86,7	2,4	5,9	4,8
21-50	34,1	80,9	6,3	7,2	5,6
51-100	21,6	69,5	15,3	9,0	6,1
101-200	19,2	55,2	22,7	14,9	7,1
>200	8,9	38,0	30,5	24,4	7,0
SIGN. F		0,000	0,000	0,000	0,143
R-SQUARE		0,197	0,175	0,054	0,002
<b>AREA (SQUARE METRES)</b>					
1-500	21,4	84,7	3,6	6,1	5,5
501-1000	20,2	80,0	7,5	7,0	5,4
1001-2000	21,0	72,4	12,9	8,7	6,0
2001-5000	21,9	60,7	19,0	13,7	6,5
>5000	15,6	50,9	24,1	18,3	6,7
SIGN. F		0,000	0,000	0,000	0,574
R-SQUARE		0,129	0,114	0,036	0,001
<b>GEOGRAPHIC AREA</b>					
NORTH	66,9	73,0	11,8	9,6	5,6
CENTRUM	18,3	66,5	15,5	11,3	6,7
SOUTH	14,8	65,3	15,0	12,7	7,0
SIGN. F		0,000	0,000	0,000	0,300
R-SQUARE		0,054	0,058	0,067	0,008
<b>OPENING PERIODS</b>					
APR JUN	8,4	89,5	7,3	0,4	2,8
APR SEP	12,6	81,3	12,2	1,2	5,3
JAN SEP	5,3	71,4	20,5	3,0	5,1
JAN DEC	69,1	66,2	12,9	14,4	6,5
SIGN. F		0,000	0,000	0,000	0,006
R-SQUARE		0,056	0,019	0,069	0,011
<b>NUMBER OF OPENING QUARTERS</b>					
1	9,0	88,7	7,8	0,4	3,1
2	14,4	80,6	12,4	1,6	5,4
3	7,5	70,9	20,1	2,6	6,4
4	69,1	66,2	12,9	14,4	6,5
SIGN. F		0,000	0,000	0,000	0,011
R-SQUARE		0,052	0,014	0,067	0,004
<b>RESTAURANT</b>					
NO	37,6	75,2	10,5	8,7	5,6
YES	62,4	67,9	14,4	11,4	6,3
SIGN. F		0,000	0,000	0,003	0,213
R-SQUARE		0,011	0,008	0,003	0,001

**TABLE 5 - SHARE ON TURNOVER OF DIFFERENT TYPES OF TOURISM  
BY AVAILABILITY OF FACILITIES**

	NUMBER <sup>a</sup>	SINGLES- FAMILIES	ORGANIZED TOURISM	BUSINESS TOURISM	OTHER TYPES
<b>MEETING ROOM OR INTERPRETING FACILITIES</b>					
NO	76,3	77,6	10,4	6,3	5,6
YES	23,7	48,2	21,0	23,6	7,1
SIGN. F		0,000	0,000	0,000	0,032
R-SQUARE		0,141	0,045	0,102	0,002
<b>SWIMMING POOLS OR TENNIS COURTS OR OTHER SPORT FACILITIES</b>					
NO	65,5	73,1	9,5	11,3	6,1
YES	34,5	66,1	19,4	8,7	5,8
SIGN. F		0,000	0,000	0,004	0,698
R-SQUARE		0,010	0,049	0,003	0,000
<b>SPA FACILITIES</b>					
NO	96,9	70,7	12,8	10,5	5,9
YES	3,1	68,3	17,5	5,8	8,4
SIGN. F		0,496	0,042	0,059	0,148
R-SQUARE		0,000	0,001	0,001	0,001
<b>BEACH FACILITIES</b>					
NO	93,3	70,5	12,7	10,7	6,0
YES	6,7	73,2	16,0	5,4	5,4
SIGN. F		0,279	0,041	0,002	0,593
R-SQUARE		0,000	0,001	0,003	0,000
<b>PARKING OR GARAGE</b>					
NO	41,1	76,0	9,6	7,7	6,7
YES	58,9	66,9	15,2	12,3	5,5
SIGN. F		0,000	0,000	0,000	0,048
R-SQUARE		0,018	0,017	0,010	0,001

**TABLE 6 - SHARE ON TURNOVER OF DIFFERENT TYPES OF TOURISM  
BY TYPES OF EQUIPMENT**

	NUMBERS	SINGLES- FAMILIES	ORGANIZED TOURISM	BUSINESS TOURISM	OTHER TYPES
<b>AUTOMATIC MANAGEMENT SYSTEM</b>					
NO	2.458	74,2	11,6	8,2	6,0
YES	361	46,8	21,7	25,5	6,0
SIGN.F		0,000	0,000	0,000	0,998
R-SQUARE		0,076	0,025	0,063	0,000
<b>OFFICE AUTOMATION</b>					
NO	2.687	71,7	12,5	9,9	5,9
YES	132	49,5	22,0	21,1	7,5
SIGN.F		0,000	0,000	0,000	0,279
R-SQUARE		0,020	0,009	0,011	0,000
<b>COMPUTERISED RESERVATION</b>					
NO	2.424	74,3	11,5	8,1	6,0
YES	395	48,2	21,5	24,2	6,1
SIGN.F		0,000	0,000	0,000	0,937
R-SQUARE		0,074	0,026	0,059	0,000
<b>PERSONAL COMPUTERS</b>					
NO	2.594	73,2	12,0	8,9	5,9
YES	225	41,6	23,6	27,9	6,9
SIGN.F		0,000	0,000	0,000	0,352
R-SQUARE		0,066	0,022	0,050	0,000
<b>EDP EQUIPMENT</b>					
NO	1.990	77,4	9,8	7,0	5,8
YES	829	54,5	20,5	18,5	6,4
SIGN.F		0,000	0,000	0,000	0,336
R-SQUARE		0,098	0,053	0,052	0,000
<b>TELEX AND/OR TELEFAX EQUIPMENT</b>					
NO	1.288	84,6	4,8	4,8	5,8
YES	1.531	59,0	19,7	15,1	6,2
SIGN.F		0,000	0,000	0,000	0,580
R-SQUARE		0,147	0,121	0,050	0,000

**TABLE 7 - SHARE ON TURNOVER OF DIFFERENT TYPES OF TOURISM  
BY NUMBER OF STARS AND NUMBER OF OPENING QUARTERS**

NUMBER OF STARS	VARIABLES	NUMBER OF OPENING QUARTERS				TOTAL
		1	2	3	4	
1-2	Number of	13,3	15,8	6,4	64,4	100,0
	Singles and Organized	90,2	85,8	82,1	79,8	82,3
	Business and Other types	6,1	8,2	10,6	5,7	6,5
	Business and Other types	0,1	0,5	1,4	7,4	4,9
	Business and Other types	3,6	5,4	5,9	7,0	6,3
3	Number of	5,6	15,7	9,5	69,3	100,0
	Singles and Organized	83,6	75,1	66,5	58,8	63,5
	Business and Other types	13,6	17,3	24,2	18,4	18,5
	Business and Other types	1,2	1,8	2,0	15,9	11,6
	Business and Other types	1,6	5,8	7,4	6,9	6,4
4-5	Number of	1,8	7,3	7,1	83,9	100,0
	Singles and Organized	82,6	67,4	49,2	44,0	46,7
	Business and Other types	12,8	21,4	37,7	22,1	23,0
	Business and Other types	3,6	8,4	7,5	29,4	25,9
	Business and Other types	1,0	2,8	5,5	4,5	4,4
TOTAL	Number of	9,0	14,4	7,5	69,1	100,0
	Singles and Organized	88,7	80,6	70,9	66,2	70,7
	Business and Other types	7,8	12,4	20,1	12,9	12,9
	Business and Other types	0,4	1,6	2,6	14,4	10,4
	Business and Other types	3,1	5,4	6,4	6,5	6,0

**TABLE 8 - HYPOTHESIS OF SELECTION OF A SUB-SAMPLE FROM THE UNIVERSE  
OF HOTELS INTERVIEWED FOR THE HORECA/TA PILOT SURVEY (1992)**

STARS:	1-2	3	4-5	TOTAL	1-2	3	4-5	TOTAL
	SAMPLE: NUMBER OF HOTELS				SAMPLE: NUMBER OF HOTELS %			
NORTH/WEST	8	36	87	131	1,3	5,8	14,1	21,2
NORTH/EAST	17	77	113	207	2,7	12,4	18,3	33,4
CENTRUM	7	56	81	144	1,1	9,0	13,1	23,3
SOUTH/ISLANDS	10	68	59	137	1,6	11,0	9,5	22,1
TOTAL	42	237	340	619	6,8	38,3	54,9	100,0
	UNIVERSE: NUMBER OF HOTELS				UNIVERSE: NUMBER OF HOTELS %			
NORTH/WEST	268	150	116	534	9,5	5,3	4,1	18,9
NORTH/EAST	814	377	162	1.353	28,9	13,4	5,7	48,0
CENTRUM	230	187	98	515	8,2	6,6	3,5	18,3
SOUTH/ISLANDS	166	174	77	417	5,9	6,2	2,7	14,8
TOTAL	1.478	888	453	2.819	52,4	31,5	16,1	100,0
	SAMPLE: AVERAGE BED PLACES				UNIVERSE: AVERAGE BED PLACES			
NORTH/WEST	84	115	292	231	33	85	259	97
NORTH/EAST	79	128	197	162	40	102	184	75
CENTRUM	134	141	247	200	39	99	229	97
SOUTH/ISLANDS	97	185	259	210	41	128	226	111
TOTAL	93	145	244	196	39	103	220	88
	UNIVERSE: STANDARD DEVIATIONS *				SAMPLE: NEYMAN METHOD %			
NORTH/WEST	7,3	32,0	32,5	32,7	3,4	8,2	6,5	18,1
NORTH/EAST	11,3	26,6	31,9	29,8	15,7	17,1	8,9	41,7
CENTRUM	27,2	26,4	24,3	25,6	10,5	8,4	4,0	22,9
SOUTH/ISLANDS	17,6	27,0	31,8	29,0	5,0	8,1	4,2	17,3
TOTAL	16,4	27,8	31,0	29,8	34,6	41,8	23,6	100,0

\* Regarding the share of business tourism on total turnover

**TABLE 9 - 8 SHARES ON TOTAL TURNOVER OF DIFFERENT TYPES OF TOURISM  
CALCULATED FOR THE THEORETICAL SUB-SAMPLE AND THE UNIVERSE**

STARS:	1-2	3	4-5	TOTAL	1-2	3	4-5	TOTAL
SAMPLE: SINGLES AND FAMILIES				UNIVERSE: SINGLES AND FAMILIES				
NORTH/WEST	76,4	51,3	33,3	40,9	83,7	56,3	37,3	65,9
NORTH/EAST	45,1	54,0	48,7	50,4	83,6	68,2	53,9	75,8
CENTRUM	32,0	53,6	40,5	45,2	79,3	62,0	45,2	66,5
SOUTH/ISLANDS	66,7	55,0	44,3	51,3	77,8	61,2	47,7	65,3
TOTAL	54,0	53,8	42,0	47,4	82,3	63,5	46,7	70,7
SAMPLE: ORGANIZED TOURISM				UNIVERSE: ORGANIZED TOURISM				
NORTH/WEST	12,8	13,6	21,6	18,9	3,8	14,7	22,6	10,9
NORTH/EAST	34,8	23,6	17,6	21,3	7,4	19,6	18,3	12,1
CENTRUM	27,6	21,1	31,6	27,3	7,5	17,6	30,0	15,5
SOUTH/ISLANDS	1,5	18,7	24,0	19,7	5,1	20,2	24,6	15,0
TOTAL	21,5	20,1	23,1	21,8	6,5	18,5	23,0	12,9
SAMPLE: BUSINESS TOURISM				UNIVERSE: BUSINESS TOURISM				
NORTH/WEST	5,8	26,8	39,8	34,1	7,7	20,4	35,0	17,2
NORTH/EAST	5,1	16,7	29,1	22,5	3,0	7,2	23,3	6,6
CENTRUM	11,4	17,3	24,4	21,0	5,1	13,4	21,7	11,3
SOUTH/ISLANDS	11,6	17,5	25,5	20,5	9,4	11,4	22,8	12,7
TOTAL	7,8	18,6	30,1	24,2	4,9	11,6	25,9	10,4
SAMPLE: OTHER TYPES				UNIVERSE: OTHER TYPES				
NORTH/WEST	5,1	8,3	5,3	6,1	4,8	8,7	5,1	5,9
NORTH/EAST	15,0	5,7	4,6	5,9	5,9	5,0	4,4	5,5
CENTRUM	29,0	8,0	3,6	6,5	8,1	7,0	3,1	6,7
SOUTH/ISLANDS	20,2	8,7	6,2	8,5	7,7	7,2	4,9	7,0
TOTAL	16,7	7,5	4,8	6,7	6,2	6,4	4,4	6,0



# TOURISM BEHAVIOUR OF THE AUSTRIAN POPULATION IN A SOCIO-ECONOMIC PERSPECTIVE: 1969 - 1993

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## Introduction

As in many other countries participation of the Austrian population in tourism, in the form of holiday travel, has dramatically increased since the end of the sixties. To what degree may socio-economic characteristics be regarded as preconditions of trends in the participation of the Austrian population in tourism? To what extent is this long-term dynamics related to a change in the population structure? The analysis of such questions can be based on the periodical Austrian Microcensus with its special surveys on holiday trips (conducted since 1969). However, in the present exercise no strictly formal (econometric) methods have been used.

The Austrian Microcensus itself is a quarterly sample survey conducted by ÖSTAT since 1968 and involving 30,000 addresses (net amount of interviews: 60,000) and covering a wide range of socio-economic characteristics. It consists of a basic programme (questions on dwellings, households and persons as usually found in the population censuses and the labour force surveys), and quarterly changing special programmes covering the whole field of social statistics (labour market, housing, social situation of certain population groups, income, health etc.). One of the regular special programmes was the survey on holiday travel (minimum duration of five days) first conducted in 1969. In this survey, in addition to the overall number of journeys, details of the two longest journeys of a person were inquired (destination, duration, accomodation). With some modifications (e.g. inclusion of short-term holiday travel), this survey has been retained since that time and has been conducted at three-year intervals. Moreover, some surveys were carried out on other segments of tourism also such as, last in 1994, on day trips and stays at health resorts.

### *B. Some demographics*

Therefore, since 1970 it has been possible, with the help of the Microcensus, to continuously observe new trends in the travel habits of the Austrian population. Since that time far-reaching changes have occurred in the structure of the Austrian population. Demographically, the most striking phenomenon is the decrease in births since the mid-sixties, accompanied by an absolute and relative decrease in the total number of the younger population.

This is above all reflected in a decrease in the number of families with three or more children. For example, in 1971 1,820,000 children under 15 years accounted for 24.4 p.c. of the overall population, by 1993 this age group comprised only 1,430,000 persons, or 18.1 p.c. of the resident population. In 1971 16.7 p.c. of the families in Austria (320,000 families) had three or more children; 10.9 p.c. (210,000) of families had three or more children under 15. In 1993 the respective proportions were only 10.4 p.c. (all children) and 4.1 p.c. (15 and over). At the same time, in the total number of families the share of younger couples (women under 40) without children rose from 5.6 p.c. in 1971 to 6.9 p.c. in 1993. Parallel to the establishment of complete families at a later point of time or the decision not to have children at all the number of younger "single" households was rising: in 1971, 110,000 Austrians under 40 lived on their own (4.5 p.c. of all Austrians at that age), in 1993 230,000 persons (i.e. 7.4 p.c. of all persons at that age). To some extent the increase in lone parent families from 224,000 (1971) to 302,000 in 1993 was caused by rising divorces (1971: 10,000; 1992: 16,000).

In spite of a clear increase in the average life expectancy in that period (men: from 66.6 to 72.9 years; women: from 73.7 to 79.4 years) the effects of the aging of the population were not similarly important during that period. Between 1971 and 1993 the number of persons over 60 increased by 8 p.c. (total population: +7%). A clearly higher increase was registered for the population over 75 (1971: 350 000; 1993: 520,000). Towards the end of the eighties and at the beginning of the nineties there was a substantial rise in the number of foreigners living in Austria (1971: 212,000; 1993: 690,000).

The higher educational attainment of the population is one of the striking socio-economic changes. In 1971 62 p.c. of the persons under 15 had only completed compulsory education, in 1993 not more than 39 p.c. still fell into this category. The change in the field of economic activity is reflected above all in the decrease in labour force in the field of agriculture and forestry and the complementary increase of employees, especially female. In 1971 370,000 economically active persons (11.8 p.c. of the economically active population) worked as self-employed persons or family workers in the sector of agriculture and another 290,000 (9.4 p.c.) as self-employed or family workers in other sectors of the economy, while 2,440,000 worked as employees. By 1993 the number of farmers had decreased to 210,000 (i.e. 5.7 p.c. of the total labour force), which was a drop by nearly 50 p.c., whereas the number of self-employed fell to 260,000 (7.0 p.c.). The number of employees increased by one third to 3,210,000, that of female employees even by 50 p.c., from 903,000 (1971) to 1,350,000 (1993). Within the group of employees a shift from manufacturing to service activities occurred, which was also reflected in a change in the occupational status of the population: with 52 p.c. of employees in 1993 the number of white-collar workers and civil servants exceeded the number of blue-collar workers (1971: 46 p.c.).

During the same period a marked decline in employment was registered for the higher age groups of the economically active population. In 1971 41 p.c. of the persons aged 55 to 64 were employed, in 1993 only 26 p.c. Unemployment rose less significantly than in other parts of Europe (1971: 36,000 unemployed, 1993: 159,000). All these changes occurred in the context of an overall increase in wealth, as reflected in the indicator of per capita GDP ("real" increase from 1970 to 1993 amounting to 70 p.c.).

### *C. Patterns of Tourism Behaviour*

From the change in the structure of the population an impact on an essential characteristic of tourism might be expected, e. g. in terms of net departure rate, which is the proportion of persons travelling (at least once; four or more overnight stays). And indeed, an increase is usually recorded for those groups traditionally accounting for a high share in overall holiday travel. Most of the increase in travelling, however, is due to a rise in income and to an increase in certain behavioural patterns (viz. of urban and socially higher ranking groups), as shown below in detail.

In the following on the basis of 1993 results it will be shown which major differences in tourism participation exist between social groups. Assuming these differences being more or less stable, changes in social structure should have an increasing or lowering effect on the net departure rate. The stability of these differences for age groups and some broader socio-economic groups is shown in Table 1, whereas figures for other characteristics can only be presented for 1993 (Table 2).

#### *Factors possibly increasing the net departure rate*

The decline in the rural population and the rising numbers of employees, and within the latter group the shift from blue-collar workers to white-collar workers and civil servants, may lead to higher net departure rates. With 15 p.c., the travelling intensity of the farming population in 1993 was clearly below the labour force average (49 p.c.) as well as below the overall population average (45 p.c.); also the percentage for blue-collar workers (38 p.c.) is far below that for white-collar workers and civil servants (61 p.c.). In the age group below 50 years, female employees (54 p.c.) travel by far more than housewives (46 p.c.) or female self-employed or family workers (34 p.c.; low percentage for female farmers).

Also the decline in the number of families with three or more children and the increase in the number of married couples without children may be expected to result in increased travelling. Only 48 p.c. of persons in the households of couples (head of household economically active) with three or more children travelled in 1993; in the case of couples with one or two children it was 55 p.c. Couples without children in their households show a net departure rate of 61 p.c.; thus to about the same extent travelling more than married couples with one or two children as married couples with three or more children travel less. Part of the increase in the share of female travellers is due to the rising numbers of younger single persons. In the age group from 20 to below 40 a clearly higher proportion of single women (71 p.c.) travel than that of women in this age bracket in general (50 p.c.). In the case of single men (20 to below 40 years) the net departure rate (52 p.c.) is above that of men of that age but to a lesser extent (45 p.c.).

If, as usually done in the Microcensus, the holidays of foreigners living in Austria are included in the calculation, then an increase in this foreign population should lead to a higher proportion of travellers. In 1990 the travelling intensity of foreign citizens (65 p.c., partly because of their age structure) was clearly higher than that of Austrian citizens (44 p.c.). In 1993, however, these rates converged (Austrians: 45 p.c., foreigners 60 p.c.), because for citizens of former Yugoslavia holidays in their home country be-

came more or less impossible or connected with great difficulties.

As expected, there is a clear positive correlation between education and travelling intensity: 22 p.c. of persons having completed compulsory education and 60 p.c. of university graduates travelled.

#### *Factors possibly reducing the net departure rate*

Basically, travelling intensity in Austria is impaired by four factors: an increase in the number of single mothers; rising numbers of very old persons; a rise in unemployment and an increase in the population living outside of Vienna. With 41 p.c., the net departure rate of single mothers with children under 15 is clearly below the values for parents from complete families (47 p.c.); also the values for the respondents aged 75 and over are below the values for the overall population. In the Austrian *Länder* excluding Vienna only 41 p.c. of the population travelled in 1993, as opposed to 58 p.c. in Vienna and 45 p.c. in Austria on average. With 33 p.c., the travelling intensity of unemployed persons is 16 percentage points lower than that of employed persons (49 p.c.).

#### *Impact of structural changes on the rise of net departure rate*

What are the actual effects of the developments described above on the overall outcome? Simple calculations show that the demographic changes together with the differences in net departure rate of the individual demographic groups were not sufficiently significant to bring about any remarkable changes in travelling intensity. Also the impact of the increase in (new) social fringe groups (e.g. unemployed, single mothers) on the overall Austrian result is negligible; only for improved education a significant influence could be concluded (Table 3).

The changes in the age structure account for only 0.2 p.c. of the rise in net departure rate from 27.5 p.c. in 1969 to 45.4 p.c. in 1993. Also the other demographic shifts mentioned above (fewer families with three or more children, more single households) were not strong enough to affect the result by more than one percentage point. The impact of improved education is much stronger and accounts with 5.3 percentage points for approximately one third of the increase in the net departure rate. With 3 percentage points, the changes of socio-economic status have a less significant influence.

#### *Convergence of net departure rates in rural and urban areas*

To a much higher extent than by shifts in the structure of the population the participation in holiday travel is obviously affected by the spread of the behavioural patterns of the urban population and of higher social classes as well. While in 1993 travelling intensity in Vienna amounted to 58 p.c., thus slightly below that of 1969, a decline which, however, does not seem to be quite plausible - this value nearly tripled (from 13 to 35 p.c.) for the communes with fewer than 5,000 inhabitants and for the total population outside Vienna (from 20 to 41 p.c.).

The considerable rise in the share of holiday makers in the population living outside of Vienna is partly a result of the higher travelling participa-

tion of all population groups and partly due to the process of *“catching up”* of certain segments of the population formerly showing very low holiday travelling; this phenomenon does not apply to the City of Vienna, where a high level of travelling (with regard to persons travelling at least once a year) was registered already at the beginning of the seventies.

#### *Convergence of net departure rate (socio-economic status)*

This convergence observed for the population outside Vienna has also a significant impact on the overall result. In 1969 the travelling intensity of white-collar workers and civil servants was about 120 p.c. higher than that of blue-collar workers, in 1993 *“only”* 60 p.c.

As mentioned before, such tendency does not apply to Vienna, which is a bit surprising, although there are still considerable differences in the travelling intensities of the individual social groups (e.g. 49 p.c. travelling intensity for blue-collar workers and 71 p.c. for civil servants).

Above all for children the age-related share of persons travelling at least once a year shows a certain degree of adaptation to the average behavioural patterns. Increased family holidays and also travel organized by schools or similar organizations have led to a participation of children and youths in holiday travel equal to that of the total population (up to 15 years: 44 p.c., 15 - 19 years 47 p.c., in total: 46 p.c.). About 25 years ago (1969) holiday travel for children was still less frequent than for adults (up to 15 years: 22 p.c.; 15 - 19 years: 25 p.c.; in total 28 p.c.). Today also children outside Vienna (up to 15 years: 41 p.c.), just as was the case in Vienna already in 1969, travel during their holidays to the same extent as the total population outside Vienna; nevertheless, their percentage is still below the values for Vienna (58 p.c. in 1993).

With an increase in travelling intensity by 60 p.c., the increase in travel participation in travel of the *“younger”* elderly population (60-69 years) corresponds to the population average. Outside Vienna, however, this group showed a far stronger tendency to *“close the gap”* (increase in the net departure rate + 145 p.c., as opposed to + 105 p.c. for the total population outside Vienna).

#### *Small communities: very low net departure rates in “fringe” groups*

In rural and partly low-income regions with a generally low participation in travelling it is mostly persons belonging to *“fringe groups”* that hardly go on holiday trips.

Accordingly, in these *“fringe groups”* the share of persons with at least one holiday trip increases almost consistently with the size of the commune. Thus in Vienna, in the group aged over 70 the share of holiday makers is six times higher than in the same age group in small communes, whereas according to this regional ranking the rate of travellers for persons aged 20 to 29 *“only”* *“doubled”*. Also in regions with generally high travelling intensity (small towns below 20,000 inhabitants, communes from 20,000 to 250,000 inhabitants and Vienna) travelling increases with the size of the commune for the age groups above approximately 40 years, whereas in the age group from 30 to 40 years there are hardly any differences between the size groups of communes.

The situation is similar with regard to social stratification by economic ac-

tivity. Also in this respect, the differences in travel participation between small and large communes e.g. for unskilled workers (increase rates ranging from 20 p.c. in communes with up to 20,000 inhabitants with a high rate of agricultural activity to 44 p.c. in Vienna) was substantially higher in 1993 than for senior white-collar workers and civil servants (65 p.c. vs. 81 p.c.).

This phenomenon can also be demonstrated with respect to the size groups of communes not influencing net departure rates anymore. In the case of unskilled workers this applies only to communes with 20,000 and more inhabitants. For other workers (skilled junior and middle-rank white-collar) as well as for the self-employed this differentiation (according to commune size groups) stops already at a lower level, namely in communes with 20,000 inhabitants (with a low rate of agricultural activity). Senior white-collar workers and civil servants, with the exception of the limited number of those living in typically rural communes, show approximately the same net departure rate irrespective of the size of their residential communes.

#### *Differences more accentuated when looking at the number of holiday trips*

The differences in the travelling intensity of various social groups are even more striking if related to the number of journeys per (travelling) person. In 1993, among blue-collar workers, white-collar workers and civil servants the shares of persons travelling more than once a year varied approximately to the same extent as travelling intensity. Accordingly, gross travelling intensity (holiday travel related to the total population, travelling or non-travelling) for senior white-collar workers and civil servants turns out three times higher than for unskilled workers; whereas net travelling intensity for senior white-collar workers is only twice as high as for unskilled workers.

The share of persons travelling several times per year is clearly highest in the age group between 60 and under 70 (46 p.c.; all age brackets 37 p.c.). Also the trend towards travelling more than once, which has been registered in all age groups in the past decades, is especially strong for respondents aged 60 and over (compared to 1969 the number of persons travelling several times tripled for the age group of 60 - 70 years; for all age groups: increase by 160 p.c.). As a result, the older age groups (e.g. 60 to 70 years with 72 journeys per 100 persons) are even above the average (70 to 100), but still below the value of the age group of 40 to 50 years (88 to 100).

There are still considerable differences in the frequency of travel in the large socio-economic groups (farmers, self-employed, blue-collar workers, white-collar workers and civil servants). With regard to the individual journeys, however, these differences are much less significant. Average travel duration, for instance, is almost the same for all groups, and also preferences for certain destinations are relatively similar, although long-distance travel destinations account for only 6 p.c. of destinations of blue-collar workers but for 10 p.c. of white-collar workers and civil servants.

#### *Little influence of the social status on country of destination of holiday trip*

Contrary to what might have been expected, during the reference period a process of "catching up" of the lower social classes with regard to holiday destinations originally preferred by members of the higher social

classes could neither be ascertained for travel to foreign countries in general nor for the countries of destination. (Of course this applies only to comparisons of large groups such as blue-collar workers and white-collar workers; there are no time series available for a more detailed social breakdown.) The travel market is divided into segments broken down by holiday resort within the destination countries and by quality level of hotels etc.

Between the large groups of blue-collar workers and white-collar workers (share of travel abroad 49 p.c. vs. 51 p.c.) already in 1969 only a slight difference appeared with regard to travel abroad already in 1969; in 1993, the share of travel abroad for blue-collar workers (65 p.c.; holidays in the origin countries of foreign workers!) was even higher than that for white-collar workers and civil servants (59 p.c.). Since the end of the sixties e.g. the share in travel abroad of Spain has doubled for both blue-collar workers (1969: 3.5 p.c., 1993: 7.4 p.c.) and white-collar workers and civil servants (4.6 and 9.2 p.c. respectively). For Greece, however (with low numbers in the early seventies), the relative increase for blue-collar workers (share in travel abroad for blue-collar workers in 1972: 1.3 p.c., in 1993: 7.4 p.c.) was slightly greater than that for white-collar workers and civil servants (1972: 3.2 p.c., 1993: 12.1 p.c.).

Obviously, the tendency to *adopt* certain holiday destinations is more pronounced by age structure than by social level, above all in terms of the overall number of journeys abroad. In 1969, for instance, the share of travel abroad in total travel for persons aged 20 - 29 was 54 p.c., and thus by more than 50 p.c. higher than that for the age group of 60 - 69 years (34 p.c.); in 1993 the difference was only about one fifth (66 compared to 54 p.c.). Accordingly the average age of holiday makers (from Austria) increased for nearly all destination countries.; for most destination countries, however, the characteristic age structure has been retained over the past few decades.

#### *D. Conclusion*

Efforts to assess the impact of social change on holiday behaviour show that obvious shifts in the structure of the population are outweighed by other characteristics virtually applying to all segments of the population, such as increasing wealth, longer legal holidays or special characteristics of the tourist market such as tremendous reductions in the prices of long-distance travel and especially of airline fares. *Fashions* in tourism, as for instance travel destinations do not spread gradually following the example of certain *forerunners* but are quickly assumed by all parts of the population. Great differences in travel behaviour between social groups continue to exist, above all with regard to the *entry* into the holiday market. As expected, convergence towards the average behaviour is strongest in rural and smaller communes; nevertheless there still prevail large disparities.

**Table 1 - Net departure rate<sup>1)</sup> 1969 to 1993 by age and employment status**

	Net departure rate (%)								
	1969	1972	1975	1978	1981	1984	1987	1990	1993
<b>Age (completed years)</b>									
Up to 14 years	22,1	25,7	32,2	34,3	<b>37,4</b>	35,2	40,3	<b>45,3</b>	<b>43,4</b>
15-19 years	24,6	27,3	35,9	33,3	<b>38,5</b>	37,3	42,7	48,6	47,0
20-29 years	33,5	35,7	42,2	39,1	<b>43,4</b>	<b>41,9</b>	46,2	46,3	45,4
30-39 years	31,2	36,9	44,6	48,4	<b>49,9</b>	<b>45,4</b>	50,8	50,6	49,3
40-49 years	34,7	33,9	39,7	37,1	<b>43,6</b>	<b>44,8</b>	51,8	53,4	53,0
50-59 years	31,8	34,3	40,1	35,7	<b>38,2</b>	<b>37,0</b>	38,9	43,0	45,4
60-64 years	.	30,0	34,9	35,0	<b>41,1</b>	37,6	<b>37,3</b>	38,6	40,6
65 years and over	.	22,9	25,0	23,7	<b>27,8</b>	<b>26,2</b>	<b>27,7</b>	30,3	30,2
<b>Employment status</b>									
Self employed and familyworkers	.	18,0	22,8	23,3	25,0	25,8	31,8	33,4	37,1
Blue-collar workers	.	26,1	30,7	30,4	33,5	32,4	36,3 <sup>3)</sup>	38,3 <sup>3)</sup>	38,8 <sup>3)</sup>
White-collar workers <sup>2)</sup>	.	55,4	59,9	56,9	59,7	58,4	63,0 <sup>3)</sup>	63,4 <sup>3)</sup>	58,3 <sup>3)</sup>
Civil servants <sup>2)</sup>	.	56,2	60,5	58,2	65,8	58,2	.	.	63,4
Apprentices	.	19,8	30,2	27,1	<b>31,1</b>	<b>30,3</b>	.	.	.
Pensioners	.	24,3	27,5	25,6	30,9	29,9	<b>31,3</b>	32,2	33,0
Other not economically active	.	29,2	35,0	35,5	38,9	37,4	42,3	46,4	45,1
of which housewives	.	31,8	35,8	34,3	36,3	34,7	39,8	41,3	41,8
Students, pupils	.	31,5	39,0	40,2	44,5	<b>44,4</b>	49,4	55,4	54,0
<b>Total</b>	<b>27,5</b>	<b>30,3</b>	<b>36,1</b>	<b>35,6</b>	<b>39,5</b>	<b>38,1</b>	<b>42,344,6</b>	<b>44,5</b>	

<sup>1)</sup> Holiday trips with four or more overnight stays.

<sup>2)</sup> 1987 and 1990 white collar workers and civil servants.

<sup>3)</sup> Including the respective apprentices.

Table 2 - Net departure rates 1993

	Net departure 1993 %	Total Value = 100
<b>Socio-economic status</b>		
<b>Self-employed and family workers</b>		
Agriculture and forestry	15,0	34
Other sectors	57,8	130
Total	38,1	86
<b>Blue-collar workers</b>		
Unskilled, semi-skilled	36,0	81
Skilled	41,5	93
Total	38,3	86
<b>White-collar workers, civil servants</b>		
Middle-level and lower	55,7	125
Senior level	71,5	161
Total	61,1	137
<b>Total labour force</b>		
Employed	48,3	109
Unemployed	49,3	111
	32,9	74
<b>Pensioners: former occupation</b>		
<b>Self-employed and family workers</b>		
Agriculture and forestry	11,7	26
Other sectors	37,0	83
<b>Blue-collar workers</b>		
White-collar workers, civil servants	30,0	67
Never economically active, unknown	51,6	116
Total	29,9	67
	33,3	75
<b>Non-economically active persons</b>		
Under 50 years	46,1	104
50 years and over	37,1	83
Students, pupils	54,3	122
Children at pre-primary age	33,0	74
Other dependants	21,4	48
<b>Educational attainment</b>		
Compulsory school	32,0	72
Apprenticeship	44,1	99
Intermediate technical and vocational schools	56,2	126
Higher general secondary schools	63,7	143
Higher technical and vocational schools	64,4	145
Universities, colleges of art	72,7	163
<b>By type of household (selection)</b>		
Married couples without children	61,2	137
Married couples with 1 child	54,6	123
Married couples with 2 children	55,4	124
Married couples with 3 children and more	43,9	99
Single parents (head of household economically active)	53,4	120
<b>Females</b>		
<b>Socio-economic status</b>		
<b>Self-employed and family workers</b>		
Agriculture and forestry	14,4	32
Other sectors	58,5	131
Total	34,3	77
<b>Blue-collar workers</b>		
Unskilled, semi-skilled	39,6	89
Skilled	44,5	100
Total	40,5	91

White-collar workers, civil servants		
Middle-level and lower	57,3	128
Senior level	74,3	167
Total	61,0	137
Total labour force	51,3	115
Pensioners total	31,8	71
Non-economically active persons		
under 50 years	45,9	103
50 years and over	37,2	83
Students, pupils	56,0	126
Children at pre-primary age	32,2	72
Other dependants	25,9	58
Total females	44,6	100
<b>TOTAL (male and female)</b>	<b>44,5</b>	<b>100</b>

**Table 3 - Impact of changes of the population structure on the net departure rate**

Net departure rate	
1969	27,5
1993	44,5
Difference in percentage points	18,0
Difference in percentage points when calculated on the ....structure around 1970	
Age structure	17,8
Social status	15,1
Educational attainment	12,7
Unemployment figures	16,8
Household structure (number of children)	17,2

# IMPLEMENTATION OF THE EUROSTAT METHODOLOGY ON BASIC TOURISM AND TRAVEL STATISTICS

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*Unit D4: Trade, Services, Transport Eurostat.*

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## 0. Introduction

Considering the international importance of tourism, the harmonisation of tourism statistics will still require a great deal of work. The Proposal for a Council Directive on Tourism Statistics by Eurostat (later referred to as "the Directive") and the draft Council Recommendation on tourism statistics are the two basic documents for the harmonisation on European level. This document is complementary to them. The purpose is to discuss the implementation of the Eurostat methodology on basic tourism statistics, focusing on the practical aspects. The document presents and explains the definitions, variables and classifications on a detailed level and introduces a more thorough tourism statistics than the minimum requirements of the Directive but also discusses the differences in national practices. Direct links to the variables and classifications of the Directive, the Council Recommendation and the harmonised mobility surveys are denoted. Links and differences with other tourism-related statistics are also discussed.

The **first part of this document** deals with the basic concepts of tourism statistics. The definitions (*in italics*) and classifications are presented mostly in the UN Draft recommendations on tourism statistics and in the WTO (World Tourism Organisation) Recommendations. The following explanations give more accurate instructions for adaptation but also put forward the problems encountered in implementing the concepts and possible solutions.

The **second part** concentrates on accommodation statistics' methodology. The basic variables are presented on a very detailed level in order to assess their international comparability. Other possible variables, which, in spite of their importance, are used in few countries only, are introduced in order to encourage their use more extensively. With the Directive, many countries reform their accommodation statistics and that is an opportunity to obtain a great deal of new important information by introducing only a couple of new cells into the questionnaire, e.g. occupied rooms (if not previously inquired), or the income from the provision of accommodation.

**Part three** discusses the variables and classifications that could be included in the tourism demand surveys, the links to variables and classifications used in tourism-related statistics and the different types of surveys.

Like the Directive, this document includes only the basic tourism statistics and surveys. A wider approach, including tourism-related statistics, is presented in the Council Recommendation. These documents, together with studies on different domains of tourism (which are yet in need of harmonisation) constitute the basis of the work towards a coherent tourism statistics' methodology, together with the UN and WTO recommendations and general classifications like NACE, CPA, NUTS, etc.

In the wide context tourism statistics' methodology comprises both "pure" tourism statistics and tourism related statistics. The definitions and classifications used in these should be consistent. Tourism is more clearly defined from the demand-side, but to be able to compare tourism activities with economic activities of other industries, it is important to define and develop both the supply and demand side statistics and to give an almost equal weight on supply and demand ("tourism supply" and "tourism demand" may be understood in different ways but in this document their meaning should be clear by the context).

## **1. BASIC concepts and tourism units**

### **1.1 Tourism; forms of tourism**

#### **Tourism comprises**

*"the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes".*

Tourism is a subset of travel, when travel is understood in a broad sense meaning a movement from one place to another. Tourism covers the world-wide travel market within the general framework of population mobility and the provision of services for visitors. Tourism means the practice of travelling outside a person's usual environment for all purposes (in principle - in practice few purposes are excluded). This is extremely important, because in common language "tourism" is generally attached to (commercial) holiday and recreation travel only. Therefore the term "business tourism" is not universally acceptable and instead of it we can normally just as well use "business travel", which is generally understood to exclude commuting and local travel, the two most important types of travel excluded from tourism.

Weekend trips and holiday trips to household's second home (owned or rented) or hired pitch on a camping site and other accommodation are included in tourism because a person has only one usual environment and second homes etc. are not considered to be part of his/her usual environment.

There are some trips that, although not excluded by the definition, are not considered as tourism. These exclusions are mainly due to other statistics: migration statistics (e.g. the exclusion of refugees and asylum-seekers), balance of payments (BOP) statistics, etc. and they are sometimes extremely difficult to apply in practice (e.g. trips that are remunerated from within the place visited and trips connected with studies; these are dealt with more detail subsequently).

Some non-voluntary purposes of trips are excluded by convention: (non-voluntary) stays in hospital and other medical institutions providing clini-

cal/medical treatment, which is prescribed by doctor, are excluded. Other exclusions include stays in prison and stays in military service (note that vacations from the institutions may be normally included in tourism). Stays in hospital may also be excluded by the usual environment criteria, but very often more serious illnesses are treated outside a person's usual environment in a central or specialised hospital. Hospital statistics can therefore be excluded explicitly from tourism.

Unlike hospitals, spas and other health establishments are included in tourism. Although part of the guests are there due to a prescription of a doctor, the establishment may be unable to make a separation between persons, who are there for voluntary or non-voluntary reasons.

### **Forms of Tourism**

In relation to a given country, the following three forms of tourism can be distinguished:

(i) *Domestic tourism comprises the activities of residents of a given country travelling to and staying in places only within that country but outside their usual environment;*

(ii) *Inbound tourism comprises the activities of non-residents of a given country travelling to and staying in places in that country and outside their usual environment;*

(iii) *Outbound tourism comprises the activities of residents of a given country travelling to and staying in places outside that country and outside their usual environment.*

Similar definitions can be used for other areas, regions or group of countries by replacing "country" with the area of reference. To avoid misunderstandings, the area of reference should then always be stated (e.g. regional inbound tourism).

In Transport Statistics "national transport" is defined as transport between two places located in the same country, irrespective of the country in which the vehicle is registered. It may involve transit through a second country. To be consistent with transport statistics, transit through a second country should also be allowed in domestic tourism.

The three basic forms of tourism can be combined in three ways to derive the following categories of tourism:

(i) *internal tourism, which comprises "domestic tourism" and "inbound tourism";*

(ii) *national tourism, which comprises "domestic tourism" and "outbound tourism";*

(iii) *international tourism, which consists of "inbound tourism" and "outbound tourism".*

The term "domestic" used in the tourism context differs from its use in the National Accounts context, where it refers to the activities and expenditures of both residents and non-residents travelling within the reference country, i.e. "internal" tourism.

## **1.2 Traveller, visitor, tourist**

**Traveller** refers to

*"any person on a trip between two or more countries or between two or more places within his/her country of residence".*

An **international** traveller is defined as

*"a person on a trip outside his/her own country of residence (irrespective of the purpose of travel and means of transport used, and even if s/he may be travelling on foot)".*

A **domestic** traveller is defined as

*"any person on a trip within his/her own country of residence (irrespective of the purpose of travel and means of transport used, and even if s/he may be travelling on foot)".*

These definitions are extremely wide, the wording "between two or more places" means that even commuters and local travellers are covered by the overall concept of traveller (but excluded from tourism).

In the balance of payments an (international) traveller is defined as "an individual staying, for less than one year, in an economy of which he is not a resident for any purpose other than (a) being stationed on a military base or being an employee (including diplomats and other embassy personnel) of an agency of his/her government or being an accompanying dependant of these, or (b) undertaking a productive activity directly for an entity that is resident in that economy".

This definition comes near the "international visitor" concept (below). Students and medical patients are excluded from the one-year rule in the BOP. However, the expenditures made by individuals in group (b), including seasonal and border workers, are included under "travel" in the BOP (see 3.4.3).

A **"trip"** in mobility survey is defined as "a movement to one or more destinations, and covers the whole period that a person is away from the place of residence".

The definition is consistent with tourism: it covers both the travelling (to the destination(s) and back to the place of residence) and the stay at the destination(s). In special circumstances, when people live during the survey period in another place than their usual residence, this place should be taken as origin.

In the long-distance mobility survey, at least one point of destination has to be situated at more than 100 km from the point of origin. This a major difference with tourism surveys, where no distance criteria exists, the destination is only outside the usual environment. Another difference is that regular trips (weekly or more frequent trips to second home, to relatives, to place of study, etc.) are included in mobility surveys. Since these regular trips are separated from other trips, they can be excluded for tourism purposes (for more considerations, see 1.3, the definition of usual environment and 3.4.4, the links between tourism and mobility surveys).

A **journey** in mobility survey is defined as "an activity based movement from a specified point of origin to a specified point of destination".

A new journey is described each time an important activity will take place. A journey can exist also at a single stage.

The definition can also be used for tourism, although there may be different interpretations for 'changing an activity' and this may have some effect on comparability. In the most common case a trip consists of two journeys: journey to destination and journey back.

A **journey stage** (segment) in mobility survey is defined as "a part of a journey defined by one single means of transport". Another stage is taken into account if a change of means of transport during a journey takes pla-

ce. The locality of change and the means of transport are described. This definition is clear and can be adopted also in tourism.

In the Council Recommendation "visit" can mean either the whole trip or only part of it, depending on the perspective (origin-based or destination-based), while in the WTO draft technical manual, "visit" is used to describe tourism only from the standpoint of the receiving place or country (the destination). Linguistically "visit" is more ambiguous than "trip" or "stay": it does not indicate an origin- or destination-based perspective and it does not necessarily involve a trip, one can pay a visit to somebody living in the same locality. From the standpoint of the receiving place or country visit can sometimes be replaced by "stay" ("duration of stay" is clearly destination-based while "duration of visit" could be origin- or destination-based). The distinction between "trip" and "visit" is important because an individual traveller can make several visits during a single trip.

**Visitor** is defined as "*any person travelling to a place other than that of his/her usual environment for less than twelve months and whose main purpose of trip is other than the exercise of an activity remunerated from within the place visited*".

All types of travellers are not engaged in tourism but all visitors are. The term "visitor" represents one of the basic concepts for the system of tourism statistics.

Visitors (domestic/international) comprise **overnight visitors**, traditionally called **tourists** ("*visitors who stay at least one night in a collective or private accommodation in the place/country visited*") and **(same-)day visitors** ("*visitors who do not spend the night in a collective or private accommodation in the place/country visited*").

The three fundamental criteria that are used to distinguish visitors from other travellers are as follows:

(i) *the trip should be to a place other than that of the usual environment* (see definition in next chapter), which would exclude short-distance local transport and commuting, i.e. more or less regular trips between the place of work/study and the place of residence;

(ii) *the stay in the place visited should not last more than twelve consecutive months*, beyond which the visitor would become a resident of that place (from the statistical standpoint);

(iii) *the main purpose of the visit should be other than the exercise of an activity remunerated from within the place visited*, which would exclude migratory movements for work purposes.

(i) and (ii) are in the definition of tourism and they are unambiguous although often difficult to put into practice. The definition of "visitor" is more restrictive than the definition of "tourism" because the "remuneration" criteria (iii) is not included in the definition of tourism and it leaves a group of travellers engaged in tourism out from the "visitor" concept. In the UN Recommendations on statistics of international migration, a short-term (one year or less) immigrant is defined as a person who has entered the country for the purpose of working at an occupation remunerated from within the country, including their dependants and household employees.

In principle the exclusion of (iii) seems proper: migration should not be included in tourism and with the exclusion tourism figures would correspond better to other statistics.

In practice, however, the remuneration criteria is extremely difficult to implement and, when interpreted literally, often leads to ambiguous and ar-

bitrary situations: e.g. drawing a difference whether a consultant is paid for by the enterprise headquarters (= tourist) or by the local unit (= non-tourist) is not reasonable. Persons remunerated from within the place visited may account for a considerable part of tourists for certain destinations and of clientele in certain hotels and guest houses. In accommodation statistics it is impossible to exclude them. In practice they are excluded only when the remuneration from within the place visited lasts for a longer time and the persons (usually) no longer live in accommodation establishments but rent an apartment.

In the demand surveys it would be easier to separate the persons remunerated from within the place visited by asking about the place of payment. This is not commonly inquired either, because it requires a separate question that many people consider rather intrusive.

Although it is impossible to implement the remuneration criteria generally, there are situations, where it can be very useful: e.g. if we want to separate seasonal workers in rural tourism, we must use the remuneration criteria.

To summarise: in each case we must consider, if the remuneration criteria should be applied and what would be the exact criteria we could use. Remuneration refers to payments (incl. payment in kind) which cover the reward of labour. It does not refer to payments for travel costs or daily allowances.

The following **categories of travellers** should not be included in **international visitor** arrivals and departures:

(i) persons entering or leaving a country as migrants, including dependants accompanying or joining them;

(ii) persons, known as border workers, residing near the border in one country and working in another;

(iii) diplomats, consular officers and members of the armed forces when travelling from their country of origin to the country of their assignment or vice-versa, including dependants and household employees accompanying or joining them;

(iv) persons travelling as refugees or nomads;

(v) persons in transit who do not formally enter the country through passport control, such as air transit passengers who remain for a short period in a designated area of the air terminal or ship passengers who are not permitted to disembark. This category would include passengers transferred directly between airports or other terminals. Other passengers in transit through a country are classified as visitors.

These exclusions are also related to migration statistics. Most countries have information on international passenger movements but to know the share of the above groups of travellers would require separate questions in extensive border surveys (or border census) and that is not common in Europe. Migration statistics are also more and more based on other sources (registration coupons, work permits, population and housing registers etc.) than on international passenger arrivals or departures.

From the tourism standpoint it is important to distinguish and exclude border workers (ii) and persons in transit (v) from tourism statistics and surveys, especially in surveys conducted at international arrival/departure points. Another important mode of travelling, that is excluded by the basic definition of tourism, viz. regular shopping trips to a neighbouring country, is not clearly excluded by these definitions but it can be excluded also in

migration statistics as 'frontier traffic' (i.e. the movement of persons residing near the frontier, crossing it frequently and often authorised to use simplified travel papers). Regular trading trips to a neighbour country can be considered as border working or frontier traffic and are excluded.

Groups (i), (iii) and (iv), which include seasonal workers, diplomats etc. are assimilated with the residents of the country in which they temporarily reside in other tourism statistics and surveys (after the arrival). They are treated like residents when they travel within the country, in which they actually reside usually for at least a number of months. It may also be difficult to exclude them when they (migrants, etc.) arrive in a country and spend some time in an accommodation establishment searching for an apartment. If possible, especially refugees and asylum-seekers should be excluded, because if a large number of refugees are placed in a hotel or other tourist establishment, they distort the local and regional statistics.

The following categories of trips should not be included in **domestic visitor** arrivals and departures:

- (i) residents travelling to another place within the country with the intention of setting up their usual residence in that place;
- (ii) persons who travel to another place within the country to exercise an activity remunerated from within the place visited;
- (iii) persons who travel to work temporarily in institutions within the country;
- (iv) persons who travel regularly or frequently between neighbouring localities to work or study;
- (v) Nomads and persons without fixed residence;
- (vi) Armed forces on manoeuvre.

The list has much in common with the list of international visitor arrivals and departures.

Commuting (iv) is already excluded by the definition of tourism. The problems of "remuneration" (ii) has been dealt with in an earlier comment and (iii) is quite similar to that: if the duration of stay is not long, it may also be considered as professional or mission travel.

### 1.3 Usual environment and residence

#### Usual environment

*of a person consists of the direct vicinity of his/her home and place of work or study, and other places frequently visited.*

The concept of usual environment has two dimensions, vicinity and frequency. Places located close to the place of residence of a person are part of the usual environment even though they may be rarely visited. Places that are frequently (= on the average once a week or more often), on a routine basis, visited are part of the usual environment of a person, even though they may be located at a considerable distance (or in another country) from the place of residence.

There is only one usual environment for a person and the concept is applicable as well in domestic as in international tourism. The usual environment excludes from the concept of "visitor" persons commuting daily or weekly to work or study, daily shopping, persons visiting the doctor, club

meetings, church, the cinema and any other similar trips within the local or day-to-day activity.

The usual environment criteria may be used to exclude from tourism persons who work in means of transport (lorry drivers, rail crew, airline pilots and hostesses, etc.) or travelling sales representatives or agents, if their trips, especially domestic trips, consist of frequent routine travel. Another possibility is to classify them as business travellers.

The following **criteria** can be used in defining the usual environment:

- (i) *minimum distance travelled;*
- (ii) *minimum duration of absence from usual place of residence;*
- (iii) *minimum change between localities or administrative territories.*

These criteria are valuable especially in distinguishing tourism in statistics and surveys carried out for non-tourism purposes. The most useful is a combination of (ii) and (iii). The minimum change between localities (or commuting areas) is usually one. Apparently a minimum duration of absence also exists. In practice it could be fixed at 3 hours to correspond to the first subdivision of "duration of trip" in tourism demand surveys. The duration of absence is for the respondents normally easier to give than the distance and it is used in many countries in day trip surveys.

The minimum distance travelled is used in mobility surveys but for tourism surveys it is theoretically more questionable: it depends greatly on the means of transport and often the facilities for leisure activities have been set up in the immediate vicinity of conurbation. If it is necessary to apply a minimum distance, the first subdivision of the variable "distance to destination and back", i.e. 50 kilometres, may be used.

**Resident in a country** (in a place).

For the purposes of international (domestic) tourism statistics

*"a person is considered to be a resident in a country (place) if the person:*

- (a) *has lived for most of the past year or 12 months in that country (place), or*
- (b) *has lived in that country (place) for a shorter period and intends to return within 12 months to live in that country (place)".*

The country of residence is the key criteria for determining whether a person arriving in a country is a visitor or other traveller. It is included in the Directive to classify international visitors according to their country of residence, not according to their citizenship. From a tourism standpoint any person who moves to another country (place) and intends to stay there for more than one year is immediately assimilated with other residents of that country (place). Citizens residing abroad who return to their country of citizenship on a temporary visit are included with non-resident visitors, though it may be desirable to distinguish them in some studies. Citizenship is indicated in the person's passport (or other identification document), while country of residence has to be determined by means of question or inferred e.g. from the person's address.

#### 1.4 Same-day trips

The overall concept for day trips is similar to that for other tourism, that

is "a break away from the usual environment".

Same-day trips in a household survey are:

(a) *"travel that is undertaken from and returns to a regular place of residence and usual environment. The trip involves no overnight stay in a collective or private accommodation"*.

Sometimes a 24 hour limit is used. That is unnecessary according to the definition: the criteria is that the person does not spend the night in an accommodation establishment or does not sleep during the trip, not even in a car or other mode of private accommodation. A day trip can therefore sometimes last for more than 24 hours.

In border and destination surveys there may be two other types of same-day trips - or rather day visits.

(b) (Round) Visits from a place at which one is an overnight visitor,

(c) Stopovers as part of transit travel (including cruises where the passenger spends the night aboard ship)

These are not actual day trips, they are such only from the standpoint of the receiving place or country in border surveys and surveys at destinations, tourism attractions or local events. In these surveys it should always be asked, whether the trip is a same-day trip from the usual place of residence or a visit during an overnight trip, since there is a risk of counting the trips and expenditure twice.

#### **What should be included:**

(1). Same-day-trips from a place which is not the permanent place of residence but the centre of the household for a number of months at a time. This includes trips of short-term migrants, i.e. persons who reside temporarily in a place, seasonal workers, au pairs, etc.

Day trips of persons living in a second regular place of residence may also be included in a household survey but it is advisable to distinguish them from day trips from the first regular place of residence.

(2). Non-regular visits to relatives or friends living in another locality. If the purpose is to provide or care for sick relatives or friends, the visits are usually regular and should be excluded.

(3). Non-regular same-day business and professional trips, whether the main purpose of travel is the exercise of an activity remunerated from within the place visited or not. This includes commercial travellers and agents, entrepreneurs, consultants and other businessmen, as well as lecturers, performing artists and employees.

(4). Trips that are undertaken to meet a requirement for goods or services are included, if they are non-regular. They may be outbound, in which case they give information for the balance of payments. (Regular shopping and regular trips for trading goods to a neighbouring country are not tourism trips).

#### **What should be excluded:**

(1). What the basic definitions exclude: trips within the usual environment like commuting, transit, local transport and trips undertaken to fulfil a constant need for goods or services (school, the doctor, club meetings, church

ch, the cinema).

(2). Same-day visits undertaken from a locality other than individual's regular domicile, i.e. day visits from a place where the individual is a visitor for a limited number of nights.

(Note trips (b) and (c) above).

Day visits forming part of overnight tourism trip can in household surveys be concluded from "places visited" (see variable V15 in demand surveys) and connected with corresponding purposes of visits and activities.

## 2. Accommodation statistics

### 2.1 capacity of tourist accommodation

**Tourist accommodation** is regarded as "*any facility that regularly or occasionally provides overnight accommodation for tourists*".

Tourist accommodation is divided into two main groups:

A. Collective accommodation establishments

which includes hotels, camping sites and other establishments

B. Private tourist accommodation

which includes private rental and non-rental accommodation

Local unit is defined in Council Regulation No 696/93 of 15 March 1993 on statistical units:

*The local unit is an enterprise or part thereof situated in a geographically identified place. At or from this place economic activity is carried out for which - save for certain exceptions - one or more persons work (even if only part-time) for one and the same enterprise.*

The accommodation establishment conforms to the definition of local unit (the term "establishment" is preferred in tourism) as production unit. It will be regarded as such for purposes of tourism statistics, irrespective of whether the accommodation of tourists is the main or secondary activity. This means that all establishments are classified in the accommodation sector if their capacity exceeds the national minimum even if the major part of turnover may come from restaurant or other services.

### Classification of tourist accommodation establishments and dwellings

In tourism statistics, some countries use a WTO-based classification, some countries use NACE Rev. 1 classification and some countries may include both. CPA is consistent with NACE but more detailed. The WTO-based classification is discussed below in detail and references are made to NACE Rev. 1 and CPA.

Hotels and camping sites, the two main groups of establishments, are in both classification systems but the other, less important establishments, are divided in the classification systems (WTO and CPA) on different grounds into very small groups. Both classification systems have good points and weak points and their harmonisation is needed. It could be achieved by concentrating on the main groups at international level and leaving the detailed classifications to national level.

COLLECTIVE TOURIST ESTABLISHMENT is defined as

*An accommodation establishment that provides overnight lodging for the traveller in a room or some other unit, but the number of places it provides must be greater than a specified minimum for groups of persons ex-*

*ceeding a single family unit and all the places in the establishment must come under a common commercial-type management, even if it is non-profit-making.*

The key criteria for an establishment is, in addition to a minimum size, common management. Collective tourism establishments are divided (WTO) into hotels and similar establishments, specialised establishments and other collective establishments; defined as follows:

*Hotels and similar establishments are typified as being arranged in rooms, in number exceeding a specified minimum; as coming under a common management; as providing certain services including room service, daily bed-making and cleaning of sanitary facilities; as grouped in classes and categories according to the facilities and services provided; and as not falling in the category of specialised establishments.*

*Specialised establishments and other collective establishments: Any establishment, intended for tourists, which may be non-profit making, coming under a common management, providing minimum common services (not including daily bed-making) and not necessarily being arranged in rooms but perhaps in dwelling-type units, campsites or collective dormitories and often engaging in some activity besides the provision of accommodation, such as health care, social welfare or transport.*

The service standards required for hotels vary from country to country (there may even be no standards, in which case the establishments can call themselves "hotel" or any other name as they wish). If the hotel standards are used as a starting point for the classification, there may be exceptions to what is stated in the definitions. Apartment hotels may not necessarily be arranged in rooms but they are included in hotels if they satisfy the service standards required for hotels. Some specialised or other establishments may have daily bed-making but they are not included in hotels if they do not satisfy the other service standards required for hotels. The greatest risk for comparability is if some countries do not include spa hotels and conference hotels in Hotels but in Specialised establishments - and exclude them from accommodation statistics.

**Classification** (the asterisks refer to parts A and B of the Directive):

#### **A. Collective tourist accommodation establishments**

- |   |      |      |
|---|------|------|
| 1. Hotels or similar establishments         | ***m |      |
| 1.1. Hotels                                 |      |      |
| 1.2. Similar establishments                 |      |      |
| 2. Specialised establishments               |      |      |
| 2.1. Health establishments                  |      |      |
| 2.2. Work and holiday camps                 |      |      |
| 2.3. Public means of transport              |      |      |
| 2.4. Conference centres                     |      |      |
| 3. Other collective establishments          | ***m |      |
| 3.1. Holiday dwellings                      |      | ***a |
| 3.2. Tourist campsites                      |      | ***a |
| 3.3. Marinas                                |      |      |
| 3.4. Other collective establishments n.e.c. |      | ***a |

## B. Private tourist accommodation

1. Private rental (non-permanent) accommodation
  - 1.1. Rented rooms in family houses
  - 1.2. Dwellings rented from private individuals or professional agencies
2. Other private accommodation
  - 2.1. Owned dwellings
  - 2.2. Accommodation provided without charge by relatives or friends
  - 2.3. Other private tourism accommodation n.e.c.

The Directive uses mainly the WTO headings for the groups which are included but makes no direct reference to it. NACE separates only hotels, camping sites and youth hostels (CPA is more detailed), which leaves a great deal of flexibility for interpretation at national level. For instance some specialised establishments and marinas may be included in "other collective establishments" or excluded from accommodation statistics. A definition and discussion on each group is presented below for the purpose to assess the different ways how the definitions may be implemented and to assess the comparability at international level.

The definition of hotels and similar establishments states that these should be grouped in classes and categories according to the facilities and services provided.

Star classification is based on certain (but varying) quality standards and it is used especially for hotels but very often also for camping sites, youth hostels and holiday villages. Another very useful possibility is to typify establishments according to location and activities they offer. This is most useful for hotels (see the typology below), because it is the biggest and most important group but similar typologies can be applied to other establishments.

### A.1.1. Hotels

*Comprise hotels, apartment hotels, motels, roadside inns, beach hotels, residential clubs and similar establishments providing hotel services including more than daily bed-making and cleaning of the room and sanitary facilities.*

[Equal to NACE group 55.1 Hotels (under which hotels, motels, inns and hotels with conference facilities are named). NACE is further divided into 55.11 Hotels and motels with restaurant and 55.12 Hotels and motels without restaurant.

CPA groups 55.11.10 and 55.12.10 are equivalent to them].

Hotels are the most important group of accommodation establishments in most countries. Apartment hotels come under hotels even if they may not be arranged in rooms (and what is understood by "apartment hotel" varies from country to country). The difference between hotels and similar establishments is in many cases unclear and in some countries hotels and similar establishments are not separated in accommodation statistics. For that reason hotels and similar establishments are grouped together in the Directive.

Because hotels are a large and heterogeneous group they are very often divided into subgroups according to different criteria. Size groups by the number of rooms or beds are easy to apply but they are not very informa-

tive about the quality of demand.

Star classification gives important information on accommodation quality and which quality level is used most by the tourists. Star classification is used extensively but the criteria vary from country to country and it is not available in all countries in Europe even on a tentative basis (classification by room prices correlates strongly with star classification).

Another very useful viewpoint is obtained by grouping hotels by different types (some of which are already mentioned in the definition of hotel). This can be done by giving a special code to each type. The most important groups might be (tentatively):

- spa hotels (compare with group A.2.1)
- conference hotels (compare with group A.2.4)
- resort hotels
- motels
- apartment hotels
- beach hotels
- summer hotels
- estate or castle hotels
- sport hotels
- urban hotels
- other hotels

#### **A.1.2. Similar establishments**

*Comprise rooming and boarding houses, tourist residence and similar accommodation arranged in rooms and providing limited hotel services including daily bed-making and cleaning of the room and sanitary facilities.*

[Included in NACE group 55.23 Other provision of lodgings n.e.c. (which includes all other establishments except hotels, camping sites and youth hostels). 55.2 names guest houses and farmhouses separately.

Included in CPA group 55.23.13 Letting services of short-stay furnished accommodation, which includes also private short-stay rental accommodation].

This group also includes guest houses and bed and breakfast as well as farmhouse accommodation (if above the national room/bed threshold). The obscure heading "similar establishments" cannot be used but by specialists, instead the names of the most important groups (guest and boarding houses, B&B, etc.) are generally used in tourism surveys and statistics.

There are cases when it may be difficult to decide whether an establishment is a hotel or a guest house, the difference between "hotel services" and "limited hotel services" can be interpreted in many ways (it is also possible to use quality criteria, e.g. hotels should generally have bathrooms for individual use). In some countries hotels and similar establishments are therefore grouped together although the separation is useful, it is made in the NACE and CPA classifications and it is interesting to follow the capacity and the use of capacity separately. The trend has been in preference for higher

services (hotels), but guest houses and B&B establishments still offer a lower price choice, usually in small or medium-size establishments.

### **A.2.1. Health establishments**

*Comprise health treatment and health care establishments providing accommodation, such as spas, thermal resorts, sanatoriums, mountain sanatoriums, convalescent homes, health farms and other similar establishments.*

[Included in NACE group 55.23 Other provision of lodgings n.e.c. (which includes all other establishments except hotels, camping sites and youth hostels) or possibly in 85.14 Other human health activities.

Included in CPA group 55.23.15 Other short-stay accommodation services n.e.c. or possibly in 85.14.15 Residential health facilities services other than hospital services].

This group is very problematic: it may or may not be separated in national statistics and its international comparability is rather poor. Health establishments providing hotel services (a majority) should, according to the definitions, be included in hotels (although it is recommended to be able to separate "spa hotels" from other hotels). Only establishments which do not provide hotel services should be included in the minor group "health establishments". However, in some countries all health establishments are classified under this heading whether they provide hotel services or not.

### **A.2.2. Work and holiday camps**

*Comprise camps providing accommodation for holiday activities, such as agricultural, archaeological and ecological work camps, holiday camps, scout camps, mountain shelters, cabins and other similar establishments.*

[Included in NACE group 55.23, Other provision of lodgings n.e.c., which includes all other establishments except hotels, camping sites and youth hostels.

Include CPA group 55.23.11, Children's holiday camp services, and part of 55.23.12, Holiday centre and holiday home services].

This group may or may not be separated in national statistics and it is rather poorly included in business registers. If information about the group is wanted, it is better obtained from demand surveys than from accommodation statistics. The group may also include children's camps, accommodation of sailing and riding schools and other sport centres (not providing hotel services). Holiday villages belong to group A.3.1.

### **A.2.3. Public means of transport**

*Consist of the accommodation, with sleeping facilities, associated with collective public transport and inseparable from it as to expenditure; it mainly concerns trains, ships and boats.*

[Included in NACE group 55.23, Other provision of lodgings n.e.c., which includes all other establishments except hotels, camping sites and youth hostels.

Nearly equal to CPA group 55.23.14, Sleeping car services and sleeping services in other transport media].

Public means of transport is a quite unique group among the accommodation establishments because it is not directly linked to a locality (hotel in a ship that remains in one place without sailing is classified as hotel). The information about the sleeping capacity in public means of transport may be obtained from transport registers. The use of the capacity can be obtained from passenger transport statistics and from tourism demand surveys.

Public means of transport may be subdivided according to mode:

(a) Ships

- cruise ships (sea and inland waterways)
- accommodation in scheduled water passenger transport
- big (often ancient) sailing ships and the like usually not using marinas to stay overnight

(b) Trains

sleeping car and couchette accommodation in trains

(c) Coaches

couchette accommodation in coaches.

(d) Other

other accommodation in public or hired means of transport (for example horse caravans).

#### A.2.4. Conference centres

*Include establishments offering accommodation and specialised in facilities for congresses, conferences, courses, vocational training, meditation and religion or young people's college. The sleeping accommodation is generally only available to the participants of the specialised activities organised in or by the establishment.*

[Included in NACE group 55.23, Other provision of lodgings n.e.c., which includes all other establishments except hotels, camping sites and youth hostels.

Included in CPA group 55.23.15, Other short-stay accommodation services n.e.c].

This group is very problematic: it may or may not be separated in national statistics and its international comparability is rather poor. Conference centres providing hotel services (a majority) should, according to the definitions (and NACE) be included in hotels (although it is recommended to be able to separate "conference hotels" from other hotels). Only establishments which do not provide hotel services should be included in the minor group "conference centres". However, in some countries all conference centres are classified under this heading whether they provide hotel services or not.

Students in full-time education should not be included as guests in conference centres.

#### A.3.1. Holiday dwellings

*Include collective facilities under common management, such as clusters of houses or bungalows arranged as dwelling-type accommodation*

*and providing limited hotel services (not including daily bed-making and cleaning).*

[Included in NACE group 55.23, Other provision of lodgings n.e.c., which includes all other establishments except hotels, camping sites and youth hostels.

Include main part of CPA group 55.23.12, Holiday centre and holiday home services].

This group should be called "holiday villages" or "holiday centres". The WTO heading "holiday dwellings" is misleading, because dwellings indicate private accommodation ("holiday dwellings" might be a proper name for B.2.1), not to establishments. Holiday villages providing hotel services (a minority) should, according to the definitions, be included in hotels even if they are usually not arranged in rooms (it is useful to be able to separate them from other hotels). Only establishments which do not provide hotel services should be included in this group. However, some countries may classify all holiday villages under this heading whether they provide hotel services or not. Holiday villages provide often various services for recreational activities, information services, canteen, etc.

### **A.3.2. Tourist campsites**

*Consist of collective facilities in enclosed areas for tents, caravans, trailers and mobile homes. All come under common management and provide some tourist services (shop, information, recreational activities).*

[Equal to NACE group 55.22, Camping sites, including caravan sites. Equal to CPA group 55.22.10].

In most countries camping and caravan sites are (after hotels) the second most important type of accommodation establishment. They very often also have a star classification for indicating the services available. In addition to staying overnight in caravan or tent, camping sites generally also have cabins to rent.

Hired permanent pitches in camping sites may be included in this group (if they come under a common management) but it is more consistent to consider them as private accommodation like second homes.

### **A.3.3. Marinas**

*Consist of boating harbours where boat owners can hire a berth in the water or a place on the land for the season or year and of ports for passing vessels where sailors pay mooring per night. These two types may be combined. At least some sanitary facilities are provided. Marinas may be run by clubs for water sports, businesses or public administration.*

[Included in NACE group 63.22 Other supporting water transport activities or possibly in 55.23, Other provision of lodgings n.e.c. or in 92.62 Other sporting activities.

Included in CPA group 63.22.11 Port and waterway operation services (excluding cargo handling) or possibly in 55.23.15 Other short-stay accommodation services n.e.c. or 55.23.14, Sleeping car services and sleeping services in other transport media or in 92.62.13 Other services rela-

ted to sports events n.e.c.].

Marinas or boating harbours are not presented as own group in the WTO classification, they are included in camping sites (current WTO recommendation) or in other collective establishments (draft WTO technical manual). Because data on marinas are available in few countries only, it is best to present them as a separate group.

Hired permanent moorings in boating harbours may be included in this group (if they come under a common management) but it is more consistent to consider them as private accommodation like second homes.

#### **A.3.4. Other collective establishments n.e.c**

*Comprise youth hostels, tourist dormitories, group accommodation, holiday homes for the elderly, holiday accommodation for employees and workers' hotels, halls of residence for students and school dormitories, and other similar facilities that come under common management, have a social interest and are often subsidised.*

[Include NACE group 55.21, Youth hostels and mountain refuges and part of 55.23, Other provision of lodgings n.e.c., which includes all other establishments except hotels, camping sites and youth hostels.

Include CPA group 55.21.10, Youth hostels and mountain refuges services, and part of 55.23.15, Other short-stay accommodation services n.e.c.].

Of these, youth hostels are the group most often included in accommodation statistics. Some youth hostels may provide hotel services in which case they should, according to the definitions, be included in hotels (it is useful to be able to separate them from other hotels).

The other groups are more similar to group A.2.2 and the demand side surveys are a better source of data for them.

#### *Treatment of combinations of accommodation types in one establishment*

In reality we often find more than one accommodation type in an establishment. Possible solutions to the problem are:

- (1) Split up the establishment into two (or more) establishments. This is the best solution if the establishment is able (and willing) to do so;
- (2) Disregard the second accommodation type if its capacity is less than the specified minimum threshold of the country;
- (3) Classify according to the main type. The main type may be determined by capacity (most often), by use of capacity or by income.

#### *Private tourist accommodations*

are the remaining types of tourist accommodation that do not conform to the definition of "establishment". Units, that are smaller than the applied national minimum capacity of establishment, may also be included in Group B.1.1 or B.1.2.

Private tourism accommodation provides, for rent (B.1.1 and B.1.2) or without charge (B.2.1, B.2.2 and B.2.3), a limited number of places. Each accommodation unit (room, dwelling) is independent and is occupied by tourists, usually by week or weekend, fortnight or month, or by its owners

as a second or holiday home.

#### **B.1.1. Rented rooms in family homes**

*The accommodation covered by this group differs from the boarding house in that the tourist stays with the family that usually lives in the home and pays a rent.*

[Included in NACE group 55.23, Other provision of lodgings n.e.c., which includes also all establishments except hotels, camping sites and youth hostels.

Included in CPA group 55.23.13 Letting services of short-stay furnished accommodation, which includes also guest houses, boarding houses and bed&breakfast establishments].

Permanently rented rooms do not belong to this group (or tourism statistics).

#### **B.1.2. Dwellings rented from private individuals or professional agencies**

*Comprise apartments, villas, houses, chalets and other dwellings rented or leased as complete units between households, on a temporary basis, as tourist accommodation.*

[Included in NACE group 55.23, Other provision of lodgings n.e.c., which includes also all establishments except hotels, camping sites and youth hostels.

Included in CPA group 55.23.13 Letting services of short-stay furnished accommodation, which includes also guest houses, boarding houses and bed&breakfast establishments].

Permanently rented or leased dwellings belong to the next group.

#### **B.2.1. Owned dwellings**

*Comprise second homes, -apartments, villas, houses, chalets, etc. used during the tourist trip by visitors who are members of the owner household. This group also includes dwellings incorporated in a time-sharing contract.*

[Include part of NACE group 70.20, Letting of own property.

Include part of CPA group 70.20.11, Renting or leasing services involving own residential property].

In spite of the word "owned", permanent rental of second homes, houses, villas, cottages, pitches on camping sites and moorings in boating harbours can be assimilated with owned dwellings and classified under this heading.

#### **B.2.2. Accommodation provided without charge by relatives or friends**

*The accommodation of this group concerns tourists allowed by relatives or friends to use all or part of their home free of charge.*

[No NACE or CPA counterpart].

The rent-free use of second homes belonging to friends or relatives are also classified into this group.

### **B.2.3. Other private accommodation n.e.c.**

*This group, which does not fit entirely into the major group of private tourist accommodation, includes other types of accommodation such as tents at non-organised sites and vessels at unofficial moorings.*

[Includes small part of NACE group 71.21, Renting services of other land transport equipment.

Includes part of CPA group 71.21.14 Leasing or rental services of motorcycles, caravans and campers and small parts of other leasing or rental of vehicles or transport equipment].

This group includes any private accommodation that does not fit in previous groups. The only requirement is that a person actually sleeps or tries to sleep during the night in some place. Even sleeping in a car some time during the night, or in a sleeping bag outdoors or at the railway station are included.

### **2.1.2 Variables on accommodation capacity**

#### **Bedroom**

\*\*\*a

*A bedroom is the unit formed by one room or groups of rooms constituting an indivisible rental whole in an accommodation establishment or dwelling.*

Rooms may be single, double or multiple, depending on whether they are equipped permanently to accommodate one, two or several people (it is useful to classify the rooms respectively). The number of existing rooms is the number the establishment habitually has available to accommodate guests (tourists), excluding rooms used by the employees working for the establishment. If a room is used as a permanent residence (for more than a year) it should not be included. Bathrooms and toilets do not count as a room. The number of rooms should generally coincide with the number of units recorded in the establishment register.

An apartment is a special type of room. It consists of one or more rooms and has a kitchen unit and its own bathroom and toilet. Apartments may be with hotel services (in apartment hotels) or without hotel services.

Cabins, cottages, huts, chalets, bungalows and villas can be treated like bedrooms and apartments, i.e. to be let as a unit.

#### **Pitch,**

\*\*\*a mooring

Camping sites and (to a lesser extent) other establishments let pitches for tents, caravans, mobile homes and similar shelter to tourists who want to stay on a "touring" pitch for one night, few days or week(s), as well as to people who want to hire a "fixed" pitch for a season or a year.

Moorings of boats in marinas can be dealt with similarly to pitches.

Hired fixed pitches and moorings for long-term rent (more than a year) may be considered as private accommodation.

## **Bed-place**

\*\*\*a

*The number of bed-places in an establishment or dwelling is determined by the number of persons who can stay overnight in the beds set up in the establishment (dwelling), ignoring any extra beds that may be set up by customer request.*

The term bed-place applies to a single bed, double bed being counted as two bed-places. The unit serves to measure the capacity of any type of accommodation.

A bed-place is also a place on a pitch or in a boat on a mooring to accommodate one person. According to the Directive, one camping pitch equals 4 bed-places if the actual number of bed-places is not known. A pitch may be for a tent (in some countries pitches for tents are of minor importance and they are not counted), caravan, mobile home or other shelter or in a boat on a mooring.

The bed-places in rooms and in pitches and moorings should be counted separately as rooms and pitches are counted separately.

The number of bed places of pitches (chalets, apartments, etc.) rented for a season or year may be distinguished from short-term rented units. In some countries these are included in the number of bed-places while in others they are not.

### **Bed-places per bedroom**

are calculated by dividing the number of bed-places (excluding pitches) by the number of bedrooms. This average does not give much information, a better way is to classify the rooms and apartments according to the number of beds (one, two, three or more). The tendency has long been in favour of fewer bed-places per room, even in collective establishments, like youth hostels and holiday villages (also in privately rented cottages), for which this measure is most interesting.

### **Months (and days) open during the year**

This variable is essential to get the seasonal aspects of the business, both for assessing the seasonal supply of capacity and for calculating the monthly occupancy rates.

### **Services offered**

**Restaurant** (for staying guests and maybe other clients) is the most important variable of services offered. Hotels are divided in two parts (hotels with or without restaurant) in the NACE classification but information on the availability of a restaurant is equally important for other accommodation establishments.

Other services may be:

- Breakfast (buffet/continental/other),
- Lunch, Dinner,
- Bar services,
- m<sup>2</sup> conference rooms and seating capacity, Interpreting facilities,

- Swimming pool,
- Sauna, Solarium, Massage,
- Laundry service, Self-service laundry,
- Other personal services (hair dressing etc.),
- Fitness or Sports facilities (tennis courts, riding, fishing, etc.),
- Spa facilities and other facilities for Health treatment,
- Beach facilities; Garden, Terrace,
- Shop(s),
- Children's playground/playroom,
- Garage, Parking,
- Transport services,
- Amusement (dancing, piano bar etc.),
- Photocopy service,
- Electronic computer assistance.

Centrally offered services are usually given in Guide books. Whether other variables than restaurant should be included in accommodation statistics, depends on national interests.

### Variables on quality

Three important quality classifications should be generally applied:

- **star classification** for hotels, camping sites, youth hostels and maybe holiday villages,
- the number of **bathrooms** for individual use (per 100 rooms) and
- the number of rooms or cabins suitable for **all-year accommodation** (provided with heating, etc.).

Other quality classifications of rooms may be:

- rooms easy of access to physically handicapped; use of lift;
- the number of rooms provided with cooling;
- the provision of rooms with telephone, television and radio;
- soundproofed rooms;
- smoke-free rooms;
- the length of the majority of the beds;
- self-catering kitchen, refrigerator; mini-bar;
- pets admitted.

Variables on quality are also usually given in Guide books. Some of the variables may be offered centrally (see Services offered, above) or in rooms.

### Other variables

If variables can be obtained from business register, service statistics or other statistics, it is not necessary to ask them in accommodation statistics. Such important variables may be e.g. **proprietorship** of the establishment, the number of **employed persons** and monetary variables in general, **turnover, wages**, etc. The economic variables are characteristic of supply and of the use of capacity (next chapter), and many interesting calculations can be made by combining the data, e.g. to estimate the employment created by the guests according to the countries of residence.

## 2.2 Use of accommodation capacity

### 2.2.1 Variables on the users of capacity

#### Arrival

\*\*\*m

(departure) *is defined as a person who arrives at (leaves) a collective accommodation establishment or at private tourism accommodation and checks in (out).*

Statistically there is not much difference if, instead of arrivals, departures are counted.

No age limit is applied: children are counted as well as adults, even in case the overnight stays of children might be free of charge.

Arrivals are calculated by country of residence of the guest and by month.

The arrivals of non-tourists should be counted separately, if possible.

The arrivals of same-day visitors spending only few hours during the day (no overnight stay, the date of arrival and departure are the same) at the establishment are excluded from accommodation statistics.

### **Overnight stay**

\*\*\*m

(or night spent) *is each night that a traveller actually spends (sleeps or stays) or is registered (his/her physical presence there being unnecessary) in a collective accommodation establishment or in private tourism accommodation.*

Overnight stays are calculated by country of residence of the guest and by month.

Normally the date of arrival is different from the date of departure but persons arriving after midnight and leaving on the same day are included in overnight stays.

A person should not be registered in two accommodation at the same time.

The overnight stays of non-tourists (refugees, medical prescription, etc.) should be counted separately, if possible.

### **Mode of lodging**

is relevant especially for overnight stays at camping sites. The classification might be:

(1) tent, (2) caravan, mobile home, (3) room, cabin.

### **Arrangement of the stay**

Overnight stays may be separated according to the arrangement of stay. Guests on package tours are the group most often distinguished and a more detailed classification may be used according to the "organisation of the trip" in the Directive (see variable V24).

### **Length of stay**

is obtained by dividing the number of overnight stays by the number of arrivals. The average length of stay is usually calculated by country of residence of the guest and by type of accommodation. It is more relevant on local and regional level because on country level the effect of same persons spending nights in several places obscures the measure.

### **Purpose of visit**

can be counted by guests or (preferably) overnight stays (for residents and non-residents) but the classification can normally include only the two

(or three) main groups:

(1) business, professional, (2) leisure, recreation, holidays; and perhaps (3) other purpose.

Visits to friends and relatives, health treatment and religious trips may be considered as leisure trips or other purpose trips. In the Directive, only (1) and (2) are separated in the tourism demand surveys (compare with the detailed classification of variable V13).

### **Country of residence of the guest**

\*\*\*m

In the Directive, a minimum number of countries and country groups are specified. These consist mainly of EU, EFTA and OECD countries. At national level it is usually necessary to include additional important tourism generating countries - and tourism destination countries; using the same list for both has certain advantages. However, to use an open questionnaire in which the countries are not specified, involves only little extra work. In a census survey all the countries of the world may then be covered, in sample surveys the reliability sets limits for the use of data of less important countries. There are some prerequisites for the use of open questionnaires: the availability of an advanced database at the statistical office and computers at larger accommodation establishments. The establishments record all the countries of residence of the guests (in whatever order), their arrivals and overnight stays. Instead of writing the country names on the questionnaire, the establishments may give directly country codes and other information on computer printouts.

Country coding. The "United Nations Standard Country or Area Code for Statistical Use" is widely used internationally and nationally. The UN maintains the world geographical classifications and gives numeric codes for countries. More informative and easier to operate in practice are the two-letter (or three-letter) alphabetic codes, maintained by the International Organisation for Standardisation (ISO) as the international standard ISO 3166 "Codes for the representation of names of countries". The ISO letter codes are consistent with the UN numeric codes and conversion tables can be used obtain the other coding system.

There is no standard country nomenclature in Eurostat and generally the coding system used by international organisations in the domain concerned is employed. An exception is external trade, which has devised an own country nomenclature that some countries may also use for tourism. Compared with the UN/ISO classifications, it has two important deviations (which are not suitable for tourism): it combines Belgium and Luxembourg, but separates Canary Islands, Ceuta and Melilla from Spain and includes them in Africa instead of Europe.

### **Other variables**

If a country has established a strict control of travellers, the tourists may be asked to give even quite a lot of additional information at the establishment or information can be obtained from the passport or other identification of the visitor. This information, usually collected for other than statistical purposes, may include residential address (useful for determining the country of residence), citizenship, number and place of issue of passport,

date and place of birth, even occupation and from where the visitor is coming and where s/he is going, etc. This kind of information would be very useful but it demands a great deal of resources from both the establishments and the statistical offices and the visitors have to reply to many detailed questions, when the policy is to decrease formalities of travel. In Europe, such detailed information is usually collected only if samples of tourists are drawn from among the guests of accommodation establishments.

## 2.2.2 Variables on occupancy

### Net occupancy rate of bed-places

\*\*\*m

*The net occupancy rate of bed-places in one month is obtained by dividing total overnight stays by the product of the bed-places on offer and the number of days when the bed-places are actually available for use (net of seasonal closures and other temporary closures for decoration, by police order, etc.) for the same group of establishments, multiplying the quotient by 100 to express the result as a percentage.*

Formula:  $NORB = (P/Gd) \times 100$

where P is the number of registered overnight stays during the month (year) and Gd is the number of bed-days actually available for use during the month (year).

The rates are generally calculated with an accuracy of one decimal.

The net occupancy rate refers to capacity that is actually available and it is clearly defined. However, in some countries part-month closures may not be observed.

Seasonally and yearly rented pitches, chalets, apartments, etc. may or may not be included in the calculation of occupancy rates or the data for them may be compiled separately. Some countries can observe the occupation of seasonally and yearly rented units while others cannot.

### Gross occupancy rate of bed-places

\*\*\*m

The gross occupancy rate of bed-places in one month is obtained by dividing total overnight stays by the product of the bed-places on offer and the number of days in the corresponding month (sometimes termed bed-nights) for the same group of establishments, multiplying the quotient by 100 to express the result as a percentage.

Formula:  $GORB = (P/Gp) \times 100$

where Gp is the number of potential bed-days.

The gross occupancy rate is also important for providing information on seasonal variation since (part of) the establishment may be closed during the year due to lack of demand. In that case the net occupancy rate gives 'too high' figures. However, the gross occupancy rate is theoretically much more difficult and internationally less accurate, because in practice it is calculated in several ways in different countries. In the above definition of monthly gross occupancy rate, the only (minimum) difference between net and gross occupancy rates is that a temporary closure of the establishment

for part of month is taken into account in the net but not in the gross occupancy rate. This usually makes only a small difference and in some countries part-month closures are not even observed.

For calculating monthly, seasonal and annual gross occupancy rates, other methods are used more commonly. The gross occupancy rate may be calculated according to the average capacity of the year or according to the (maximum) capacity of the peak season, usually the capacity in July or August. Using the peak capacity for calculating the gross occupancy rate for other seasons may give too low percentages. What would the occupancy rate have been if the establishment had been open? And there may be other reasons for closing (part of) the establishment during the low season, not only lack of demand. Part of the peak capacity may be unsuitable for all-year accommodation but it is often unknown which part.

#### **Net occupancy rate of rooms (houses, pitches, moorings...)**

For hotels and similar establishments, the room occupancy rate is very probably a better measure of capacity utilisation than the bed occupancy rate, because a room with a double bed is very often occupied by a single person. But although highly recommended, it is not used as widely as the bed occupancy rate, because the room occupancy rate requires more information from the establishments. This information may consist of inquiring monthly the average number of rooms available and how many rooms have been in use daily during the month (= the sum of rooms in use on the first, second, ... day of the month) and this requires calculations from the establishments.

Formula for calculating the net occupancy rate of rooms is

$$\text{NORR} = (Q/Hd) \times 100$$

where Q is the monthly (yearly) sum of occupied rooms and Hd is the number of rooms actually available for use, net of seasonal or other temporary closures.

Occupancy rate for houses (in a holiday village or single houses) can be calculated like rooms. Frequently the rent of a holiday house does not depend on how many persons are staying in the house and in that case the calculation of room occupancy rate is the only relevant measure, at least from the owner's point of view.

The **gross occupancy rate for rooms** can be calculated in the same (various) ways as for beds and the difficulties are similar.

Occupancy rates can be calculated in a similar way for pitches and moorings (or bed-places in them) but this is not so common.

Occupancy rates can be calculated for all types of accommodation. The information about the occupancy rates is vitally important for investments as well on local and regional level as concerning the investments to different types of accommodation and to the quality of accommodation. The occupancy rates should be calculated for different types of accommodation and according to the star classification and, if possible, also for subgroups of hotels (like spa hotels).

## **2.3 Guidelines for collection**

### **Sources of accommodation capacity**

An updated register of names and addresses of accommodation establishments is extremely important. Business registers are generally used in obtaining the names, addresses and NACE-classifications of accommodation establishments. Guide books and tourism organisations are important sources of capacity, services offered and quality classifications.

For commercial private accommodation, the intermediary agencies are an important source. For non-commercial private accommodation, housing registers, censuses and surveys may give information, e.g. the number of second homes. The availability to use the home or second home of relatives or friends can commonly be inquired in demand surveys only.

### **Monthly capacity**

It is advisable to ask for the number of bed-places and bedrooms in establishments monthly because they may change according to season and the information in registers may be out of date. The numbers of bedrooms and bed-places are needed for calculating the occupation rates. Bed-places should be distinguished by type of capacity (rooms, pitches, moorings).

### **Minimum capacity**

Countries use different legal or statistical standards for the minimum capacity of hotels and other establishments. The threshold is usually based on the number of rooms (or pitches) or beds and it may be different for observation of the capacity (for capacity there may be no threshold) and for observation of the use of capacity.

The threshold should be chosen in such a way that at least 95 % of all nights spent in the accommodation establishments are covered. This 95 % limit is not necessary for every group of establishments separately, because that might mean different threshold for each group and considerable extra work.

The statistics on capacity and on the use of capacity should be consistent. If the thresholds are different, the capacity of the small establishments, which are not included in statistics on the use of capacity, should be dealt with separately and confined to national use. In international statistics only the capacity for which the use of capacity is reported, is taken into account. The information which threshold is in use in the country for the use of capacity should be reported because it has extremely great effect on the number of establishments (which is a poor measure of capacity) but relatively small effect on the numbers of rooms and bed-places.

There are two possibilities how to deal with establishments smaller than the national threshold. If the country possesses a register encompassing all establishments (including those below the threshold applied for the inquiries on the use of capacity), it is possible to estimate the number of over-night stays for the establishments below the threshold, by using the data on the establishments above the threshold, with certain presumptions. This is a more rationalised way than to consider the establishments below the threshold as private accommodation (the other possibility) but since it is only possible in some countries, the estimates obtained should be generally confined to national use and not transmitted to international statistics because the international comparability might deteriorate.

### **Legal obligations**

- for the guests to give information to the establishment. If there is no legal Act, that requires tourists to fill in a registration form, the information can be obtained on voluntary basis.

- for the businesses to fill out and send the questionnaires of accommodation statistics to national statistical authority (possibly under the threat of periodic penalty payment). When the replies are checked regularly and reminders sent to establishments failing to send the data in time, high response rates are possible. Police control is normally avoided but sometimes it may be needed on the co-operation, especially for new establishments which are not used to send the information. It is not advisable to use police control on the quality of the data.

### **Census or stratified sampling**

As there is a very strong interest in regional tourism data, most European countries (except the largest countries) have census surveys for establishments. For the larger countries it is also possible to use samples without losing much reliability on a country level. The stratification may be done according to region, type of locality and accommodation capacity. It may also be advisable to include all the largest establishments (which usually have good information systems) and to use a sample of smaller and medium-size establishments.

Accommodation statistics for private accommodation are usually sample based (if they are collected at all). It is also possible to get part of the information from the intermediary agencies.

### **Response rate**

Response rate varies according to the type of accommodation. The rate is usually high for large hotels and low for small holiday villages. Some countries adjust the number of overnight stays according to the response rate, assuming the same occupancy rate and country distribution for those, who have not replied; maybe taking into account the type of accommodation, the size of establishment and the location. Other countries do not estimate the figures for non-response because the assumptions may be false (the establishment may be closed temporarily or gone out of business without informing about it) but report the response rate so that the users may calculate the effect of non-response. Anyway, it should be informed, if an estimation for non-response has been calculated and on what grounds.

### **Quality of the information obtained**

Data on numbers of guests and on numbers of overnight stays are often more or less underestimated by accommodation statistics, compared with the results of tourism demand surveys of residents and frontier surveys of non-residents. This is due to lack of co-operation of the management, partially as a result of groundless fear of tax consequences. Forbearing guidance and good filling instructions improve the received data.

### **Transmission of data**

The establishments normally transmit the data to the statistical offices on questionnaires or computer printouts.

The possibility to transmit (main part of) the data in a standardised ma-

chine-readable format via network seems to be quite near in the future. It offers interesting possibilities for a very large data collection, which is not possible on questionnaires.

### **Regional identification**

If a country has a computerised link between the postal code of the establishments' real address and the regional classifications, it is sufficient to record only the postal codes and to deduct from that all other regional classifications:

- locality, municipality and **NUTS-classification**, levels II and III \*\*\* a  
(see Council Recommendation, Appendix 5)
- destination type (or topographical grouping, see demand surveys V 21)
- tourism region of the country and maybe cultural zone

Regional identification is extremely important and forms apparent links with demand surveys, registers, etc.

### **Key variables**

There are key variables, like overnight stay, that are essential and should be as accurate as possible. For some other variables, estimates may well be used. Some variables, like purpose of visit and income from the provision of accommodation, may be optional for establishments having difficulties to forward the data. This has very little effect on the results if most establishments have no problems in transmitting the data and the results are presented as percentages or averages.

## **2.4 Links with other statistics**

### **2.4.1 Measuring tourism demand**

Accommodation statistics can not cover all tourism demand (for that reason tourism demand surveys are necessary), but a most important part in relation to the economic importance and the effect on employment. Accommodation statistics, although a second best alternative, are often the cheapest and most effective way to gain information on parts of the demand side of tourism, especially on tourists from abroad. Accommodation statistics' data in one country provide information on the outbound tourism of another country.

### **2.4.2 Business registers**

Business registers can be used, except as a source of information on establishment addresses and classifications (activity code at the four-digit level of NACE Rev. 1), also as a source for very limited economic data. In minimum, this only contains the size of labour force (local unit) or also net turnover and net assets (enterprise). For further reference, see Council Regulation on Community Co-ordination in Drawing up Business Registers for Statistical Purposes (2186/93 of 22 July 1993).

### **2.4.3 Service statistics on Horeca/TA**

A strong connection exists between accommodation statistics and service statistics on the hotel (= accommodation) sector.

Generally accommodation statistics are census based and service sta-

tistics are sample based (for smaller enterprises), but it should be possible to connect the data on a unit basis. Some countries combine both types of surveys in one survey. The possibility to combine the annual survey of economic data with an annual survey (census) concerning accommodation capacity and services is worth consideration. The co-ordination and integration of data collection activities can also involve other statistics, e.g. environmental statistics.

Limited economic data can be inquired monthly in the accommodation statistics, mainly the income from provision of accommodation. This, connected to other economic data, gives information about the importance of accommodation compared with other activities of the establishment, like restaurant services.

For further reference, see Draft Council Regulation Concerning Structural Business Statistics (1994) and Eurostat Methodological Manuals of Statistics on Service Enterprises, chapters General Framework and Horeca - Travel Agencies.

#### **2.4.4 Price statistics**

If the income from provision of accommodation, including breakfast (if included in the room price) and VAT (which can be calculated if necessary) is asked for in the monthly accommodation statistics, the average room prices and room price indices can be calculated as well as the prices per night spent. Room prices can also be inquired separately but it is better to follow the development of real prices (invoiced) than the announced or advertised prices.

The room prices from accommodation statistics can be utilised to a larger extent than the room prices from consumer price index, since they can be calculated on a local and regional level as well as for different types of accommodation and for the quality of accommodation, e.g. according to the star classification.

### **3. Tourism demand SURVEYS**

Tourism is characterised better from the demand side but it is more than just an act of consumption. It involves experiences that are very difficult to measure as such but may be evaluated through the impact they have on the propensity to seek (sometimes to avoid) same kind of experiences. Tourism demand measurement is central for the understanding of tourism and the tourism industry and for decision making and policy formulation at national and international level. To measure tourism demand at national level means the measurement on a regular, systematic basis, of the propensity, frequency and characteristics of a resident population's travel habits through information obtained from national surveys and of the travel habits of visitors through national sample surveys of visitors.

This document presents tourism demand surveys extensively, compared with the minimum requirements of the Directive, and deals with some practical aspects of carrying out the surveys. What is included in the document is not expected to be implemented universally. A phased programme for developing tourism demand surveys is necessary for each country and it depends on the needs and interests of commercial and public sector users and their potential financial participation in surveys. To present the variables and classifications in detail is, however, needed for two reasons. Fir-

stly, a country may choose, in addition to the Directive and according to the principle of subsidiarity, the level of detail for different surveys and perhaps include some important subclasses relevant for the country or included in a specific survey, and the results obtained will be consistent with the general framework. Secondly, the more detailed sub classifications offer examples of what is included in a certain class.

### 3.1 Classification of surveys and statistical units

The surveys can be classified in different categories according to where they are carried out. The surveys in respondents' homes are origin-based and the surveys at destinations are destination-based. Surveys at borders and other places in transit are closer to destination-based surveys. The distinction is important because visitors can be classified into different categories according to the perspective and the results from different surveys may then not be compatible. Perhaps the clearest example is a cruise passenger who may enter a country or several countries (perhaps one country several times) as a same-day visitor while spending the nights on the ship.

The statistical unit, which is used for the selection of a sample (sampling unit) and the statistical unit to be interviewed (response unit) are not necessarily the same. In all cases the selection should be based on sampling theory that the results can be generalised.

#### 1. In respondents' homes the statistical unit may be

(i) an **individual**, who is identified in sampling procedure individually; or selected randomly from within a household (sampling unit), responding only for him/herself (response unit).

(ii) a **household**, whose tourism participation is reported by every member of the household speaking for him/herself. It is also possible that one respondent speaks for the trips made by all members of the household but the results may be less reliable. If surveying the tourism demand of household as a unit is considered essential, questions must be included which permit analysis of the data by individuals to ensure comparability with other countries where the statistical unit is an individual, not a household.

The recommended statistical unit is an individual (aged 15 or more; possibly children) selected at random (from randomly selected households). The tourism of children aged 0-14 is important, although it was left optional in the Directive, because all countries do not collect the data for children. The children may be included in the random sample or their tourism may be measured by asking the respondent about the trips of his/her children below 15 living in the same household.

Household-based sampling is more complicated than individual-based sampling. The same is true for responding. Members of the household may have different travel patterns (and expenditure) and household composition may change within a year.

#### 2. At borders or destinations the statistical unit may be

(iii) an **individual visitor**

(iv) a **travelling party**, which may be a household group or other party. Analysis of the data by individuals must be possible also in this case.

In destination surveys and at borders the selection of individuals by random procedures is also recommended although the sampling in border surveys is often quite complicated and may involve multi-stage stratification. If the selection of targets is based on a quota sampling (quota by generating country) in visitor surveys at borders, the results cannot be strictly generalised but they can be weighted by the results of other surveys to allow generalisation. The children's behaviour may also be estimated as members of a travelling party.

### **3.2 Variables and classifications**

#### **3.2.1 Volume of tourism**

(a) From the surveys carried out in respondents' homes, we obtain the monthly, quarterly and yearly estimates for the participation (number and percentage, sometimes called the rate of departure) in domestic and outbound tourism on one and more occasions and estimates of the number of domestic and outbound trips by the residents of a country.

(b) Estimates of the number of non residents received within a country (inbound tourism) and of their trips can be obtained from surveys at international arrival and departure points. These surveys very often also provide information on outbound trips of residents.

(c) The surveys carried out in respondents' homes are usually not large enough to give reliable estimates on regional and local tourism, For that reason surveys at destinations are conducted. Accommodation statistics and passenger transport statistics and surveys also give information about regional and local tourism.

Sections 3.2.2 - 3.2.4 give harmonised contents for standardised surveys of tourism demand. Naturally it is not possible to include all the variables in all forms of surveys and the more details we want to know, the greater the sample size must be to ensure reliable results. A survey in a respondent's home can also be several times longer than a survey at a visitor arrival or departure point.

The variables are presented below in the same order as in the Council Recommendation (p. 13-16, with their V numbers). The list contains some variables that are not included in the Recommendation but it is far from being complete. Various questions about

(a) choosing the destination, i.e. planning for the trip and sources of information,

(b) opinions, i.e. interest in various destinations and on holiday in general and

(c) experiences, especially satisfaction with services during the trip, are generally asked especially in border and destination surveys for evaluating the effectiveness of travel marketing.

(d) intentions for future travel are neither considered here.

#### **3.2.2 Characteristics of persons**

involve demographic and socio-economic classifications and groupings and basic data on propensity and frequency of travel for analysing tourism demand among the population (e.g. purpose of visit by different socio-economic characteristics). This group of variables is often referred to as "visi-

tor profile" but in addition to visitors it concerns also persons who do not participate in tourism. Some of the characteristics may be obtained from a population register or asked in a general part of a multipurpose survey and usually they include more than what is in the Directive (age, sex).

More variables and classifications concerning the characteristics of persons can be obtained from the European Community Household Panel (ECHP).

### **V1. Place of residence** **country of residence**

\*#  
\*\*\*m

The actual address (street number, village or town) and postcode of permanent or usual residence should be recorded, together with **locality** (municipality) and country. Regional classifications (NUTS, LOC - see variable V3) may be obtained from postcodes and also other classifications like:

- Topography, for which the same classification can be used as for "destination type" (see V15).

The place of residence is usually the same as the place of origin of a trip (see V14).

### **V2. Citizenship**

\*

Country of present citizenship. In case of dual citizenship, both should be specified.

If citizenship is asked in addition to country of residence, information about the travel patterns of residents with foreign citizenship may be obtained, e.g. the propensity to visit the country of citizenship.

If statistics are compiled according to citizenship, the terms should be modified accordingly. Instead of speaking of "residents" of a country, "nationals" should be used and instead of "non-residents", "aliens".

(Instead of citizenship, "nationality" is often used in the same meaning. Nationality is more ambiguous: it may also refer to an ethnic, linguistic, religious or other group among the citizens of a country).

### **V3. Locality size; level of urbanisation**

\*

The size of locality and its level of urbanisation have an effect on tourism behaviour. The information is normally obtained from the locality (in V1, the place of residence). The classifications of population statistics should be used.

### **V4. Age**

Actual age or year of birth should be recorded.

#

If possible, it is best to record the ages of all the members of the household; or at least the age of the respondent and the ages of the children in the household.

The Directive requires only the annual number of tourists making long (4+ nights) leisure trips in five age groups, of which the lowest (0 to 14) is optional. However, age can be easily connected to any characteristic of trip and this information transmitted to Eurostat as optional. Different segments of tourism market can be distinguished according to age.

Classification:

(1) 0 - 14	***a
(2) 15 - 24	***a
(3) 25 - 44	***a
(4) 45 - 64	***a
(5) 65+	***a

#### V5. Sex

(1) male	***q#
(2) female	***q#

The Directive requires only the number of tourists by sex but generally sex can be connected to any characteristic of trip made by the visitor and the information transmitted to Eurostat. It is of general interest if males and females have differences in the frequency and characteristics of trips.

#### V6. Household composition

Household size #

is the total number of adults and children in the household.

Because household composition have an effect on travel habits, it is best to specify the age and sex of each member of the household.

Number of children #

aged 0 to 14 in the household (15+ are considered as adults) is one of the main criteria according to which households are classified. Recording the actual ages (see variable V4) of children is recommended, because the ages of children influence the decision how to spend the holidays. A separation between small children (0 to 5) and school children (6 to 14 or possibly into two groups 6 to 10 and 11 to 14) is important.

A minimum classification of household types consists of four major groups:

1. One adult without children \*
- (may be further divided according to age (e.g. retired), sex or economic activity)
2. One adult with children \*
3. Two or more adults without children \*
- two adults without children
- more than two adults without children
4. Two or more adults with children \*
- two adults with children
- (may be further divided according to the number of children)
- more than two adults with children
- (may be further divided according to the number of children or the size of household, e.g. 6 or more members)

Household size and composition are major factors on travel patterns and very often results are presented according to the household composition and the age of the head of the household.

#### Marital status of respondent

The classification (following the EC Household Panel):

1. married
2. separated
3. divorced
4. widowed

5. never married
  6. living in a consensual union
- If two classes are given (class 6 in addition to 2, 3, 4 or 5), class 6 is more relevant for tourism statistics .
- Reduced classifications can be obtained by combining classes (1 and 6, 2 and 3).

### V7. Education

The highest level of education of the respondent.

Classification:

1. Pre-primary education \*
  2. First level of primary education \*
  3. Second level: lower (first stage) secondary education \*
  4. Second level: upper (second stage) secondary education \*
  5. Third level or higher education \*
- a third level education other than university degree
  - an initial university degree or recognised equivalent
  - a higher university degree or post-graduate

For details, see International Standard Classification of Education (ISCED) of UNESCO.

### V8. Economic activity status

of the respondent. It is also recommended to ask for the number of economically active persons in the household.

A detailed economic status classification may include:

1. **Economically active** \*
- 1.1 Employed (working at least 15 hours per week) \*
- 1.1.1 working as an employee
  - in paid employment (full time, i.e. 30 hours or more per week or part time, i.e. 15 to 29 per week)
  - in training under special scheme related to employment
  - in paid apprenticeship
- 1.1.2 self-employment (with or without employees)
- 1.1.3 (unpaid) work in a family enterprise
- 1.2. Unemployed \*
2. **Not economically active** \*
- 2.1. Student (in education or training) \*
- 2.2. Homemaker (doing housework, looking after children or other persons) \*
- 2.3. Income recipient \*
- 2.4. Retired
- 2.5. In community or military service
- 2.6. Other \*

### V9. Professional occupation

of the respondent and of the person in the household having the highest income (if not the respondent).

Classification: the main groups are presented in the Council Recommendation (see also International Standard Classification of Occupations, ISCO-88 (COM) of the ILO).

The classification presented below gives some subgroups that may be used in congress travel statistics and possibly some other special statistics.

- |  |    |
|--|----|
| 1. Legislators, senior officials and managers        | *# |
| - Ministers or senior government officials           |    |
| - Presidents, managers, chief executive officers     |    |
| - Others   |    |
| 2. Professionals                                     | *# |
| - Professional freelancers                           |    |
| - University professors                              |    |
| - Associate professors and researchers               |    |
| - Other  |    |
| 3. Technicians and associated professionals          | *# |
| 4. Clerks  | *# |
| 5. Service workers and shop and market sales workers | *# |
| 6. Skilled agricultural and fishery workers          | *# |
| 7. Craft and related trades workers                  | *# |
| 8. Plant and machine operators and assemblers        | *# |
| 9. Elementary occupations                            | *# |
| 10. Armed forces (excluding conscripts)              | *# |

#### V 10. Income \*

Household's net monthly income is the most important amount to be inquired.

In addition it is very useful to know respondent's own net and gross income. (If both cannot be given, the one that is available).

Net income means amounts as they are received, which is normally after tax and contributions to social insurance and pension. If income varies between months, an average should be given. If the exact figure is not known, an estimate should be given (or at least the approximate range according to the classification).

Classification in ECU (according to the EC Household Panel):

- |     |              |
|-----|--------------|
| (1) | - 499        |
| (2) | 500 - 999    |
| (3) | 1000 - 1499  |
| (4) | 1500 - 1999  |
| (5) | 2000 - 2499  |
| (6) | 2500 - 2999  |
| (7) | 3000 - 4999  |
| (8) | 5000 or more |

#### V11. Possession of tourism related products (in household)

- |                                       |   |
|---------------------------------------|---|
| 1. Accommodation                      | * |
| 1.1 Second residence                  |   |
| 1.2 Other (e.g. tent)                 |   |
| 2. Transport                          | * |
| 2.1 Number of passenger cars and vans |   |
| - ownership                           | # |
| - leasing-car                         | # |
| - rental car                          | # |
| - company car                         | # |

- other #
- 2.2 Caravan/mobile home
- 2.3 Motorcycles/mopeds
- 2.4 Number of bicycles
- 2.5 Pleasure boat
- 2.6 Other
- 3. Recreational and sports equipment \*
- 3.1 Skis
- 3.2 Other

For each of these should also be asked, if the durable is:

- (1) owned by the household
- (2) long term rented (over 1 year).
- (3) otherwise available for use without rent (e.g. friends' or relatives' property)

### Housing situation

Firstly, the type of dwelling may be asked (possibly with or without garden).  
Classification (according to EC Household Panel):

- 1. single-family house
  - detached
  - semi-detached or terraced
- 2. apartment or flat in a building
  - with less than 10 dwellings
  - with 10 or more dwellings
- 3. other

Secondly, if the household is:

- (1) owner of the dwelling
- (2) tenant/subtenant, paying rent
- (3) accommodation provided rent-free.

### Tourism experience

#### V12. (a) Number of trips

by month of departure.

- 1. Same-day trips \*#t  
(e.g. last month; in panel surveys whole year may be covered)
- 2. Overnight trips \*\*\*m#t
- 2.1. 1-3 night trips \*\*\*m  
(e.g. last 3 months; in panel surveys whole year may be covered)
- 2.2. 4+ night trips \*\*\*m  
(e.g. last 12 months)

It is asked if these were

- (A) domestic or (B) outbound \*\*\*m#t

as well as if they were

- (a) leisure or (b) business \*\*\*m#t

trips (see V13).

The transmission of quarterly data on countries of destination (see V15) for outbound trips is required annually by the Directive.

The actual number of trips are asked and normally the characteristics of each trip separately.

A classification for each group (e.g. domestic leisure day trips, etc.) may be: none, 1, 2, 3, 4+

**(b) Number of visitors/non-visitors**

1. Number of day visitors

2. Number of tourists

\*\*\*q

The numbers of tourists, i.e. persons participating in overnight tourism, are classified according to the trips they have made (at least one trip belonging to the group during a period):

(A) domestic

\*\*\*q

(B) outbound

\*\*\*q

(C) domestic and outbound

\*\*\*q

and, according to the purpose of trip:

(a) leisure

\*\*\*q

(b) business

\*\*\*q

The same classifications are applied for day visitors. Tourists are further subdivided according to the number of overnight stays: if the trip consists of 1-3 overnight stays or of 4 or more nights.

Normally the figures are presented as percentages of the total population, separately for each group (e.g. XX % of the population made at least one trip during the quarter, XX % made a domestic leisure overnight trip, etc.). The number of tourists making long (4+ nights) holiday trips during a year are often presented as percentages according to the number of these trips (one, two, three or more) because the number of trips may have an effect on what kind of trips are made.

According to the Directive, the numbers of tourists making different kinds of overnight trips are inquired quarterly.

For persons not participating in tourism, the reasons (one or several) can be established, usually when the non-participation lasts for a longer period (a year):

- (1) prefer to stay home, no motivation to travel
- (2) lack of free time due to work or family commitments
- (3) economic reasons (cannot afford to travel)
- (4) health reasons
- (5) worried about safety
- (6) lack of awareness of travel possibilities
- (7) other

**3.2.3 Characteristics of trips/visits**

are asked for each trip separately. Each trip has one main purpose but it may involve secondary motivations, several visits with possibly different purposes and several activities. The variables can mostly be inquired on a more detailed classification level than what is required in the Directive and some possible sub-classifications are presented in this chapter.

Questions covering destination type, purpose of visit (on a more detailed level) and visitor activities are necessary if we want to calculate estimated participation in rural, cultural and other specialised forms of tourism.

**Type of trip**

Same-day trip (actual day trips should be separated from visits during an overnight trip) or overnight trip(\*\*\*m).

Cruises may be separated already at the beginning of the inquiry (depending on survey) as well as overnight trips in one or several locations (cf. with destination type V21)

### V13. Purpose of trip/visit

There is only one main purpose for a trip, in the absence of which the trip would not have taken place. Secondary purposes might also be inquired but it is far better to ask the purpose of visit for each destination V15 (place visited) separately.

Generally, there are of two main reasons to travel:

(A) Business/professional travel

(B) Personal travel.

Business/professional travel is presented in all classifications as own major group (there may be small differences in what it includes). The classification problem arises when trips for personal reasons are divided into major groups differently in international classifications (tourism, mobility, migration, BOP, etc.).

The Directive includes a separation between

(a) business or professional

\*\*\*m

(b) leisure, recreation or holiday.

\*\*\*m

Most countries are interested in all purposes to travel and usually also collect data for all purposes. Leisure, recreation and holidays cover most of personal reasons but because the classifications vary from country to country, it should be indicated, if (b) covers all personal reasons or if it is restricted to the corresponding WTO class or to something between them.

The WTO recommendation consists of as many as six major groups, business (group A) and five personal reason groups (1 to 5 below). In the WTO classification, purposes 2 to 5 are separated from leisure and presented as major groups. These groups are almost completely connected with leisure and in many countries they are accordingly classified as sub-categories of leisure trips. Visiting friends and relatives is a large and important group and it is often presented as a separate major group while health treatment and religious trips are much smaller groups and seldom presented as separate major groups in Europe.

In mobility surveys, there are also 6 groups, but although these are not the same as in the WTO classification, they are harmonised to a great length and involve no problems.

(1) commuting is one of the groups but for tourism it must be excluded. The other groups are (2) business/professional, (3) shopping, (4) visit to friends/relatives, (5) other leisure/recreation/holidays, and (6) other.

In migration statistics tourist arrivals and departures are classified in four categories: (1) holiday, (2) education, (3) business and (4) other purposes. Group (2), education, is somewhat problematic, because it is presented as an own major group. Education may be connected with professional travel or with leisure.

Balance of payments contains the major division between (A) business travel and (B) personal travel. The latter may be further divided into (i) health-related, (ii) education-related and (iii) other personal travel, because the

one-year rule in BOP does not apply to students and medical patients, who remain residents of their economies even if the length of stay in another economy is one year or more.

The minor groups of leisure may form a link between purpose of visit and activities undertaken during the visit (see variable V23) and they are tentatively presented in both classifications.

#### A. Business and professional

\*\*\*m#j

- 1 Congress, conference (convention, seminar)
- 2 Business meeting
- 3 Fair, exhibition (professional participation) (cf. CPA 74.84.15)
- 4 Mission
  - International body
  - Government administration (including military missions)
  - Enterprises, private or public
  - Other institutions, foundations etc.
- 5 Familiarisation visits (including employer incentive tours: the trip is completely or partially paid for by a firm, with the aim of motivating employees to reach extraordinary levels of performance)
- 6 Sales, marketing
  - Industrial or agricultural: installing equipment, repairs, etc.
  - Trade: purchases, sales, market prospecting, etc.
  - Tourism: programming and contracting travel or accommodation; aircraft and ship crew on public carriers, guides and other tourism professionals
  - Other
- 7 Culture, recreational (professional artistic, cultural, religious and sporting travel)
- 8 Research, teaching, consultancy trips
- 9 Language studying
- 10 Other education associated with profession (cf. CPA 80.42.10, 80.42.20) (Excludes: attending schools and other educational establishments involving regular travel to places of education within the normal routines of full time education)
- 11 Miscellaneous, including accompanying persons

#### B. Personal reasons

##### 1. Leisure, recreation and holidays

\*\*\*m#j

- 1.1 Relaxation, eating and drinking
- 1.2 Shopping #j
- 1.3 Sports as spectator
- 1.4 Sports (active non-professional), physical exercise
- 1.5 Education, meeting (non-professional)
- 1.6 Culture and entertainment as spectator
- 1.7 Arts, hobbies and games, other (non-professional)

##### 2. (1.8) Visiting friends and relatives

\*#j

Visits to relatives or friends, Home leave, Attending funerals, wedding, Other family events (Excludes: regular (at least once a week) visits to parents, to (sick) relatives and care of invalids -i.e., part of normal routine travel)

3. (1.9) **Health treatment** (voluntary reasons) \*
- Spas, Convalescence, Health resorts,  
Thalassotherapy, Other treatments and cures  
(Excludes: non voluntary stays in hospitals and other medical  
institutions providing residential clinical/medical treatment,  
which are prescribed by doctors and mostly paid for by the  
state or by recognised health insurance)
4. (1.10) **Religion and pilgrimage** (non-professional) \*
- Attending religious events, Pilgrimages
5. (1.11) **Other purposes** \*#j
- Transit (a purpose of visit only in border surveys)
  - Other purpose
  - Unknown purpose

**V14. Place of origin  
country of origin**

\*#j  
\*\*\*m

This is usually the same as the place and country of residence (**locality** and NUTS, see V1).

The trip may also start from the place of work or education. This is not relevant for tourism (the place of residence may still be considered as the origin) but it is relevant in mobility surveys.

When people live during the survey period in another place than their usual residence (e.g. short-term migrants and seasonal workers), this place should be taken as the origin. For day trips the place of origin may be the second regular residence of the person although it is useful to distinguish them from trips originating from the first residence.

**V15. Place of destination  
country of destination**

\*#s  
\*\*\*q

The separation between domestic(\*\*\*m) and outbound(\*\*\*m) overnight trips is in the Directive. Quarterly data concerning the country of destination are transmitted annually. The required countries and country groups are in the Annex of the Directive and other important destination countries can be asked in addition to the list. The group "not specified" should be avoided.

Inbound trips are not covered by the Directive but the destination is commonly asked in border surveys, also for day trips.

Automatic coding of place or locality names is an important option.

The classification may include LOC or NUTS codes for places and UN or ISO 3166 standard country codes.

Destination can be understood in different ways. It may be

(a) the place the visitor considers as the most important place visited (motivating destination).

(b) the place where the most amount of time is spent (time destination)

or

(c) the farthest place visited (distance destination)

It is very useful to know all these destinations as well as less important destinations in transit (see next variable, places visited). The main destination (place, country) should be separated from other destinations.

The main destination may be the farthest place, but often only a short

trip is made to the farthest place/country. It may be the place/country, where the most time is spent, but this may be difficult to define: it occurs very often, that the place of overnight stay is not the same as the place where the most time is spent during the day. In such case the time spent during the day is probably more important: the place of overnight stay may have been chosen near (or even at some distance from) a major tourism destination since it may be more peaceful or cheaper or no suitable accommodation at the destination was available. Sometimes due to lack of time, vehicle breakdown or other reason more nights may also be spent in a transit country than in the destination country.

The main destination is related to the main purpose of trip (in the absence of which the trip would not have taken place) and therefore the main destination should be defined as (a), the place that the visitor considers as the main destination. If the respondent has difficulties for deciding what that is (e.g. for a touring trip), the main destination may secondarily be decided as (b), the place, where most nights were spent or, if there are several such places, (c), the farthest place.

### **Other places/countries visited**

It is usual to visit places on the way to the main destination and on the return journey, as well as to visit places from the main destination. Every place visited can be seen as a minor destination. To speak of several destinations may be confusing to the respondent and it may be more clear to speak about one main destination only and refer to the other destinations as "places visited". These are recorded in the order of visits. Because the visits often have different characteristics, it is useful to record for each place visited separately:

- purpose of visit
- means of transport
- (main) means of accommodation
- duration of stay.
- destination type (may be obtained through automatic place-name coding)

### **V16. Means of transport**

The Directive contains a minimum classification and requires the means of transport to be asked only annually for long (4+ nights) leisure(\*\*\*)a trips, whether domestic or outbound. If several means of transport are used, the main active means of transport (= used for the longest part of the trip) is asked. However, if the data are used more widely, e.g. for passenger transport, more information about the means of transport may be asked for all trips and visits.

The WTO classification is presented in the Council Recommendation.

A more detailed classification, including also groupings used in mobility surveys and time use surveys, with corresponding CPA numbers is presented below.

In mobility surveys, the means of transport are asked for each stage of a trip separately.

In addition to the successive means of transport, combined transport (e.g. car in a train or on a boat for part of the journey) is also interesting. If it is separated, both transport modes should generally be indicated, firstly

the active (e.g. ship) and secondly the passive (e.g. car; in mobility surveys "car on ferry" is asked separately).

- |   |   |
|---|---|
| <p><b>1. Air</b></p> <p>1.1 Scheduled flight (CPA 62.10.10)</p> <ul style="list-style-type: none"> <li>- First class</li> <li>- Business class</li> <li>- Economy class</li> <li>- Economy and APEX/SUPERPEX class</li> </ul> <p>1.2 Non-scheduled flight; including taxi flight (62.20.10)</p> <p>1.3 Other air transport</p> <ul style="list-style-type: none"> <li>- Rental of aircraft (62.20.30, 71.23.10)</li> <li>- Other (partly 71.40.14, 92.71.12)</li> </ul> <p><b>2. Waterway</b></p> <p>2.1 Passenger lines and ferries</p> <ul style="list-style-type: none"> <li>- Ferry on inland waterway (61.20.11)</li> <li>- Ferry on sea or coast (61.10.11)</li> </ul> <p>2.2 Cruise</p> <ul style="list-style-type: none"> <li>- Cruise or other passenger transport (water taxi, excursion, sight seeing) on inland waterway (61.20.12)</li> <li>- Cruise or other passenger transport on sea or coast (61.10.12)</li> </ul> <p>2.3 Other waterway transport</p> <ul style="list-style-type: none"> <li>- Rental of vessels (61.10.31, 61.20.31, 71.22.10)</li> <li>- Pleasure boat, incl. rowing boat and other (partly 71.40.14, 92.72.12)</li> </ul> <p><b>3. Land</b></p> <p>3.1 Railway</p> <ul style="list-style-type: none"> <li>- High speed train</li> <li>- Other interurban railway (60.10.11, 60.10.12)</li> <li>- Urban railway, underground (60.21.10)</li> </ul> <p>3.2 Motor coach or bus, other public road transport</p> <p>(In the Directive, the data for buses and coaches are asked separately, in the Recommendation they are merged with other public road transport)</p> <p>3.2.1 Scheduled (60.21.31, 60.21.32)</p> <ul style="list-style-type: none"> <li>- Scheduled motor coach (60.21.31, 60.21.32)</li> <li>- Urban and suburban buses, trolley buses and trams (60.21.21, 60.21.22)</li> </ul> <p>3.2.2 Non-scheduled, rental of buses, touring and sight-seeing (60.23.11, 60.23.12 and partly 71.21.15)</p> <p>3.3 Private and rented vehicles</p> <p>3.3.1 Private vehicle</p> <ul style="list-style-type: none"> <li>- Cycle (partly 71.40.14)</li> <li>- Moped, motor cycle (partly 71.21.14)</li> <li>- Passenger car (excluding taxi and rented automobile) (-)</li> </ul> <p>(including cars belonging to friends or relatives)<br/>(In mobility survey this includes taxis and rented cars)</p> <ul style="list-style-type: none"> <li>- Van, lorry (partly 71.10.10, 71.21.11)</li> </ul> | <p>***a#s</p> <p>*</p> <p>*</p> <p>*</p> <p>***a#s</p> <p>*</p> <p>*</p> <p>*</p> <p>*</p> <p>***a</p> <p>***a#s</p> <p>#s</p> <p>***a</p> <p>*</p> <p>*#s</p> <p>*#s</p> <p>*#s</p> <p>***a</p> <p>*</p> <p>#s</p> <p>#s</p> <p>#s</p> |
|---|---|

- 3.3.2 Vehicle rental \*
- Rented automobile (excluding buses) (partly 71.10.10)
- Taxi (60.22.11, 60.22.12)
- Other rented vehicle
- 3.4 Other land transport \*\*\*a
- On foot ( - )
- Animal drawn vehicles and riding (60.23.13 and partly 71.21.15)
- Funicular, teleferic and ski-lift transport (60.21.41)
- Other (60.21.42, 60.23.14)

### V17. Distance covered during the trip

(outward and return)

It is very often possible to automatically calculate the distance between origin and destination localities by assuming that the shortest route is used by road or railway, according to the mode of transport used (for air and waterway transport shortest routes are less applicable, instead average routes may be used). If automatic calculations are not possible, the actual distance or an estimate for the whole trip may be asked.

Distance and the means of transport give valuable information about environment and energy consumption of tourism.

Classification: (for one way distance travelled)

- (1) -49 km \*
- (2) 50 - 99 km \*
- (3) 100 - 199 km \*
- (4) 200 - 299 km \*
- (5) 300 - 499 km \*
- (6) 500 - 999 km \*
- (7) 1000 - 1999 km \*
- (8) 2000 - 4999 km \*
- (9) 5000 - 7999 km \*
- (10) 8000+ km \*

In the long-distance mobility surveys a minimum distance of 100 km is used. This means that the lowest distance class of tourism demand surveys, below 50 km, is excluded from long-distance mobility surveys. In some countries long-distance and short-distance mobility surveys are combined but trips over 100 km are separated.

Transport time

(outward and return)

Transport time is more relevant for day trips than for overnight trips.

If the trip consists of several places visited and of several journey stages, the transport times for each journey may be asked separately.

Classification, usually in hours:

- under 1
- over 1 under 2
- over 2 under 3
- over 3 under 4
- over 4.

In special surveys the classification may be more accurate, including

(ten) minutes.

### V18. Means of accommodation

For definitions and possible sub groupings, see Accommodation statistics, p. 10 to 18.

According to the Directive, it is necessary to ask for the main means of accommodation (where most nights are spent) for domestic(\*\*q), out-bound(\*\*q) leisure(\*\*q) and business(\*\*q) trips. It may also be useful to ask for the main means of accommodation separately for each visit (see variable V15) during a trip.

Classification (the asterisks refer to the C part of the Directive):

- |  |     |   |
|--|-----|---|
| <b>1. Collective tourist accommodation establishments</b>                |     | * |
| 1.1 Hotels or similar establishments                                     | **q |   |
| 1.1.1 Hotels   |     | * |
| 1.1.2 Similar establishments   |     | * |
| 1.2 Specialised establishments   | **q |   |
| 1.2.1 Health establishments  |     | * |
| 1.2.2 Work and holiday camps   |     | * |
| 1.2.3 Public means of transport  |     | * |
| 1.2.4 Conference centres   |     | * |
| 1.3 Other collective establishments                                      | **q |   |
| 1.3.1 Holiday dwellings  | **a |   |
| 1.3.2 Tourist campsites  | **a |   |
| 1.3.3 Marinas  |     |   |
| 1.3.4 Other collective establishments n.e.c.                             | **a |   |
| <b>2. Private tourist accommodation</b>                                  | **q |   |
| 2.1 Private rental (non-permanent) accommodation                         | **a |   |
| 2.1.1 Rented rooms in family houses                                      |     | * |
| 2.1.2 Dwellings rented from private individuals or professional agencies |     | * |
| 2.2 Other private accommodation  | **a |   |
| 2.2.1 Owned dwellings  | **a |   |
| 2.2.2 Accommodation provided without charge by relatives or friends      |     | * |
| 2.2.3 Other private tourism accommodation n.e.c.                         |     | * |

<b>V19. Date of departure</b>	*#j
<b>month of departure</b>	**m

In mobility surveys the **date of return** #j

is also asked. For tourism purposes this is not necessary: the duration of trip V20 is sufficient.

The actual day and month of departure should be recorded. The trips are classified in the Directive according to the month of departure and whether they were domestic(\*\*m), out-bound(\*\*m), leisure(\*\*m) or business(\*\*m) trips, not according to the month of return. The difference is important, because when conducting the surveys, the trips completed during the previous month, quarter or year are recorded.

Day of the week and season can be obtained from the date.

Note that if the date of return is asked in addition to the date of departure, the difference does not necessarily give the duration of trip (V20). One must be careful especially for day trips: the dates may be different but the trip may not involve an overnight stay. Therefore the number of overnight stays (duration of trip) must be asked separately.

### V20. Duration of trip/visit

\*\*\*q#j

The duration of trip/visit is understood in two ways: for day trips/visits it means hours and for overnight trips/visits it means nights spent. The actual number of overnight stays must be inquired, it cannot be calculated from the hours or dates.

For the hours, there are two possible ways, either to ask for (a) day, hour (and minute #) of departure and day, hour (and minute #) of return, which is the method used in mobility surveys or (b) to ask for the actual number of hours. Method (b) is sufficient for tourism but it does not give the times of the day needed in mobility surveys (giving the minutes may involve considerable memory problems and rounded figures may be used).

#### Same-day trips/visits: hours

\*#j

Classification:

(0) Less than three hours (optional)

- less than 2 hours

- 2-3 hours

(1) 3 to 5 hours

- 3 hours

- 4 hours

- 5 hours

(2) 6 to 8 hours

- 6 hours

- 7 hours

- 8 hours

(3) 9 to 11 hours

(4) 12 hours or more

\*  
\*  
\*  
\*  
\*  
\*  
\*  
\*  
\*  
\*  
\*  
\*

For defining day trips, a minimum duration of 3 hours is very often applied. This means excluding from the survey the less important first group, that mostly consists of sporting or friend/relative visits near the usual environment.

#### Overnight stays

\*\*\*q#t

For defining a night spent, see Accommodation statistics, p. 22.

Classification:

(0) no overnight stays

(1) 1 to 3 nights

- one night

- 2 to 3 nights

(2) 4 or more consecutive nights

(2a) 4 to 7 nights

(2b) 8 to 14 nights

(2c) 15 to 28 nights

#t  
\*\*q  
\*  
\*  
\*\*\*q  
\*\*\*a  
\*\*\*a  
\*\*\*a

	- 15 to 21 nights	*
	- 22 to 28 nights	*
(2d) 29 to 91 nights	***a	
	- 29 to 42 nights	*
	- 43 to 56 nights	*
	- 57 to 70 nights	*
	- 71 to 91 nights	*
(2e) 92 to 365 nights	***a	
	- 92 to 182 nights	*
	- 183 to 365 nights	*

In the Directive, these are classified as domestic(\*\*\*)q), outbound(\*\*\*)q), leisure(\*\*\*)q) and business(\*\*\*)q) stays and outbound stays according to the world geographical breakdown(\*\*\*)q). Also the monthly (not only quarterly) figures of overnight stays may be transmitted to Eurostat as an important optional information.

It is recommended to record all countries of overnight stays during the trips, although this is not literally required by the Directive. It is also possible to record all the overnight stays to the main destination country but this may cause considerable biases. Nights spent on board ship or in a train moving from one country to another are included in outbound overnight stays but they are not spent in any specific country. It is better to include them in "not specified" category, if there is no "cruise" category. If the nights are spent on board ship, when the ship is in port, the passengers may or may not be formally free to enter the country. If the passengers are free to enter the country, the nights might be recorded to that country, spent in a specialised establishment (public means of transport), but also in this case the 'cruise' or 'not specified' may be used.

### V21. Destination type (= type of place visited)

The destination type may be asked separately or it may be obtained through automatic place-name coding, if localities are classified according to destination type.

If several places (destinations) of different types are visited during a trip, the information on all of them is valuable (see V15); excluding (compulsory) stops during the journey.

Classification:

1. **Urban areas** \*
- 1.1 Capital or other metropolitan city \*
- With more than 1 million inhabitants (incl. suburbs)
- With less than 1 million inhabitants (incl. suburbs)
- 1.2 Designated heritage or cultural city or town \*
- 1.3 Other city or urban area \*
2. **Resort town or village** \*
- 2.1 Health resort \*
- Spa town or village \*
- Seaside located \*

- Lake or river located \*
- Mountain located \*
- 2.2 Seaside resort \*
- 2.3 Lake or river resort \*
- 2.4 Ski resort \*
- 2.5 Other mountain resort \*
- 3. **Countryside** \*
- 3.1 Waterside incl. islands \*
- Seaside \*
- Lake, reservoir \*
- River, canal \*
- 3.2 Mountains, hills \*
- Mountains, highlands \*
- Hills \*
- 3.3 Other: village, rural area, moor land, woodland \*
- 4. **Cruise, sea, lake or river** \*

### V22. Travel party

consists of the number (and type) of adults and children under 15 (children above 15 are counted as adults) travelling together during the whole or main part of their trip.

It is useful to know, if the travel party consists of

- members from the own household or
- members that are not from the own household and possibly if these consist of relatives or other people (question 3 below).

Comparing the travel party with household composition (V6) provides important information about travel habits of persons in different types of households.

The data on travel party may consist of:

1. The number of all persons (adults and children) \*#j
2. The number of children (under 15) \*
- and possibly ages or age groups (0-5, 6-10, 11-14)
3. Type of adult party (excluding children):
- one person alone
- two adults: with spouse or cohabiting partner
- two adults: with other relative or friend
- three or more adults

### V23. Activities undertaken during the trip/visit

Activities undertaken during the trip refer to the actual behaviour of persons and they should fit with purpose of trip/visit. They may give additional motives for the trip. The classification of activities, that are connected with leisure, may be used also for (additional) activities during a business trip.

It is very useful, if the frequency of activities can also be asked.

The activities can to some extent be linked to services and products offered (the CPA numbers refer to the supplier of the service).

The classification presented below is harmonised to a great extent with the activity classification used in time-use surveys (TUS). The classifications of tourism and time use surveys cannot be exactly same, because

many activities in time use surveys are not connected with for tourism and for some activities especially relevant for cultural tourism a more detailed classification is needed for tourism.

	TUS	CPA
A. Business and professional activities (see purpose of trip V13)	1	
B. Personal activities		
1.1 Relaxation, eating and drinking	02, 34, 38, 39, 53	
1.1.1 Rest, recreation (in park etc.), picnicking, use of beach, bathing, use of swimming pool	53	92.72.11
1.1.2 Having time for the family (including honeymoon)	34, 38, 39	
1.1.3 Eating or drinking in a restaurant, bar, cafe, public house, wine bar etc.	02	55
1.1.4 Other		
1.2 Shopping, personal services (all kinds of non-regular leisure shopping)	36	52
1.3 Sports as spectator	525	92.6
1.4 Sport, physical exercise participation (non professional active participation in all kinds of sport and physical exercise outdoors and indoors)	6	92.6
1.4.1 Sports		
Jogging, running	641	
Cycling, mountain biking	642	71.40.14
Skiing (downhill, cross-country), skating	643	71.40.14
Swimming	644	
Gymnastics	645	
Golf		71.40.14
Tennis		71.40.14
Ball games	646	71.40.14
Rowing, sailing, surfing, other water sport	647	71.40.14
Other sports	648	
1.4.2 Recreational physical exercise		
Walking (a reasonably long distance), hiking, trekking, climbing, mountaineering	610	
Fishing, angling	622	92.72.12
Hunting, shooting	621	01.50.10
Picking berries, mushrooms, flowers	623	
Horse riding, pony trekking		71.40.14
Ballroom and discotheque dancing		92.34.12
Other	624	
1.5 Education, organisational activities (not connected with profession)	2, 41, 421	
1.5.1 Education, studying	2	80.42.10, 80.42.20
1.5.2 Attending organisational (except religious) activities, exhibitions, conferences, meetings, trade shows, parties	41, 421	74.84.15

1.5.2 Other		
1.6 Culture and entertainment as spectator	52	
1.6.1 Cinema, video	521	92.13.11
1.6.2 Theatre, concert, opera, ballet (classical, folklore, contemporary)	522	92.31.21
1.6.3 Art galleries and exhibitions	523	92.31.22
1.6.4 Museums	523	92.52.11
1.6.5 Libraries, archives	524	92.51.1
1.6.6 Sight-seeing, excursions (also by old vehicles), guided or unguided; Landscape or cityscape tours by walking, cycling or by taking a drive		63.30.14 60.23.12 60.23.13
1.6.7 Historic or stately home, Castle or ancient monument or site, Cathedral or ancient church, Other buildings famous for their architecture		92.52.12
1.6.8 Zoo, aquarium, bird sanctuary, safari park; Botanical garden, formal garden		92.53.11
1.6.9 Nature reserves, environment oriented trip (country park etc.)		92.53.12
1.6.10 Circus		92.34.11
1.6.11 Theme parks, leisure or amusement parks		92.33.10
1.6.12 Temporary show, carnival, other festival, gastronomy, wine tasting, entertainment		92.34.13
1.7 Arts participation, hobbies, crafts and games	7	
1.7.1 Non professional active participation in arts		92
Visual arts	711	
Performing (music, drama etc.)	712	
Literary arts	713	
1.7.2 Collecting and other technical hobbies	72	
1.7.3 Games, gambling, betting, bingo, casino	73	92.71.10
1.7.4 Other	74	
1.8 Visiting friends and relatives	51	
Visiting relatives and friends, Home leave, Attending funerals, wedding, Anniversary, other celebration (Excludes: regular (at least once a week) visits to parents, to (sick) relatives and care of invalids -i.e., part of normal routine travel)		
1.9 Health activities (voluntary reasons)	366	85.14.15
Visiting spas, health resorts, treatments and cures (Excludes: non voluntary stays in hospitals and (if possible) other medical institutions providing residential clinical/medical treatment, which are prescribed by doctors and mostly paid for by the state or by recognised health insurance)		85.14.18 93.04.10
1.10 Religious activities (non-professional)	422	
Unpaid work for religious organisations,		

Attending religious events, Pilgrimages  
1.11. Other and unspecified activities

91.31.10

**V24. Organisation of the trip**

classification:

1. Booking direct with accommodation/transport operator \*\*\*a
  - booking only accommodation
  - booking only transport
  - booking both accommodation and transport
2. Using travel agency/tour operator \*\*\*a  
(for whole or main part of trip)
  - 2.1 Package tours \*\*\*a
  - 2.2 Other \*
3. No booking in advance \*
4. Other/unknown

If the trip is organised by a club, company or school, it may be included in 1, 2 or 3, like individual travel, if the respondent knows how the club has organised the trip. Otherwise, the unknown category is used.

In package travel the package should cover at least accommodation and the longest part of the journey. It may or may not cover other things: breakfast, journey from airport to accommodation, sight seeing, etc.

In the Directive, the organisation of trip is required only for the total of long (4+ nights) leisure(\*\*\*)a trips annually, but it can be used much more widely and linked with other characteristics of trips, maybe also visits.

**3.2.4 Tourism expenditure (V25)**

is "the total consumption expenditure made by a visitor or on behalf of a visitor for and during his/her trip and stay at destination".

This is closely linked to tourism consumption, which is "the value of goods and services used by or for tourism units (visitors)".

Expenditure is one of the characteristics of a trip but can be accumulated also on personal and country level. Dividing expenditure by duration of trip, average daily expenditure can be calculated. Expenditure is a most difficult area to measure but the information is important as part of the processes involved in estimating balance of payments and employment through tourism.

Measuring expenditure in respondents' homes is necessary for domestic tourism expenditure but it is used also for outbound tourism expenditure, since all the expenses before, during and after the trip can be asked. To recall expenses may cause problems, which are often great compared with border surveys, where all the expenses of the whole trip (outbound and inbound trips) are not yet available (but can be approximated). Therefore in border surveys, not total expenditure but only expenditure during stay in the country and expenditure during stay abroad are often asked.

Tourism expenditure encompasses a wide variety of items, ranging from the purchase of consumer goods and services inherent in travel and stays to the purchase of small durable goods for personal use, souvenirs and gifts

for family and friends.

The following outlays or acquisitions should be excluded from tourism expenditure:

(a) Purchases for commercial purposes, that is, resale, made by any category of visitor and purchases made on behalf of their employer by visitors on business trips.

(b) Capital type investments or transactions engaged in by visitors, such as land, housing, real estate, works of art and other important acquisitions (such as cars, caravans, boats, second houses) even though they may be used in the future for tourism travel purposes.

(c) Cash given to relatives or friends during the trip which does not represent payment of tourism goods or services, as well as donations made to institutions.

Attention should be paid to both exceptionally low expenses of a trip (which suggest that all expenses are not included) and exceptionally high expenses (suggesting capital type investments, which must be excluded).

The expenses of second residences are most difficult to measure and it may be better to estimate them using secondary data sources.

(For detailed discussion see the WTO draft technical manual on the collection of tourism expenditure statistics).

Expenses of overnight trips:

(similar classification is used for day trips, excluding accommodation):

<b>Total</b>	***q
<b>A. domestic trips</b>	***q
<b>B. outbound trips</b>	***q

Classification of A and B:

<b>1. Package travel, package holidays and package tours</b>	***a
(total travel costs)	
1.1 Accommodation (with food where included, full/half board may also be separated)	*
1.2 Transport	*
1.3 Insurance	*
1.4 Other (local transfer, guided tours, fees, entertainment etc.)	*
<b>2. Accommodation</b>	*
(with food where included in price of accommodation, full/half board may also be separated)	
<b>3. Food and drinks</b>	*
(distinguishable from accommodation; in restaurants, cafes, bars, minibar, etc.; excluding retail trade = 6.2-6.3 below)	
- Alcoholic drinks	
- Meals, snacks, non-alcoholic drinks	
<b>4 Transport</b>	*
4.1 Fares	
- To the destination and back home	
- Within the destination (public transport, taxi)	
4.2 Use of vehicle	
- Cost of petrol or diesel (actually used for the trip or estimate)	
- Parking charges	

- Other (e.g. vehicle rental)
- 5. Recreational, cultural and sporting activities** \*
- 5.1 Guided tours
- 5.2 Sporting activities (hire of equipment and facilities)
- 5.3 Cultural activities (admission charges, including tickets bought in advance)
- 5.4 Attractions and other recreation (entrance fees, etc.)
- 6. Shopping** \*
- 6.1 Pre-trip shopping for items to be used during the trip \*
- 6.2 Shopping for items to take home (incl. food and drinks) \*
- Gifts and souvenirs
- Clothes
- Other
- 6.3 Shopping for items to consume during the stay \* (incl. food and drinks)
- 7. Other expenses** \*
- 7.1 Congress or meeting expenses (enrolment fee; expenses of photocopies, programme and materials; books, magazines and subscriptions related to the congress; annual fees paid to the organisation)
- 7.2 Insurance
- 7.3 Telephone calls
- 7.4 Other (e.g. postage, processing of films, exchange charges, etc.)

Respondents are seldom able to separate the categories of package travel (observed expenditure), but it should be asked which items are covered. Package travel may be broken down by other methods (adjusted expenditure). Identifying the transport share of package travel is important for the BOP breakdown into items "travel" and "passenger transport".

Money spent on various tourism products can in principle be asked on even more detailed level than what is presented above. In practice this may involve great difficulties but it can be applied in special surveys.

It is also very useful to know, **where and when** the goods and services are purchased:

- (1) At the country/place of residence; of which:
  - Before the trip
  - After the trip
- (2) In transit and at places visited during the travel to destination
- (3) At the destination country/area
  - by country visited

Note: If the data are used for Balance of Payments, the breakdown of expenditure by country is extremely important.

### Payment of the trip

is asked in some surveys. Classification:

- (1) traveller him/herself
- (2) family member
- (3) employer
- (4) other

Support from funding institutions can be asked separately.

### International tourism payments

In international tourism, the visitor's expenditure is a receipt for the receiving country and an expenditure for the generating country.

International tourism receipts are

*"expenditure of international inbound visitors including their payments to national carriers for international transport. They should also include any other prepayments made for goods/services received in the destination country".*

These should include receipts from both overnight and day visitors, preferably separately. For the sake of consistency with BOP recommendations of IMF, it is recommended to classify the international fare receipts (payments made to carriers registered in the compiling country of sums owed by the non-resident visitors, whether or not travelling to that country) separately.

International tourism expenditure is

*"expenditure of outbound visitors in other countries including their payments to foreign carriers for international transport".*

Like receipts, these should include expenditure from both overnight and day visitors, preferably separately. It is also recommended to classify the international fare receipts (payments made to carriers registered abroad by any person resident in the compiling country) separately.

### **3.3 GUIDELINES FOR COLLECTION**

#### **3.3.1 Surveys on overnight trips, carried out in respondents' homes**

The basic form of tourism demand measurement are purpose designed sample surveys, carried out in the homes of the respondents who are residents of a country, by direct interview, postal questionnaire or conducted over the telephone. The execution of these surveys is regulated on quarterly and annual basis by the Directive. According to the principle of subsidiarity, the Member States will decide, how the surveys will be carried out in each country. There are several possibilities: panel survey or not, carried out monthly or quarterly, etc. The quarterly data required by the Directive consists of about six questions and it can be included in a multipurpose survey if only the minimum information is asked.

Surveys in respondents' homes are essential in achieving statistically valid results for the generation of each country's domestic and outbound travel, and to measure the propensity and frequency of participation in tourism. Household surveys cannot be replaced by border surveys in measuring outbound tourism because border surveys do not give information on persons who do not participate in tourism. Except to measure the participation in tourism, the surveys also very often inquire the reasons for non-participation. The surveys provide the data needed to assess and forecast variables influencing the demand for tourism. When all countries in Europe conduct surveys of residents' tourism demand - using the variables mentioned in the Directive - it is possible to construct overall estimates of the flow of intra-European travel and of travel by residents to destinations outside Europe. Sample size is a limiting factor for identifying the flow of visitors to minor destinations.

It is not reasonable to measure short trips (1 to 3 nights) on an annual

survey. Very few people are able to recollect for several months the number and details of short trips they make for business or leisure purposes. The relatively small proportion of the total population, who generate a large number of trips per year, has the greatest memory problem. Details of short staying trips should therefore be measured through at least quarterly surveys. If possible, monthly surveys, surveying equal number of units every month are recommended. Monthly surveys may also measure the incidence and frequency of longer trips although annual (or multi-annual) surveys are recommended to cover the full details of long holidays and other leisure travel. The annual survey may be conducted in connection with the last monthly or quarterly survey.

Another possibility is to use a panel survey and some countries are experienced and prefer this method. Panel surveys have advantages and disadvantages. In panel surveys the tourism behaviour of the same people can be followed in time and consistent annual figures can be obtained from the quarterly data. Weighting the results of independent quarterly surveys to obtain annual figures is more complicated and the results may be slightly different from those obtained from an annual survey.

Most people can recollect and provide information about their main holiday of the year, up to twelve months after the event. For this reason holiday surveys have been conducted in most countries for many years on an annual basis. Annual surveys have been mostly based on trips of at least four nights away from home and this limit is also in the Directive. Although the statistical logic of four nights can be questioned, the continuity with previous surveys is a very strong argument for keeping the limit as it is.

### **3.3.2 Surveys on same-day trips, carried out in respondents' homes**

Same-day tourism is a particular phenomenon of the demand for tourism and its importance has grown rapidly with the development of the means of transport. In some cases a choice can be made between day trips and overnight trips. Apart from a common desire to experience nature or to be in the open air, an important proportion of the same day travellers' demand is for tourism products and services (e.g. to participate in an event), although compared with overnight tourism, same-day travel consists of high volume and lower revenue.

The recommended survey method is a representative sampling of individuals or households, in the latter case involving interviews about or with all members of the household. Another possibility is to use a diary method panel. In both cases it is very important to get the responses from the part of the population that makes most trips because they are the most difficult to catch up with. The surveys are conducted among the residents of the country or region and include their domestic and outbound day trips. Deplorably the household surveys on day trips are not conducted in all countries of Europe and much of the information on day trips comes from border surveys and surveys at tourism sites.

Data on expenditure can be used to derive estimates of direct and indirect employment in tourism. The results of outbound same-day-travel (usually to an adjacent country) provide important information for these adjacent regions on the repercussions and significance of incoming visits by

day travellers.

The interviews should spread over all 12 months of the year and each cover a survey period, which can still be remembered by the respondent. The survey period should not exceed one month (or even two weeks) because of the limited ability of those interviewed to remember the day trips in a longer survey period. The survey period, survey intervals and the number of respondents should always correspond to one another so as to achieve an adequate volume of available interviews for an entire survey year. Day tourism varies considerably according to the population of the survey area, the varied and attractive day tourism destinations and the state of the transport infrastructure and mobility opportunities of the population.

Depending on the survey program of a country, surveys on same-day trips may be carried out either together with tourism demand surveys of short (1-3 nights) overnight trips or separately, if the simultaneous compilation involves difficulties or if it is not considered appropriate. Since conducting surveys on overnight trips is regulated while carrying out surveys on day trips is not, the results from surveys on day trips and overnight trips must be presented separately. However, it would be interesting to see if a correlation exists between making day trips and overnight trips.

Same-day trips are usually included in surveys at international borders and comparing their results with the household survey results gives valuable information, also for the reliability of the surveys. To get the whole picture on same-day travel, a third source, surveys at destinations may be used in addition. To combine the information from several different sources may be quite difficult but it would prove very useful, if it can be done.

### **3.3.3 Surveys of travellers at international arrival and departure points**

The statistical unit is the traveller or possibly the travel party. The first distinction to be made is between visitors and other travellers, notably border workers, transit passengers, migrants and regular (weekly) shoppers to a neighbouring country. The information about these non-tourism travellers is also very interesting and it may be collected in the same connection, in which case the surveys measure all international travel, not only tourism. This kind of combined survey is often very rational and gives added value to the tourism border survey.

There are alternative venues where interviews can be conducted: at departure from the country (at departure point or in the means of transport) or upon arrival in the country. Good co-operation with authorities (police, customs officer, frontier guards, etc.) and companies managing the points or operating in the location is a necessity for conducting border surveys.

The surveys include inbound visitors and very often also outbound, usually both day trips and overnight trips. From the standpoint of validity of the information collected, it is preferable to interview inbound international visitors as they are departing the country and residents as they are returning from abroad. They have completed the main part of their visit at this point and can report on their activities as behaviour rather than intentions. If due to costs or administrative controls there are difficulties to arrange the

interviews of arriving or departing visitors, a representative sample of inbound visitors can be drawn also as they enter the country (or residents as they are leaving) but then one must rely on intentions rather than actual behaviour.

Border surveys give very important additional information to household surveys and provide the only comprehensive means of measuring accurately the volume, value and characteristics of tourism that enters EU/EFTA from other regions of the world. For some countries, these visitors may generate half or more of all international tourism revenue and measurement is vital for balance of payments and employment estimates and for marketing and planning purposes.

The methods of sample selection, choice of survey points and estimation procedures are different for different means of transport. Collection of data usually takes place through multistage stratified (or systematic) sample surveys, where e.g. the first hierarchical level is the place of arrival, the second level is the means of transport and the third level is the visitor. The knowledge of traffic volume and of passenger movements by season and by day of week greatly improves the accuracy of the results. Direct interviews, or combined with questionnaires returned before leaving, are normally used. Due to lack of time, the questionnaires are sometimes asked to be returned by post but this may deteriorate the representativeness. The reliability of the results (estimates) should be studied, usually by variance estimation.

The methodology for measuring international tourism at airports and sea ports is established and has been used for many years in several countries. The interviews of travellers by railway are normally held in the train. Although there are major difficulties in measuring valid samples of road transport crossing national borders for countries, which have extensive and open land borders, it is desirable that a sampling of road traffic on roads at national boundaries is conducted. A multistage sampling can be employed: a sampling frame of all departure roads is defined and a sample of these is chosen. Then a sample of visitors is selected at the chosen venues. The surveys can be combined with traffic surveys undertaken by Transport Authorities or Customs Authorities. The dismantling of border checks and controls of individuals' movements within the EU (especially between "Schengen countries") and the European Economic Area does not rule out options for the conduct of surveys (although census surveys cease with the free movements of persons).

The surveys can provide estimates for both credit and debit in the travel account of the balance of payments. The data can be very useful since exchange control is no longer practised in OECD and reliable monetary data does not come automatically from administrative sources. If extensive information on physical movements, expenditure, accommodation used, etc. is collected, the border surveys can provide key data on international tourism expenditure.

The same methodology that is used for surveys at international borders, can be applied in surveys for tourism flows between regional borders. Regional surveys have been accomplished by some regional organisations

(in few countries in Europe). It is more common to estimate regional tourism flows by traffic measurements.

#### **3.3.4 Surveys of visitors at destinations and other tourism sites**

Surveys at visitor destinations are used to provide detailed information about internal tourism: domestic and often also inbound tourism. They normally concern both same-day and overnight visitors. The surveys at visitor destinations are sensitive to double counting, i.e. they may include round trips from a place to which the visitor is an overnight tourist and stopovers as part of transit travel. The same individual may also visit many different tourism places on the same trip. This should be taken into account while carrying out the surveys in order to avoid problems in reconciling the data to other tourism statistics.

The surveys are used at national level but perhaps even more on regional and local levels. The total number of visitors at certain important tourism attractions is counted or estimated regularly and there are also quite many ad hoc surveys. The great number of the surveys supports strongly the usefulness of this kind of information as additional source of tourism demand and for assessing expenditure patterns. The data are used on regional level especially for marketing and development purposes (attitudes and motivations, interests and details of activities). The data obtained from these surveys are not easily obtainable from other sources.

Data may be collected through two-stage sampling, where the first stage units are the time intervals and the second stage units are the persons visiting the site. If the tourist site has a controlled mechanism for entry, a linear systematic sampling with random start and appropriate interval of selection can be used. If the site has no controlled entry and the number of visitors is difficult to count, special methods may be required.

The surveys at tourism sites are more often carried out by local or regional organisations or by research or marketing offices than by statistical offices. Nevertheless there are strong interests to influence also the surveys conducted by private enterprises in order to introduce the standardised definitions and classifications to ensure comparability with macro level surveys.

The surveys may be conducted in any place where a high proportion of visitors can be found even if the validity criteria is often not fulfilled. The most important visitor destinations are various visitor attractions and local events, for which the number of visitors are usually counted or estimated on a regular basis.

Surveys on visitors should first identify local people among the visitors and estimate their proportion of all persons at different times. Then the surveys are carried out in the normal way: separating same-day and overnight visitors and asking the normal visitor and trip/visit characteristics.

Data on tourism attractions, events and other visitor destinations are most important for cultural but also for rural and regional tourism.

#### **3.3.5 Other types of surveys**

Besides surveys at respondents' homes, borders and tourism places, there are other types of surveys that will be only briefly mentioned in this document. A sample may be drawn from the visitors in accommodation establishments but a representative sample cannot be drawn from all modes of accommodation and day visits are naturally excluded. But if we are more interested in tourism revenue than in visitor flows, samples of tourists from hotels and other establishments may well be drawn, because these tourists, especially business travellers staying in hotels, are the biggest spenders.

Validity problems also arise when surveys are conducted in means of transport, unless access to a destination is limited to only one means of transport. However, sometimes (part of) border surveys may be replaced by surveys in means of transport.

In the diary method visitors are identified in advance, questionnaires are sent at the beginning of the reference period. This seems theoretically good but involves many practical problems (loss of questionnaires, premature completing and returning etc.) and generally post-trip surveys are preferred.

### **3.4 LINKS WITH OTHER STATISTICS**

#### **3.4.1 Accommodation statistics**

Important parts of tourism demand can be measured through guest registrations in accommodation statistics, namely estimates of the number of visitors staying in accommodation establishments in a country or in a region or locality.

The comparison of demand surveys with accommodation statistics gives extremely important information about the coverage and reliability of the statistics.

#### **3.4.2 Tourism products and services**

The proportion of visitors' demand for tourism products and services, for which travellers have to pay, can be linked with the supply side statistics and surveys, particularly via in depth classification of expenses and activities. This presupposes that the demand surveys are recorded in detail and that the statistics for the supply side of tourism and also tourism related statistics use harmonised classifications. The two most important tourism-related statistics in this relation are service statistics and the commodity accounting of input-output accounts.

#### **3.4.3 Balance of payments**

In the BOP recommendations of the International Monetary Fund, two items are connected to tourism. (1) travel covers the goods and services acquired from an economy by foreign travellers during visits of less than one year in that economy. (2) passenger transport covers all services provided - between the compiling economy and abroad or between two foreign economies - in the international transport of non-residents by resident carriers (credit) and that of residents by non-resident carriers (debit). Also included are passenger services performed within an economy by non-re-

sident carriers. Excluded are passenger services provided to non-residents by resident carriers within the resident economies; these are included in travel. In addition to passenger fares - including fares that are part of package tours but excluding cruise fares, which are included in travel - passenger services include charges (for baggage, vehicles, etc.) and expenditure for food, drink, etc. while on board carriers.

A majority of Member States use at present the so called "banking method", where the valuation of travel is based on the information of exchange of bank notes (and other forms of currency). Few countries base their analysis on the survey method at the moment but with the emergence of European Monetary Union and a single currency this will be the main method for the BOP travel item in the EU, supported by the data from other sources (travel agencies, transport operators, etc.). To obtain reliable estimates on BOP through surveys require quite large samples, e.g. 20 000 interviews per year.

An important option would be to use the expenditure data from tourism demand surveys (and possibly from mobility surveys if expenditure is included in them) for BOP purposes or to conduct common household and border surveys for tourism and BOP. For that, the differences in the concepts and definitions used for purpose of trip (V13) and tourism expenditure (V25) should be either reconciled or two slightly separate sets of figures should be asked, one for tourism and the other for BOP. Since BOP includes day travel, day trips should be included in the surveys or estimated.

#### **3.4.4 Passenger transport**

All statistics on passenger transport (except commuting) are very interesting and useful from the tourism standpoint. Traffic flows and transport infrastructure have an effect on tourism supply. Tourism demand for a country or a region may be partly estimated through an analysis of passenger transport data, usually obtained from several sources.

Mobility surveys in households are a special case of passenger transport statistics, since most of the variables used are also in tourism demand surveys. If we want to use the data from mobility surveys and tourism demand surveys together effectively, the concepts, definitions, common variables and classifications must be harmonised. The issue is to be able to standardise the data on European level and the prerequisites for this are quite good. There is no need to regulate the conducting of tourism and mobility surveys: they may be carried out (in one, two or several surveys) in the most effective way according to the survey programme and the contents of the surveys varying from country to country.

There are requirements from both sides, tourism and transport, for the standardisation. The minimum requirements of the tourism Directive are not sufficient for mobility surveys and - as seen from this document - additional questions should be included. The latest proposal for mobility surveys is harmonised to a great extent with tourism statistics and, if considered appropriate, allows to combine the mobility and tourism demand surveys. If this is not the case, there remains from the tourism standpoint, however, one somewhat problematic issue, the survey unit, where trips below 100 km are excluded from the long-distance mobility surveys. Although overni-

ght trips below 100 km are not frequent, they occur, and that makes the combination of data from the two surveys somewhat problematic, because it is not known exactly what part of the other survey is covered. However, this can be adjusted quite easily by including into mobility surveys trips below 100 km involving an overnight stay.

The classifications for characteristics of trips and for characteristics of persons in tourism and mobility surveys are not exactly the same, but they are consistent and should involve no problems.

### **3.4.5 Time use surveys**

It was decided in December 1994 to harmonise the time use surveys carried out in Europe. In the future (the main survey is scheduled for 1997, using a sample size of 5000 households per country), important information on especially same-day travel but also on staying trips can be obtained from time-use surveys also on European level, not only in those few countries, where it has been possible to separate tourism trips in the surveys. Because day trips are not covered by the tourism Directive, time use surveys and mobility surveys are the sources, from which information on day trips may be obtained on European level in the future.

The data consists of an extensive background data, socio-economic characteristics of persons, and of the time-diaries kept by the respondents. The survey covers all seasons of the year, two or three days: one weekday and next Saturday and/or Sunday. It should be possible to extract (approximate) tourism trips from the survey since the proposal includes a question if the respondent was on a day trip or on an overnight trip to another municipality (excluding regular trips to work/study) or in a second home during the survey day. Time use surveys are the only source, from which the time used for different activities during a trip can be obtained and they can be a very valuable extra source for tourism information.

There are limiting factors for the use of the results of time use surveys. Firstly, time use surveys are carried out at long intervals, usually every fifth year. Secondly, the relatively small sample sizes do not permit reliable regional results. Special attention should also be paid to catch up with persons who are on holiday at the time of the survey and that the diaries are filled by them.

# TRANSPORT CONDITIONS AND TOURIST DEVELOPMENT. A TERRITORIAL ANALYSIS FOR SOUTHERN ITALY

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## 1. Introduction (\*)

The paper discusses how the most important factors concerning the interactions between tourism and transport network (transport infrastructures endowment and location, accessibility, quality of services) can be analysed through suitable statistics. The objective is to verify to what degree can the tourism development of a specific area be attributed to the development of conditions of accessibility and to the level of efficiency of services to mobility (Costa, Gambuzza, Manente, Minghetti, 1995).

The analysis, carried out by analysing the heterogeneous reality of the South of Italy (1), has involved a very detailed statistical documentation at a territorial level permitting the aggregation of the individual resorts into homogeneous macroregions in terms of accessibility and transport problems. This operation was nevertheless incomplete as no precise system of measurement of tourist flows at a municipality level exists in Italy. It was therefore possible to use data on tourist movement (arrivals and nights) provided by ENIT (the national tourism body) for resorts of acknowledged tourist interest and in which there is a tourist office (APT).

## 2. Southern Italy in the national context

Southern Italy is an isolated area due to the shape of the Italian peninsula. The structural picture of unsuccessful and/or insufficient tourism development is linked to three objective elements, directly connected to the characteristics and organisation of the transport system and services to mobility, which explain the spontaneous diffusion process of the tourist flows in Italy, in which the Southern regions have been strongly penalised.

The first factor is the marked prevalence of short- to medium-haul origin markets of tourist demand towards Italy. Europe, and especially the countries bordering Italy along the Alps or nearby, are the main origin markets of international tourism to Italy. The share of European tourism over the total number of foreigners is 79% of arrivals in all means of accommodation, reaching 90% when considering transit at borders. Almost three-quarters of this movement comes from Germany, France, Switzerland and Austria; Germany alone represents 32% of arrivals and almost 42% of nights.

The second factor is the characteristics of the model of tourism consumption that has evolved in past decades —medium-long stay family holidays— and the incidence of road transport, offering practical advantages such as flexibility, autonomy, speed, cost. About 76% of foreign visitors to Italy cross the borders by car. The remaining 24% is distributed between air, rail and sea transport, with a clear prevalence of air transport in recent years (12% in 1991 against 7.4% in 1968) to the detriment of rail transport (9% in 1991 against 14.8% in 1968), and with a substantial stability of sea transport (2%) (2). In short, the fact that Europe is the strongest origin market explains why short and medium-length travel has been, and continues to be, the largest share of international tourism in Italy and also why the use of private road transport has played an increasingly important role. On the other hand, the use of private road transport, which is generally common for itinerant tourism, has ended up responding to the specific model of tourist consumption prevalent in recent decades mentioned above.

In this context, Northern Italy, far more than the rest of the country, has been a privileged area for the development of this tourist behaviour, both because it has environmental conditions that correspond to the prevailing forms of tourism (the Alps, especially the Dolomites; the Northern Adriatic coasts), and also because this supply has permitted limited time and general cost factors for the main demand markets. This latter aspect has been greatly aided by the favourable exchange conditions and a development of the means of accommodation aimed at mass tourism and the family holiday formula.

Finally, the third factor concerns the correlation between general economic development and tourism industry increase. At a macroterritorial level, in fact, it is a matter of course that the most dynamic areas in the improvement of the infrastructure of the transport network and the raising of the service standards, which correspond to the areas with greatest economic growth, include the areas with the greatest tourist development. Southern Italy, which is characterised by a lagging-behind in its economic structure, has therefore been excluded from the most recent process of tourist development.

However, beyond the impact of these elements, from the analysis of the infrastructures it nevertheless clearly emerges that the poor efficiency of the transport services in this region has undoubtedly contributed to making the Southern tourist product less attractive or less renowned, or to emphasising its image of poor quality.

Given such problems, what are the features of tourist demand and the performance of the tourist industry in Southern Italy?

In geographical and territorial terms, the phenomenon has followed the main lines of development and human concentration along the coasts, which were historically places of exchange and cultural interaction with other countries. Even the excellent projects of tourist development (from the Costa Smeralda to the many Villages or Clubs that have developed fairly recently throughout the South) have followed the same localising tendency and have helped to reinforce the idea of a mainly "sun & sea" kind of tourism.

As far as the tourist flows towards the South are concerned, they are a low share of the total movement in Italy: 10-12% of international flows and 20% of Italian flows, against the 55% and 57% of the North (Table 1).

The prevalence of domestic demand is characterised in its turn by a do-

minance of intraregional movement. During the Eighties a significant share of the increase in holidays was due to the demand of residents, which reached 70% of the total. The consequence is a progressive increase in the short-range mobility, fed by the so-called "tourism in the neighbourhood" that is mainly concentrated in holiday homes (Table 2). The implications of this aspect are manifold. The burden of this demand continues to be one of the main causes of the deterioration of local resources and of the congestion of the transport network, especially near the main urban/generating centres. At the same time, massive building investment has led to real estate speculation, to the detriment of the growth of a modern hospitality industry. The gradual development of medium-long stay family holidays of the residents in the area has, moreover, blocked the development of tourist services that a similar external demand would have required or stimulated, both in terms of the organisation of the demand, the variety and quality of the supply, and the services to tourist mobility.

Finally, the tourist industry—to which development strategies have dedicated very little attention—plays a very limited role in the Southern Italian economic system. Only 20% of total tourist consumption in Italy (15.5% of foreign consumption and 24% of Italian consumption) takes place in Southern Italy (Table 3). The added value generated by such spending is 22% of the national tourist value added and is 3.7% of GDP in the South (against a national average of 4.6%) (Table 4).

### **3. Accessibility and mobility conditions and tourism demand perspectives in Southern Italy**

Before formulating any transport policies for the sector, it is essential to move beyond a simple description of Southern Italy as an area penalised by its greater distance from the main origin markets of tourist demand and devoted to "sun & sea" holidays, and to explore new possibilities and tourism development perspectives in the area. This means that answers must be found to some fundamental questions: whether transport has conditioned the heterogeneous lines of tourist development in Southern Italy and to what degree; what are these lines of development; what are the most popular resorts and where are they located; why have the inland areas in the South remained underdeveloped or even excluded from the main tourist itineraries; what are the prevailing and the emerging types of demand; and finally which resorts are—and continue to be—able to sell their product on the international markets and which will be the newcomers.

To answer these questions, the Southern tourist resorts have been reclassified according to territorial macroareas (3) which, because of their geographical, social and economic characteristics, have a fairly common tourist experience, but what they all share are problems of accessibility and functioning of the transport network: the main urban centres; the smaller centres of historical and artistic interest; the Neapolitan district; the Adriatic coast; other coastal resorts; the inland naturalist and spa centres (Figure 1). The division into these tourist areas and the analysis of their development processes, permit an interpretation of the role played by transport in the conditioning of the evolution of tourism demand and the hierarchical relations between resorts. Table 5 presents the performances of these areas in terms of arrivals for the years 1968, 1978, 1988 and 1992.

The **main urban centres** include the main Southern capitals (Naples,

Palermo, Bari, etc.) and have fewer accessibility problems as they are closer to the main transport infrastructures such as ports and airports, road networks and national and regional railways. Nevertheless, the trend of tourist flows shows how they are undergoing a structural crisis that is most severe on the domestic market. Their relative share of the total tourist movement to the South has dropped from 60% of arrivals at the end of the Sixties to 31% at the beginning of the Nineties. In this context, the international movement has slightly improved its position, albeit in alternating phases, even though it does not exceed 23% of the total.

The causes of this may only marginally be traced back to problems linked with the endowment of infrastructures, as it is probably due to more general environmental problems, such as social decay, urban disorder and the inefficiency of services offered both to residents and to tourists. Furthermore, in many cases the centrality of the network system servicing these cities has missed the objective of providing a specific function in the organisation and activation of tourism services. The most significant case is that of Naples with reference to the Neapolitan tourist system which, as we will see, is one of the strongest and most dynamic areas in Southern Italy due to its complex and varied supply: seaside and spa resorts, and historical and cultural attractions. Naples is a central junction in the system of regional mobility, especially in relation to the international and long-haul demand that most easily travels by plane. However, it has not been able to claim a central position in the supply of services to coastal tourism, a role that has probably been covered by Sorrento, the true centre of the Campania system.

Within this first outline of difficulties emerge the role and the success of coastal-seaside resort tourism which is characterised, on the one hand, by an almost exclusive "sun & sea" role along the Adriatic route and, on the other hand, by a more diversified primary supply with strong historical and cultural elements, especially along the Neapolitan coast and in Sicily. Despite a general and indisputable growth in demand, which has risen from 27% of the total flow to the South at the end of the Sixties to over 50% in the early Nineties, the situation is extremely varied. The Neapolitan area stands out because its vicinity to Naples gives it strong advantages in terms of accessibility, but it is also influenced by the more general regional problems linked to the lack of organisation of infraregional networks and connections between the resorts that make up the tourist system, and which Naples has been unable to solve. The location of the area in terms of the main access points has, therefore, certainly contributed to maintaining and strengthening its overall tourist role (from 17% of the total tourist movement towards the South at the end of the Sixties to 19.2% in 1992). But the determining factors of this success have been, and continue to be, those linked to the traditional images conveyed by literature and the myth of the Grand Tour, rather than the seaside resort supply.

The Adriatic seaside resorts along the coasts of Abruzzo and Puglia are situated along the Rhine-Adriatic route of European tourism and today attract about 19% of the total Southern arrivals (against 4.6% in 1968). Although there are no particularly important airports in the area, these resorts enjoy the advantages linked to good accessibility through the coastal road and railway network. They share the diffusion processes of the typical seaside resort holidays of the Northern areas, of which they are a less crowded outlying extension in terms of accommodation supply. However, the fo-

reign flows are scarce (9% of arrivals in the area).

The other coastal centres include popular centres in Sicily (Taormina and Cefalù) and Sardinia (especially the northern coast), as well as some coastal centres in Calabria and Basilicata. In terms of tourist movement, each year they attract 15% of the Southern total, against 5-6% at the end of the Sixties. Their tourist dynamics is a midway position compared to the previous two examples of seaside resorts. The growth trend of the tourist movement is stronger than that of the Adriatic centres and the foreign component is significant (over a quarter of overall nights), although less prominent than in the Neapolitan area.

In terms of infrastructures, these areas are undoubtedly less well served and have problems of accessibility and diffusion of flows at a territorial level that are most serious in the centres along the Sicilian and Sardinian coasts. However, the success recorded by this group of resorts seems to indicate that the services are adequate for the needs of the kinds of tourist mobility that have thus far emerged. The explanation of this is partly to be found in the fact that many of these centres are not destinations for traditional holidays but for short, itinerant holidays that combine seaside stays with cultural itineraries. Nevertheless, in the resorts with the highest growth in tourist flows, especially foreign flows, this is linked to development processes that have their roots in the traditional Grand Tour (as with the Neapolitan area), or have been implemented by brilliant entrepreneurial campaigns carried out by hotels and travel agencies rather than by improvements in the general accessibility conditions in terms of frequency of runs and average travelling times (Costa Smeralda in Sardinia and Cefalù in Sicily).

While in the South the infrastructures are adequate along the two main coastal lines of access where in past decades economic, social and demographic development and infrastructural innovation were concentrated, the smaller centres of historical and artistic interest, including inland towns such as Paestum, Agrigento, Piazza Armerina, Matera and Ostuni, are clearly penalised. Population exodus and depressed social-economic conditions in these areas have undoubtedly been associated with a lesser demand (and perhaps fewer needs) for infrastructural improvements, while transport services are still insufficient and inefficient.

They are all centres in which holidays are characterised by a cultural component that is much more explicit than in the larger urban centres, but have greater accessibility problems, a smaller transport infrastructure endowment and, consequently, considerable difficulty in the organisation of tourist travel/itineraries. This hinders tourism development, especially the foreign component. However, the area currently attracts about 9% of total arrivals compared to 7% at the end of the Sixties. In this context, foreign tourism has increased by seven percentage points over the last thirty years, reaching 21.5% of arrivals recorded in the area.

The naturalist and spa centres, which are mainly inland locations, have the greatest access difficulties and, perhaps as a consequence, are the centres where medium-long stay family holidays and holidays linked to winter sports or outdoor activities are most popular. They mainly attract Italian tourists, whose flows have grown from 4-5% at the end of the Sixties to 8-9% today. The centres where the naturalist component may be strongest and may open up new development possibilities are around the National Park in Abruzzo.

#### 4. Conclusions

The analysis by homogeneous macroareas through detailed territorial data, of the relations between infrastructures and dynamics of the tourist demand in Southern Italy reveals that :

a) the common image of Southern Italy as a destination for seaside holidays may essentially be attributed to the behaviour of the Italians, especially those resident in the Southern regions. It also shows how this fact negatively affects the evolution of the tourist market and hinders the development of a productive local tourism system;

b) the greater or lesser success of the Southern tourist resorts does not always seem to be directly connected to the characteristics of the network system and to the efficiency of the services offered. Different trends of the demand can only partially be attributed to the role played by the infrastructures and the transport services, while more frequently elements connected to the image of the different local products, to the state of the primary resources and to the quality of complementary goods and services (from means of accommodation to other tourist services) are involved;

c) the only explicit and concrete case of positive interaction between infrastructural development and tourist growth not merely on a local level is along the Adriatic coast, where the development of the coastal railway and especially the road network has favoured the movement of traditional forms of tourism down from the northern Adriatic riviera. It does not, however, seem possible to find a correspondence between the urban role, the endowment of infrastructures and centrality in regional and interregional transport systems. The negative dynamics in some main urban centres indicates that the presence or the vicinity of airports, or the nodal function of connections with islands are not advantages if other elements such as the quality of social life and urban services in general, as well as more specifically tourist aspects, are absent. At the same time, the lack of an efficient widespread intermodal system of transport services has hampered the development of tourism towards the many cultural and natural attractions of the internal areas. These resorts, which are still ignored and often excluded from the main tourist itineraries, are instead one of the most important resources on which the relaunching of the South could be based (Costa, Gambuzza, Manente, Minghetti, 1995).

The study has also traced the main tendencies of tourist movement in the South and has pointed to some significant emerging dynamics, comparing this situation with the general evolution of the tourism demand on a national and international scale. The emergence of more varied models of tourist consumption, new travel opportunities offered by the extension of air traffic and the progressive expansion of the tourist destination market are all aspects that tend to question the competitive conditions connected to the distance factor: Southern Italy is thus part of a new, global competitive scenario. The competitiveness of the South on the international markets of demand, especially on the newcomer markets, will thus certainly depend on the ability to improve the quality of the services offered and organisation of the demand. But it will also have to face the problems related to the management of tourist mobility and therefore with the insufficiency of the transport system.

In that context, the analysis here presented can give useful information on new possibilities the area could achieve in the international tourism

market through improvements in the transport system, both through better services and, in the long run, through greater investment in infrastructures, and then for the specification of the basic guidelines suitable for "transport policies for tourism", which must be compatible with the integrated development of the South (Costa, Gambuzza, Manente, Minghetti, 1995).

(\*) This paper uses results obtained in the research project "Impatto degli investimenti nelle infrastrutture di trasporto sul grado e sul tipo di sviluppo turistico" carried out by the Scuola di Economia del Turismo of the University of Venice as part of the C.N.R. Progetto Finalizzato Trasporti 2. It was presented to the 30<sup>th</sup> TRC Meeting held in Venice from 7 to 10 April 1995

#### Notes

(1) The administrative regions examined here are Abruzzo, Molise, Puglia, Campania, Basilicata, Calabria, Sicily, Sardinia.

(2) Although modal unbalance in tourist movement is not unique to Italy, it does nevertheless characterise it with respect to the European average. According to a recent survey commissioned by the EEC (KONSO, 1988) automobile tourist traffic at the end of the Eighties was estimated at 45% of the total, while air traffic was approximately 30%. These results show very diverse national situations, with prevalent shares of road transport varying between 50 and 65% in Northern and Central European countries.

(3) Since the data on tourist movement (arrivals and nights) provided by Enit (the national tourism body) for resorts of acknowledged tourist interest and in which there is a tourist office (APT) were used, the entry "other resorts" in Table 5 includes the territorial areas not recognised as being of tourist interest and not individually surveyed, and thus not traceable to any of the typologies used for the study of tourism in Southern Italy.

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Tab. 1 - Domestic and international tourist flows in Italy, by destination area. 1992

	Absolute values (thousands)			Share on total flows in Italy (%)			Share on total flows in each area (%)		
	Italians	Internat.	Totals	Italians	Internat.	Totals	Italians	Internat.	Totals
<b>ARRIVALS</b>									
Southern Italy	9551,3	2218,5	11769,8	21,4	10,3	17,8	81,2	18,8	100
Northern-Middle Italy	35088,3	19399,7	54488,0	78,6	89,7	82,2	64,4	35,6	100
<b>Total Italy</b>	<b>44639,6</b>	<b>21618,2</b>	<b>66257,8</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>67,4</b>	<b>32,6</b>	<b>100</b>
<b>NIGHTS</b>									
Southern Italy	51568,1	12029,8	63597,9	19,9	12,2	17,8	81,1	18,9	100
Northern-Middle Italy	206967,0	86613,8	293580,7	80,1	87,8	82,2	70,5	29,5	100
<b>Total Italy</b>	<b>258535,1</b>	<b>98643,5</b>	<b>357178,6</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>72,4</b>	<b>27,6</b>	<b>100</b>

Source: ISTAT, Statistiche del turismo, 1994.

Tab. 2 - Tourist accommodation supply in Italy, 1992

Beds	Absolute values			Shares on total supply (%)			Shares on total Italy (%)		
	South	North-Middle	Italy	South	North-Middle	Italy	South	North-Middle	Italy
<b>Total hotels</b>	363637	1359340	1722977	8,2	13,4	11,8	21,1	78,9	100
of which: 5-4 stars	76329	214836	291165	1,7	2,1	2,0	26,2	73,8	100
<b>Total non-hotel accommodation</b>	802970	2936111	3739081	18,1	29,0	25,7	21,5	78,5	100
of which: Campings and tourist villages	447950	819019	1266969	10,1	8,1	8,7	35,4	64,6	100
<b>Private holiday homes (1)</b>	2752894	4789186	7542080	61,9	47,3	51,8	36,5	63,5	100
<b>TOTAL</b>	<b>4443780</b>	<b>10118492</b>	<b>14562272</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>30,5</b>	<b>69,5</b>	<b>100</b>

Note:

(1) Estimates by Istituto Tagliacarne.

Source: ISTAT, Statistiche del turismo, 1994; IS.NA.R.T., 1994.

Tab. 3 - Tourist expenditure by macroregion. 1991 (billions of Italian lire)

Macroregions	Tourist expenditure			Shares on total expenditure in Italy (%)			Shares on total expenditure in each macroregion (%)		
	Italians	Internat.	Totals	Italians	Internat.	Totals	Italians	Internat.	Totals
Piemonte, Liguria, Val d'Aosta	10003	1741	11744	16,34	7,59	13,96	85,18	14,82	100
Lombardia	4740	1347	6087	7,74	5,87	7,23	77,87	22,13	100
Veneto, Trentino A.A., Friuli V.G.	12956	10014	22970	21,17	43,66	27,30	56,40	43,60	100
Emilia Romagna	8471	2654	11125	13,84	11,57	13,22	76,15	23,85	100
Toscana, Umbria, Lazio	10285	3619	13904	16,80	15,78	16,52	73,97	26,03	100
Campania, Basilicata	2782	1370	4151	4,54	5,97	4,93	67,01	32,99	100
Calabria, Sicilia	2300	859	3160	3,76	3,75	3,76	72,80	27,20	100
Marche, Abruzzo, Molise	7762	941	8703	12,68	4,10	10,34	89,19	10,81	100
Puglia	1092	112	1204	1,78	0,49	1,43	90,70	9,30	100
Sardegna	818	278	1096	1,34	1,21	1,30	74,63	25,37	100
Southern Italy	14754	3560	18314	24,1	15,5	21,8	80,56	19,44	100
Total Italy	61209	22935	84144	100	100	100	72,74	27,26	100

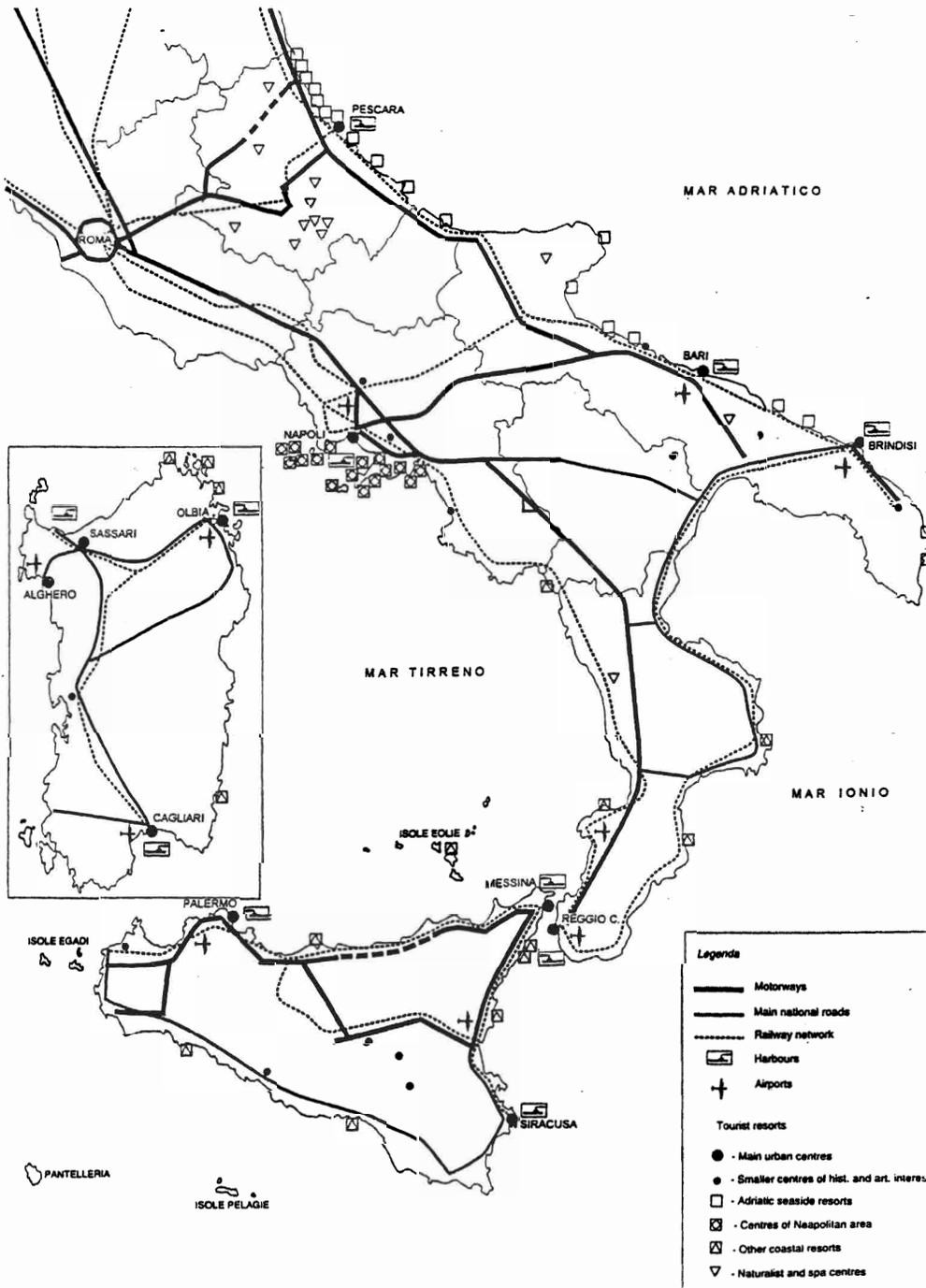
Source: Costa P., Manente M., 1993.

Tab. 4 - Added value by macroregion, activated directly and indirectly by tourist expenditure.

	Internationals		Italians (nets)		Totals (nets)		GNP
	A.V.	% on GNP	A.V.	% on GNP	A.V.	% on GNP	
PLV	1552	0,96	6161	3,82	7713	4,79	161147
LOM	2690	0,94	6417	2,25	9108	3,20	284966
VTF	5360	3,04	7113	4,04	12472	7,08	176048
EMR	1994	1,72	4764	4,10	6758	5,81	116230
TUL	3316	1,32	8987	3,57	12303	4,89	251476
CAB	1023	1,04	2693	2,73	3716	3,77	98672
CAS	864	0,77	2157	1,91	3020	2,68	112781
MAM	814	1,24	3373	5,14	4186	6,39	65552
PUG	442	0,64	1558	2,26	2000	2,90	68931
SAR	261	0,92	724	2,54	985	3,46	28466
SOUTH	3404	0,91	10504	2,81	13907	3,71	374403
ITALY	18316	1,34	43946	3,22	62261	4,56	1364270

Source: Costa P., Manente M., 1993.

Fig. 1 - Location of tourist resorts and main transport infrastructures in Southern Italy



(Attached to Figure 1)

CLASSIFICATION OF SOUTHERN TOURIST RESORTS

<b>NATURALIST AND SPA CENTRES</b>	<b>(Region)</b>	<b>NEAPOLITAN AREA</b>	<b>(Region)</b>
Campo Imperatore	Abruzzo	Lacco Ameno	Campania
Caramanico Terme	Abruzzo	Casamicciola Terme	Campania
Sulmona	Abruzzo	Ischia	Campania
Tagliacozzo	Abruzzo	Barano, Forio, Serrara	Campania
Scanno	Abruzzo	Procida	Campania
Pescocostanzo	Abruzzo	Pozzuoli	Campania
Rivisondoli	Abruzzo	Castellammare di Stabia	Campania
Roccaraso	Abruzzo	Vico Equense	Campania
Pescasseroli	Abruzzo	Sorrento-S. Agnello	Campania
Teramo	Molise	Capri-Anacapri	Campania
S. Giovanni Rotondo	Puglia	Positano	Campania
Noci	Puglia	Amalfi	Campania
G. Piemontese (Terme Luigiane)	Calabria	Ravello	Campania
		Maioni	Campania
		Cava dei Tirreni	Campania
		Salerno	Campania
<b>SMALLER CENTRES OF HISTORICAL AND ARTISTIC INTEREST</b>	<b>(Region)</b>	<b>MAIN URBAN CENTRES</b>	<b>(Region)</b>
Trani	Puglia	Pescara	Abruzzo
Martina Franca	Puglia	Bari	Puglia
Lecce	Puglia	Brindisi	Puglia
Caserta	Campania	Napoli	Campania
Pompei	Campania	Reggio Calabria	Calabria
Paestum	Campania	Messina	Sicilia
Matera	Basilicata	Palermo	Sicilia
Erice	Sicilia	Siracusa	Sicilia
Enna	Sicilia	Olbia	Sardegna
Piazza Armerina	Sicilia	Sassari	Sardegna
Caltagirone	Sicilia	Alghero	Sardegna
Agrigento	Sicilia	Cagliari	Sardegna
Oristano	Sardegna		
<b>OTHER COASTAL CENTRES</b>	<b>(Region)</b>	<b>ADRIATIC SEASIDE RESORTS</b>	<b>(Region)</b>
Maratea	Basilicata	Alba Adriatica	Abruzzo
Crotone	Calabria	Tortoreto	Abruzzo
Soverato Marina	Calabria	Giulianova	Abruzzo
Vibo Valentia	Calabria	Roseto degli Abruzzi	Abruzzo
Isole Eolie	Sicilia	Pineto	Abruzzo
Cefalu'	Sicilia	Silvi	Abruzzo
Taormina	Sicilia	Montesilvano Marina	Abruzzo
Giardini-Naxos	Sicilia	Francavilla al Mare	Abruzzo
Acireale	Sicilia	Ortona	Abruzzo
Sciacca	Sicilia	Vasto	Abruzzo
Gela	Sicilia	Termoli	Molise
S. Teresa di Gallura	Sardegna	Vieste	Puglia
La Maddalena-Palau	Sardegna	Manfredonia	Puglia
Arzachena	Sardegna	Margherita di Savoia	Puglia
Muravera	Sardegna	Barietta	Puglia
		Fasano	Puglia
		Ostuni	Puglia
		Otranto	Puglia
		Santa Cesarea Terme	Puglia

Tab. 5 - Domestic and international tourist arrivals in Southern tourist resorts.

	1968			1978			1988			1992		
	Italians	Internat.	Totals	Italians	Internat.	Totals	Italians	Internat.	Totals	Italians	Internat.	Totals
<b>Absolute values (thousands)</b>												
Main urban centres	1796,5	436,5	2232,9	1871,9	577,4	2449,3	1703,0	505,5	2208,5	1642,1	445,1	2087,2
Neapolitan area	365,3	264,6	629,9	489,0	399,4	888,4	664,4	571,8	1236,1	723,8	562,6	1286,4
Adriatic seaside resorts	152,4	16,1	168,5	604,0	118,1	722,0	918,3	137,0	1055,3	1033,6	104,6	1138,2
Other coastal resorts	149,6	51,0	200,6	311,0	188,5	499,5	732,8	319,6	1052,4	748,0	266,1	1014,1
Smaller centres	224,5	38,4	262,8	350,3	130,9	481,2	437,4	148,8	586,2	473,8	129,9	603,7
Naturalist and spa centres	152,2	10,8	163,0	235,8	10,1	245,8	393,1	24,5	417,6	552,8	24,2	576,9
<b>Total resorts</b>	<b>2840,5</b>	<b>817,3</b>	<b>3657,8</b>	<b>3861,9</b>	<b>1424,4</b>	<b>5286,3</b>	<b>4848,9</b>	<b>1707,3</b>	<b>6556,2</b>	<b>5174,1</b>	<b>1532,4</b>	<b>6706,5</b>
Other resorts	2682,3	260,0	2942,4	4154,7	564,2	4718,9	4181,6	708,6	4890,3	4403,1	672,9	5076,0
<b>Total Southern Italy</b>	<b>5522,8</b>	<b>1077,3</b>	<b>6600,1</b>	<b>8016,6</b>	<b>1988,5</b>	<b>10005,1</b>	<b>9030,5</b>	<b>2415,9</b>	<b>11446,5</b>	<b>9577,2</b>	<b>2205,3</b>	<b>11782,5</b>
<b>Market shares (%)</b>												
Main urban centres	63,25	53,40	61,05	48,47	40,54	46,33	35,12	29,61	33,69	31,74	29,04	31,12
Neapolitan area	12,86	32,38	17,22	12,66	28,04	16,81	13,70	33,49	18,85	13,99	36,71	19,18
Adriatic seaside resorts	5,36	1,97	4,61	15,64	8,29	13,66	18,94	8,03	16,10	19,98	6,83	16,97
Other coastal resorts	5,27	6,24	5,48	8,05	13,23	9,45	15,11	18,72	16,05	14,46	17,36	15,12
Smaller centres	7,90	4,69	7,19	9,07	9,19	9,10	9,02	8,72	8,94	9,16	8,48	9,00
Naturalist and spa centres	5,36	1,32	4,46	6,11	0,71	4,65	8,11	1,44	6,37	10,68	1,58	8,60
<b>Total resorts</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Total resorts	51,43	75,86	55,42	48,17	71,63	52,84	53,69	70,67	57,28	54,03	69,49	56,92
Other resorts	48,57	24,14	44,58	51,83	28,37	47,16	46,31	29,33	42,72	45,97	30,51	43,08
<b>Total Southern Italy</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Average annual % change</b>												
	1978/68			1988/78			1992/88					
	Italians	Internat.	Totals	Italians	Internat.	Totals	Italians	Internat.	Totals			
Main urban centres	0,41	2,84	0,93	-0,94	-1,32	-1,03	-0,36	-1,27	-0,56			
Neapolitan area	2,96	4,20	3,50	3,11	3,65	3,36	0,86	-0,16	0,40			
Adriatic seaside resorts	14,76	22,05	15,67	4,28	1,50	3,87	1,19	-2,67	0,76			
Other coastal resorts	7,59	13,96	9,55	8,95	5,42	7,74	0,21	-1,82	-0,37			
Smaller centres	4,55	13,06	6,23	2,24	1,29	1,99	0,80	-1,35	0,29			
Naturalist and spa centres	4,47	-0,66	4,20	5,24	9,31	5,44	3,47	-0,14	3,28			
<b>Total resorts</b>	<b>3,12</b>	<b>5,71</b>	<b>3,75</b>	<b>2,30</b>	<b>1,83</b>	<b>2,18</b>	<b>0,65</b>	<b>-1,08</b>	<b>0,23</b>			
Other resorts	4,47	8,05	4,84	0,06	2,31	0,36	0,52	-0,52	0,37			
<b>Total Southern Italy</b>	<b>3,80</b>	<b>6,32</b>	<b>4,25</b>	<b>1,20</b>	<b>1,97</b>	<b>1,35</b>	<b>0,59</b>	<b>-0,91</b>	<b>0,29</b>			

Fonte: ENIT, anni vari.

# THE TRAVEL BALANCE OF PAYMENTS IN THE LIGHT OF THE EUROPEAN MONETARY UNION. SITUATION ANALYSIS, PROBLEM DESCRIPTION AND POSSIBLE SOLUTION APPROACHES

by Ruth MEIER

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## **1. The Travel Balance of Payments in the Context of Economic Statistics**

### ***1.1 The Content of the Travel Balance of Payments***

The Travel or Tourism Balance of Payments analyses the monetary flows which are due to international tourism between a given country and the rest of the world. Being a part of the overall Balance of Payments it follows strictly the BoP methodology.

The Tourism Balance of Payments analysis therefore only takes into consideration final tourism consumption. In accordance with Balance of Payments rules the Tourism Balance of Payments does not take into account any aspects of tourism production, financing or investments.

Although the Tourism Balance of Payments follows the "national concept" it does not take into account the final tourism consumption of residents in their own country. This because of the above defined condition that only international monetary flows are subject of Balance of Payments analysis. As explained further down this part of the analysis is taken care of in other statistical systems of analysis (such as satellite accounts).

The International Monetary Fund defines expenditures to be analysed by the Tourism Balance of Payments as "all goods and services acquired by travellers (...) from the economy in which they are travelling and for their own use....These goods and services may be paid for by the traveller, paid for on his or her behalf, or provided to him or her without a quid pro quo (e.g. free room and board received by official visitors or by friends and relatives). In practice, information on goods and services provided without a quid pro quo will not usually be available."

When examining this definition in detail it becomes clear that the Tourism Balance of Payments only analyses a part of tourism final consumption. Due to the set definition that only international monetary flows have to be taken into account, expenditures before or after the trip in the country of residence of the traveller are never considered as part of the Tourism Balance of Payments.

Therefore it is evident that the impact of tourism on the economy of a

given country can never be analysed with the Tourism Balance of Payments only. For this purpose a much more sophisticated and detailed system of statistical analysis - which consists of various statistical systems - will have to be developed. The Tourism Balance of Payments analysis the share and the importance of international tourism final consumption within the international trade and international economic relations of a given country with the rest of the world.

## **1.2 Complementary Possibilities for Tourism Statistical Analysis**

### **1.2.1 Satellite Accounts**

Satellite Accounts are - contrary to the Tourism Balance of Payments - defined by the "Domestic Concept". Furthermore they normally use the production approach as the starting point for the analysis of the impact of tourism on a given economy.

The ideal satellite system considers not only the production aspects but also the tourism consumption and the monetary flows financing tourism industry. With other words the satellite accounts try to answer the following three questions:

1. Who produces how much?
2. Who consumes what and how much?
3. Who finances and pays which goods and services?

As the methodological concept of satellite accounts should be fully compatible with the System of National Accounts, this sectorial analysis of tourism leads to the possibility of an in-depth analysis of tourism impact and importance on the overall economy of a given country.

Besides this wider approach of the economic analysis (production financing and consumption), the tourism satellite accounts also take into consideration the tourism domestic consumption (i.e. the final consumption of residents in their own country).

### **1.2.2 Microeconomic Analysis**

Microeconomic analysis - such as the concept of HORECA/TA surveys - allows the examination of the situation and the development of single branches or parts of branches of tourism industry in detail. Special consideration can be given to aspects such as turn-over or cost-benefit-analysis in order to survey the tourism industry's performance. All these aspects can be taken into account neither by the Tourism Balance of Payments nor by the Satellite Accounts as they only deal with analysis on the macroeconomic level.

With the proposed microeconomic system specific aspects of tourism management can be considered as for example shares of personal costs or investment on the overall industry expenditures can be analysed.

The distinction between micro- and macroeconomic analysis has to be defined very clearly, as it has been shown many times in the past that users of the two statistical systems tend to mix up the contents and concepts.

Very often the users of the Swiss Tourism Balance of Payments - which is established with the survey method and which therefore can, for example, be broken down into macro-economic revenues of specific forms of accommodation - have confused this general economic analysis with the micro-economic analysis of a specific branch.

## **2. The Tourism Balance of Payments Calculation Methods**

So far calculation methods have not been finally defined. The Balance of Payments Manual of the International Monetary Fund only defines the concepts. In practice two main methods have been applied so far their application depends on the statistical sources existing and the economic circumstances of a country.

In order to give some more guiding recommendations, the World Tourism Organisation has mandated the Swiss Federal Statistical Office to develop a technical manual dealing with the various systems of compilation method for the Tourism Balance of Payments. This manual is part of a series of technical manuals which will be published soon by the World Tourism Organisation.

In order to start discussion on the influence of the European Monetary Union on the compilation methods of the Tourism Balance of Payments it is necessary to briefly explain the two mainly used methodologies. A more detailed description will be given in the mentioned technical Manual of the World Tourism Organisation.

### **2.1 The Banking Method**

Most countries in the world and all countries of the European Union use the "Banking Method" to calculate international tourism receipts and expenditures of their economies. This method measures all payment flows of an economy which can be considered as being of touristic nature.

The "Banking Method" takes into account not only the flow of bills and coins but also all payments made with credit cards or cheques also considered are bank transfers if their purpose can be identified as being tourism oriented.

The greatest advantage of this method certainly is the fact that all monetary flows can not only be analysed on a global level but also bilaterally or multilaterally. This means that the "Banking Method" clearly informs about bilateral and multilateral interdependencies of a given country with a defined set of other countries.

Therefore the importance of a specific country as country of origin or destination for the economy which is under analysis can be clearly identified. Bilateral Tourism Balances of Payments can also be a basis - by analogy with the Balances of Foreign Trade - to establish a kind of positive or negative Tourism Trade Balance between two countries.

Furthermore the "Banking Method" allows to chose the periodicity of the calculations in accordance with analytical needs. The Tourism Balance of Payments can be established with a monthly, quarterly, seasonal or annual break down, giving very specific information especially for marketing purposes.

The main disadvantage of the "Banking Method" is the fact, that this methodology does not allow to structurize tourism receipts and expenditures of a given country in accordance with the various forms of tourism. For example it allows neither to keep record of changes in the structure of visitors of a country nor to measure the impact of structural changes of the accommodation offer on the Tourism Balance of Payments.

Furthermore with the "Banking Method" it is impossible to differentiate expenditures of tourists from expenditures of same-day visitors. A distinction which is - especially for marketing purposes - of high importance.

## **2.2 The Survey Method**

The "Survey Method" used for establishing of the Tourism Balance of Payments is based on a detailed statistic of the physical flows of tourism, which are combined with a set of surveys dealing with tourism expenditure structures and spending behaviours of visitors. The statistical system is normally includes by a series of surveys analysing the development of sales of touristic goods and services.

While expenditure structures and spending behaviours are analysed with the help of surveys conducted with visitors, the sales of touristic goods and services have to be analysed by getting in contact with the respective producers and points of sales.

The Tourism Balance of Payments compiled in accordance with the "Survey Method" can be presented in the form of accounts, which give a clear picture of the various forms of tourism. A first distinction is normally made between "tourists" and "same-day visitors" (as defined by the World Tourism Organisation). Within these two main categories further break downs are possible depending on the statistical sources and the defined information needs of the users of tourism statistics of a country.

This possibility to structure the Tourism Balance of Payments of a given country in accordance with its structure of the touristic offer also clearly describes one of the main advantages of the system. With the "Survey Method" the receipts and expenditures of international tourism of a given economy can be analysed not only on the global level but also the macroeconomic indicators can be calculated for each segment of tourism.

One main disadvantage is certainly that it is almost impossible to break down on a bilateral level a Tourism Balance of Payments established on the basis of the "Survey Method". Theoretically it certainly is possible to do bilateral analysis, in practice it never has been done on a regular basis as this exercise would call for a tremendous amount of very fine detailed statistics and surveys. If information on a desaggregated level was asked for, it probably would be necessary to establish a set of models for the calculation.

Furthermore it is very difficult to establish with the "Survey Method" a Tourism Balance of Payments which is broken down on a monthly, quarterly or seasonal level. This desaggregation has never been carried out in practice either.

## **2.3 Further requirements of the International Monetary Fund**

The International Monetary Fund defines in the recently released fifth edition of its Balance of Payments Manual a clear distinction between "Business Travel" and "Other Travel".

The main reason for this requirement is the fact that "Business Travel" is - for National Accounts purposes - not considered to be final but intermediate consumption. For Balance of Payments purposes "Business Travel" is defined as final consumption.

Therefore the mentioned distinction is absolutely necessary if the concept of Balance of Payments has to be compatible with the concept of the System of National Accounts as the results of the Tourism Balance of Payments are taken as input for the calculations of the account "Rest of the World" of the National Accounts.

Besides this methodologically defined distinction of further break downs

of forms of tourism is asked for by the Balance of Payments Manual. As the International Monetary Fund defines the expenditures for goods and services in a temporarily visited economy of medical patients and students as travel expenditures, these expenditures have to be surveyed separately as well.

The separate treatment of these two categories of visitors is necessary again because of methodological differences between the System of National Accounts and the Balance of Payments.

### **3. The Tourism Balance of Payments in the Context of the European Monetary Union**

#### ***3.1 The Importance of Intra-european tourism***

Intra-european tourism is of very high importance for all member countries of the European Union, be it as country of destination or as country of origin of tourists and same-day visitors.

With the exception of the United Kingdom all member countries of the European Union calculate more than 50% of their total number of overnight-stays of foreign visitors as being of European origin. These shares have varied in 1993 between 53% for the Federal Republic of Germany and 90% for Luxembourg.

Already this very general information makes it clear that the introduction of the European Monetary Union creates a lot of problems for the compilation of the Tourism Balance of Payments, mainly because within the European Union the economies of member countries have to be considered as being a domestic market.

#### ***3.2 Future Changes for the Tourism Balance of Payments Compilation due to the European Monetary Union***

Today almost all member countries of the European Union use the "Banking Method" when compiling the Tourism Balance of Payments.

Therefore the most important information source are statistics on exchange of bills and coins, international credit card and cheque transfers as well as bank transfers for touristic purposes.

Assuming that with the introduction of the European Monetary Union it will no longer be necessary to buy foreign currencies to cover travel expenditures when crossing national borders, it becomes evident that the "Banking Method" as it has defined up to now can no longer be used as the compilation method for the Balance of Payments, at least not for intra-regional travel on the territory of the European Monetary Union.

In order to solve the then arising problems two possible approaches can be described.

#### ***3.3 Possible Solution Approaches***

##### ***3.3.1 Change of System versus Estimations***

One possible approach would be to consider the territory of the European Monetary Union as one single economic area. This would lead to the solution that only one Balance of Payments would have to be established which would analyse the receipts and expenditures of tourism taking place

between this economy and the rest of the world.

Bearing in mind the above mentioned importance of the intra-european travel movements and also considering the fact that the various European countries are competing markets in tourism, the above described solution can be considered as not being satisfactory.

All information on monetary flows due to bilateral tourism within the territory of the European Monetary Union would be lost. Information which has a high importance for the economic analysis of the tourism market of a given country.

At the moment nobody could ever consider the territory of the European Monetary Union being treated as one single market for tourism purposes. The preconditions for tourism vary very much between the different countries and especially this diversity is one of the main sales arguments when setting up a marketing campaign for a country.

Another solution would be to establish estimation models based on the information existing nowadays. This solution could certainly be used for a transition period, it would however become weaker and weaker as time passes on and the further the once good statistical basis goes away.

In the future a very sophisticated system of model type analysis would be necessary in order to analyse the performance of tourism in the context of the Balance of Payments.

So far no possible system has yet been described anywhere and it is highly impossible to imagine any kind of indicator which could be used.

Another possibility to tackle the problem would be to change totally the methodology used to compile the Tourism Balance of Payments and to switch over to the "Survey Method".

As described briefly before this compilation method is independent of any currency used to pay for tourism goods and services. This method can already now be used on a national or regional level. It therefore would be possible to apply it to any country within the European Monetary Union.

### *3.3.2 Preconditions for the Change of Compilation System*

Within the present paper it has only been possible to give a very rough and brief description of the "Survey Method". But already this short abstract clearly defines the main precondition existing when compiling the Tourism Balance of Payments in accordance to the "Survey Method".

The bases of the "Survey Method" and at the same time starting point for all calculations and estimations is a very well developed and very detailed statistic of physical tourism flows. The existence of such a tourism statistic which does not only take into account arrivals and overnight stays in all forms of accommodation but also the flows due to same-day travels is a "conditio sine qua non" for the "Survey Method".

Information on physical tourism flows can be obtained by various methods, depending on the statistical methodologies used in a country and also on the importance of tourism for the economy of a given country.

Tourism flows can be measured by well developed accommodation statistics which are accomplished by surveys conducted to measure the volume of same-day visitors and special categories of travellers (as described in chapter 2.3). If this approach is chosen to measure the physical flows, it is essential that expenditure surveys are conducted in order to analyse those of foreign visitors in the economy of the given country.

Furthermore the expenditure side of the Tourism Balance of Payments can either be established with the help of household surveys dealing with tourism expenditures of the residents of the given country abroad or with the help of bilateral data of other countries.

If no detailed accommodation statistics exist it would be possible to analyse visitor flows with passenger or visitor surveys which are established already in many countries in Europe.

As said before the following variables are necessary as basis for analysis: Number of arrivals and nights spent (if possible broken down into the various forms of accommodation), information on expenditure structures and behaviours of the visitors.

Practice has shown that accompanying surveys with producers of touristic goods and services are of great help for this kind of analysis.

The above mentioned variables are all defined as key variables within the directive about the "European Tourism Statistics" of Eurostat. Therefore the change of system for the compilation of the Tourism Balance of Payments would become possible, once this directive is implemented.

#### **4. Conclusions**

As the OECD/Eurostat Forum in Venice is neither the place to take decisions nor is the available time sufficient for an in-depth discussion it has been the purpose of this paper to make tourism statisticians more sensitive to the upcoming problems in the area of the compilation of the Tourism Balance of Payments.

Of course a possible change of the compilation method would not be as easy as it might appear now, as many detail problems would have to be discussed thoroughly.

Eurostat has recognised the importance of the problem and has established a new Task Force. This Task Force will bring together Balance of Payments experts of various Central Banks with Tourism Statisticians of some European countries. The Task Force will start in July 1995 an in-depth discussion of the existing problems and possible solution approaches.

At the moment it is highly important that tourism statisticians recognise the importance of the information given by the Tourism Balance of Payments. Although the Tourism Balance of Payments answers - as described before - only a part of the possible questions, it nevertheless gives a big variety of macroeconomic indicators which are essential for the global analysis of tourism impact.



**SESSION 4**  
**THE TOURISM INDUSTRY:**  
**ANALYSIS OF THE GLOBAL ECONOMIC IMPACT**



## INTRODUCTORY OPENING

by A. FRANZ

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Like the 1994 Forum the 2<sup>nd</sup> Forum has again provided a special presentation and discussion of tourism (T.) in the macroeconomic perspective. The obvious interest in both contributing to the session as well as in subsequent discussion clearly demonstrated the usefulness of this topic (which may that way become a more or less fixed part of the Forum series). This time it was attempted to put the accent on figures on the impact rather than on mere design, although - largely determining analyses - the basic compulsory structures may not be ignored, and still there are misunderstandings.

For remedy of the latter, and to provide an overall reference frame the Chairman started with a short presentation of the main features of the OECD's Tourism Economic Accounts Manual (MTEA). Deriving from a few basic notions of accounts (central commodity account, production account, resident household consumption account and an r.o.w. account) the 5 standard Tables of the MTEA were recalled (characteristic T.; commodity flows; characteristic production; T. consumption by function; employment and investment), mutually interlinked by classification symmetries. As a more novel concern, the OECD accounts can be easily identified or embedded in more comprehensive frameworks like the SNA satellite accounts. [A summary of this diagrammatic presentation is given in the Annex.]

The then following presentations partly dealt with more specific requirements of compilation, partly with implementation and evaluation of more comprehensive or "made to measure"-systems. Most typically the former are now concentrating in fields where traditional statistical reference is gradually getting lost, due to liberalisation/integration. The best example is the T. data needed for BOP and beyond that, for most significant analyses of r.o.w. flows connected with T., and no longer available from usual banking statistics [R. Meyer (C.H.)]. EUROSTAT is now going to engage in developing data collection systems based on other tools ("survey method", in combination with physical flows e.g.).

A group of ISTAT authors (F. Di Leo et al.) considers a wide range of issues, starting from the classification and ending with satellites. There, some discussion can be found on the topical classification and NA concepts with a view to T. The focus, however, is on the present situation with its variety of accounting and classification concepts to deal with T. in statistical terms. The authors particularly address the still vexing basic questions of appropriate statistical units, accounting links, population(s). The overall con-

clusion is that standards (like TEA) may be maintained but at the same time benefit from linking to other satellite type reference, e.g. in the social field or physical data contexts.

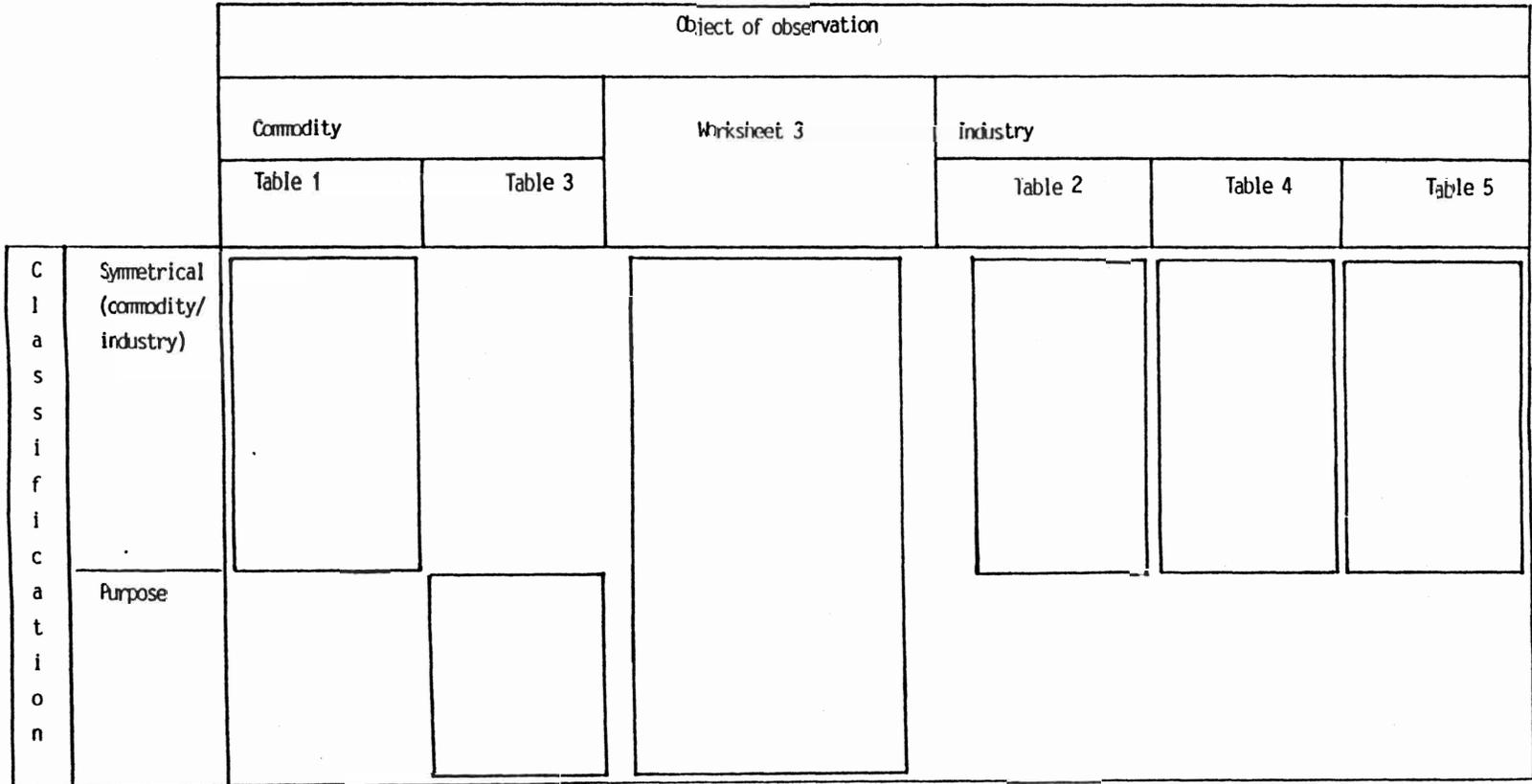
Likely, the Canadians have developed the most ambitious T. satellite at all, starting this work several years ago already. It has favourably fertilized various other pertinent initiatives like the WTO recommendations, standard classification and also the TEA (OECD). Just now the complete system has become available, and is impressing enough by detail, formal rigor, clearness of structure and potential of analytical evaluation and interlinking. Even this system, however, cannot avoid to start from a couple of basic assumptions and methodological conventions, and above all, with its present comprehensiveness it cannot easily be duplicated elsewhere.

Other contributions were more closely addressed to evaluation in its own right. A most interesting paper was contributed by CISET, investigating the regional economic implications on the basis of a multiregional - multi-sectoral IO-model, designed for Italy (10 regions, 8 sectors). That way they calculate interregional multipliers, regional VA, employment, etc. Even within this relatively aggregate set they can demonstrate that in various instances major benefits are drawn from tourism in regions not so touristic as such, due to different patterns of industrialisation.

A rather simplistic impact model was presented by Austria, using traditional IO-technique to derive multipliers and subsequent key figures on impact. However, as a matter of fact this kind of models keeps its vitality, as a practical tool of quick answers (provided IO and T. vectors are readily at hand). Indeed, IO turns out as a tool not easily replaced by any other technique when overall impact of T. is at issue. This being so the recency of IO-Tables assumes major importance here also. In addition, the standardized calculation of BIP impact etc. requires certain clarification in other fields, too, e.g. whether touristic investment or non-market promotion activities are to be taken into account, or delimitation of particularly complex sectors, e.g. railway systems.

Such alternatives would often not seem to be answered by economic dogmatic solutions but to require more flexible solutions, the building blocks being provided in an utmost standardized way. There are many other particular features which may not be ignored in such models even if macro-economic e.g. the hidden portion of T., or the differentiation due to subsidisation, the often difficult quantification of certain expenditure segments (e.g. retail sales purchases). It seems, that a next occasion of this kind would usefully concentrate on interlinks of macro-systems to other related reference, and how to increase the analytical potential that way; at the same time particular statistical problem areas arising within such overall framework might be usefully addressed.

Diagram Q: Overview



<sup>1)</sup> cf. MTEA p. 104 ff.

Diagram 1:

SNA-NTEA	SUPPLY				USE				Other
	CPC				Intermediate Consumption				
	1 - 54	55 - 63	92/91, 93-	Total	1 - 54	55 - 63	92/91, 93-	NTEA (= SNA)	
								Organized	Business & Government Travel
CPC 1									1.4 a
54									
55									
63							1.4.1	1.4.2	
92									
91									
93									1.3
Total					1.3.1				
ISIC 1									
54									
55									
63				1.2.1					
92									
91									
93									
Total		1.1.1							
VA CE									
Ofc									
Timet							1.3.2		
OS									
Imports - Residents (Travel abroad)									
Other (Non Travel)		1.1.2							
Employment							1.3.3		

Final Use									
PNFCE (Residents)									
Exports									
GFCI									
GFCF									
Order	Non-travel	Excursionists	Tourists	Travel	Other	1 - 54		55 - 63. 92	91. 93 -
	1.4 b	1.4 c	1.4 d	1.4 e					
	1.4.3	1.4.4		1.4.5					
	*)	*)	*)	*)					
								1.4.6	

\*) residual, possibly including other elements also (cf. respective remarks of Diagram 2)

\*) including both a gross and a net version, with regard to treatment of packages.

Legend: X.Y.Z building block of NTEA

" " " " , but with purpose classification

SNA (sub-) matrices, with Totals shown as marginal vectors, as suitable

*Diagram 2:*  
Inventory of virtual and actual MREA building blocks

		SUPPLY										GDP	VA (by components...)	Employment	
		Output				Imports		USE							Export
		Tourism	Industries	Other Industries	Other	Organized	Business & government travel	Other (non-travel)	Final Use						
		Non-Characteristic	Characteristic	Characteristic of Tourism	Travel	Other than travel	Other (Non-travel)	Excursionists	Tourists	Non Residents Travel	Other (than travel)				
Commodities	CPC 1 - 54 " 55 - 63, 92 (i.e. Table 1)		2.1.1			2.1.2	2.1.3	2.1.4	2.1.5	2.1.6	2.1.7	2	2		
	" 91, 93 -														
	Symmetrical with														
Industries	ISIC 1 - 54														
	" 55 - 63, 92 (i.e. Table 2)	2.2.1				2.2.2							2.2.3		
	" 91, 93 -														
	ISIC 1 - 54 " 55 - 63, 92 (i.e. Table 4) " 91, 93 -											2.4.1			
	ISIC 1 - 54 " 55 - 63, 92 (i.e. Table 5) " 91, 93 -													2.5.1	
Purposes (i.e. Table 3) 3						2.3.1	2.3.2	2.3.3	2.3.4	2.3.4					

**Legend:**  
 MREA building blocks  
 virtual further building blocks

- 1 Residual, possibly including other elements also (cf. 2)
- 2 Eventually appearing uses of this kind to be included in 1
- 3 Including a gross as well as a net version, with regard to treatment of packages

**Note:** - Classification structures between Tables 1 (commodities) and Table 2, 4 and 5 (industries) are basically symmetrical. Coding of Table 1 has, therefore, to be aligned with ISIC Rev. 3 rather than original CPC.

- Imports "packed" by domestic organizers are left out; if any, the respective columns (imports organized; intermediate consumption important for organisation) would have to be further split.

Correspondence of building blocks

Diagram 1	Diagram 2
1.1.1	2.1.1
1.1.2	2.1.2
1.2.1	2.2.1
1.3.1	2.2.2
1.3.2	2.2.3
1.3.3	2.5.1
1.4.1	2.1.3
1.4.2	2.1.4
1.4.3	2.1.5
1.4.4	2.1.6
1.4.5	2.1.7
1.4a	2.3.1
1.4b	2.3.2
1.4c	2.3.3
1.4d	2.3.4
1.4e	2.3.5
1.4.6	2.4.1

## Abbreviations:

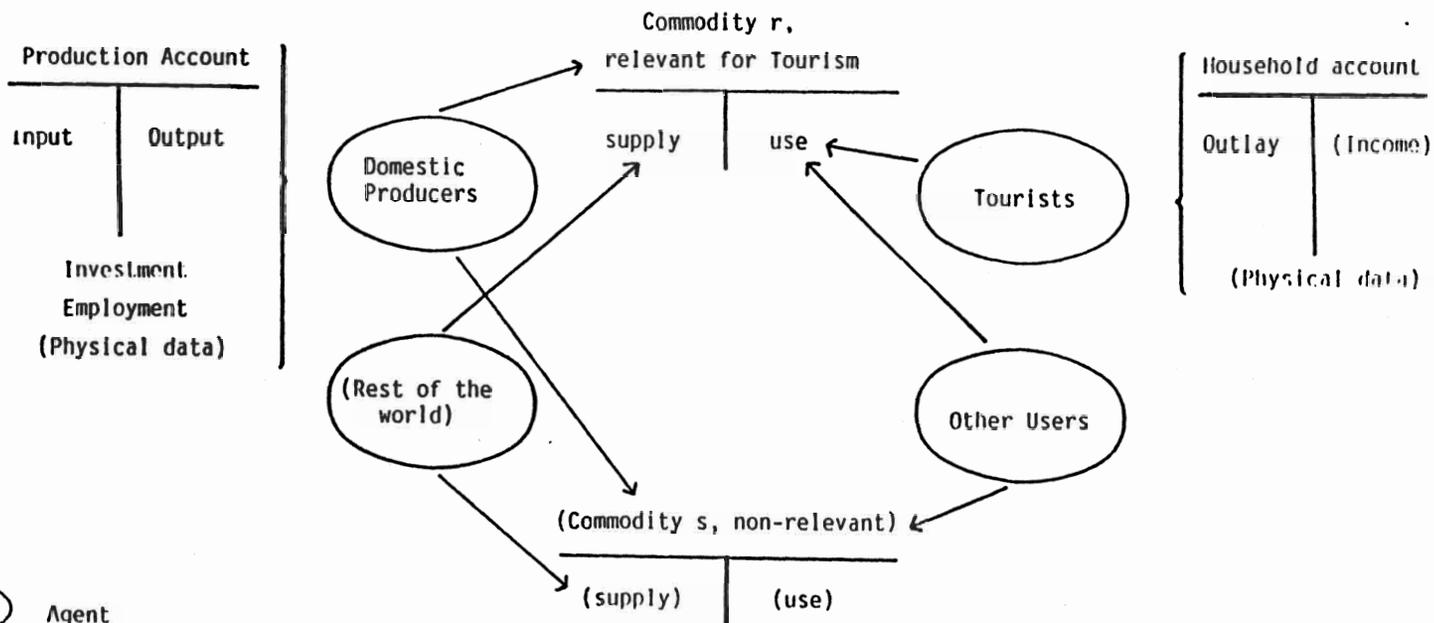
VA	Value added
CE	Compensation of employees
CFC	Consumption of fixed capital
Tind/net	Taxes minus subsidies
OS	Operating Surplus
CPC	Central Product Classification
ISIC	International Standard Industrial Classification
GFCE	Government final consumption expenditure
CFCF	Gross fixed capital formation
PHFCE	Private household final consumption expenditure

Extensions

Basic Information

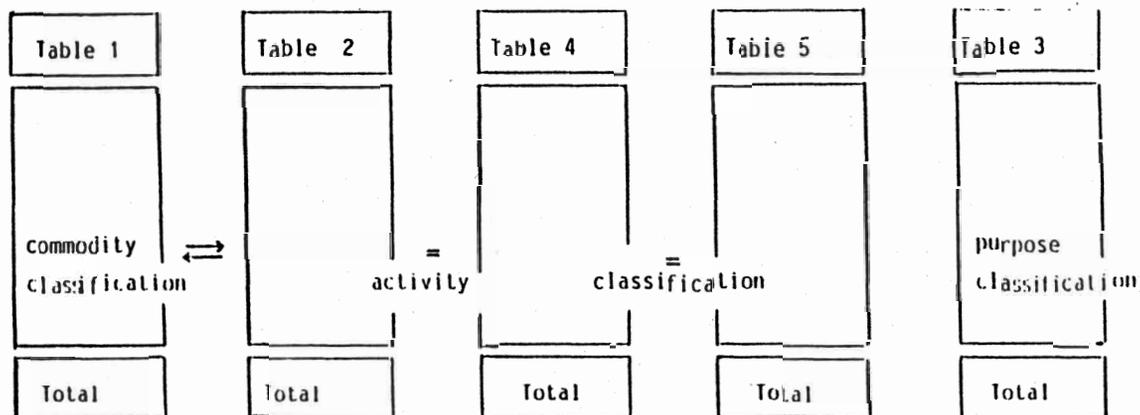
Extensions

Commodity Account



○ Agent  
 T Account  
 (.....) not in the MTEA

Overall Relationship and Correspondence between the Tables



- o activity classification (Tables 2, 4, 5) identical!
- o commodity classification (Table 1) and activity classification (Tables 2, 4, 5) symmetrical!
- o domestic production (Table 1)  $\leq$  gross output (Table 2)
- o Total of touristic uses (Table 1) < Total uses (Table 3)

∟ Further coherence can be specified on the Worksheet level...



# THE ECONOMIC IMPACT OF TOURISM IN ITALY. A MULTIREGIONAL-MULTISECTORAL ANALYSIS FOR 1991

by Paolo COSTA and Mara MANENTE

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## 1. Introduction

The tourism supply satisfying traveller's demand for goods, leisure, infrastructure and for other items sold on the market at a given price is usually the object which everybody —researchers, policy makers, experts, operators— make reference to, when they have to emphasise the rising importance of tourism both at a national and world-wide scale as a productive phenomenon and as a major objective of many developing countries —or marginalised regions inside industrialised countries— to secure faster economic growth and/or better control of unemployment.

With nearly \$3.4 trillion for 1995 and \$7.2 trillion for 2005 of output estimated and forecast world-wide, travel and tourism is becoming the world's largest industry and the largest generator of jobs (212 million in 1995 and 338 million in 2005), producing more and more wealth and income (10.9% of the world-wide GDP in 1995 and 11.4% in 2005) (WTTC, 1995).

However, this unanimous acknowledgement is frequently in contrast with a careless, partial and discordant conceptualisation of the identity and the structure of this aggregate. Furthermore, the attention to its economic impact does not always go hand in hand with similar attention to the building of an informative system able to express the complexity and the cross-wise character of tourism production, and adequate to the analysis of the features and the performances of the phenomenon seen as an industry.

It is well known by scholars and researchers that travel and tourism economic impact estimation appears quite arcane and that this is due to the heterogeneous nature of the "travel and tourism demand" and of the "travel and tourism industry". Improvements in this field come first of all from major accuracy and homogeneity at an international level dealing with, and providing a solution to, the following issues:

a) the definition of "travel and tourism industry" and its acknowledgement into the production system through the specification of the activities which form it;

b) the measurement of the tourist product and of its items;

c) the assessment of the total macroeconomic impact —direct, indirect, induced— of the travel and tourism industry, in terms of income, added va-

lue, employment, balance of payments, and the best methodology to reach this aim.

These questions are so strongly linked that any solution or choice for each of them can condition the methodology evolution and the final results at any other level.

The discussion on the definition of the travel and tourism industry refers to the question if it can be considered an industry, given its atypical nature. This peculiarity can be expressed by the fact that tourism production becomes such, **when and where** it is bought by tourists, i.e. it is an aggregate of "end-use" activities which can be found in the economic system only by moving from an "**end-use**" function, i.e. from the consumption behaviour of tourists. This is not consistent with the definition of other industries in the production system which are recognised on the basis of their specific **production function**, and then through the principal product or group of products they produce or distribute (Frechtling, 1994a).

The debate on the statistic measurement concerns the fact that, because of the centrality of the concept of tourist in each field of analysis, the traditional and more developed statistics are those on arrivals and nights. Useful for the demand flows knowledge, they cannot give us information on the economic role of tourism and on the productive characteristics and performances of such atypical industry.

But, once the existence of the travel and tourism industry has been accepted, the same classifications, variables, interpretative schemes used for the analysis of whatever activity —income, added value, employment, import, export— have to be applied to study the macroeconomic role of the tourism industry, so assuring an homogeneous set of indicators and a comparable evaluation. The only preliminary measure to be undertaken is the necessity to convert the "end-use" function into a production function. A broad range of literature points out the "Travel expenditure Estimation" — i.e. the demand approach— as the more suitable method to be used.

These aspects are discussed more in detail in Manente and Minghetti (1995), where the importance of the demand approach for the crossing from the "end-use" function to a tourist production function, and then the usefulness of collecting statistics on tourism expenditure, are focused on.

This paper on the contrary intends to contribute to the improvement of the methodologies used for the assessment of the total economic impact of tourism, the travel and tourism industry presence accepted and the demand approach chosen (Session 2). Starting from the input-output technique, a **multiregional-multisectoral** model (MULTUR) is carried out, and the multiplier analysis, in particular through the definition and the estimation of the **interregional multiplier of international tourist** consumption, is developed (Session 3). The MULTUR model is performed for Italy and a detailed picture of the Italian travel and tourism industry in terms of sectoral and regional economic impacts for the year 1991 is given (Session 4). A much more in-depth interregional analysis of the direct, indirect and induced effects produced by international tourism demand in terms of added value is presented in Sessions 5 and 6. Some final remarks are summarised in Session 7.

## 2. Why a multisectoral-multiregional Input-Output model for tourism

Assuming that the tourist industry exists and that the object of tourism

production is all that tourists consume—and tourists may consume different goods and services at different moments and places—the following consequences relevant for the estimation of the economic impact of tourism can be underlined:

a) the estimation of the economic role of the activities producing goods and services for tourism consumption should take into account all the production sectors as tourists may consume each good or service sold in the market. That means it is impossible to select a priori the tourist activities;

b) the travel and tourism industry cuts crosswise the production system and affects more or less large quotas of the activity of each sector;

c) the production chain the tourism starts up is ramified not only in the economic system but also in time. "When purchasing goods and services, the tourist produces direct economic benefits ... These direct or primary impacts produce—with variable time-lags—secondary economic effects ... that include indirect benefits and induced benefits" (Frechtling, 1994b).

All these factors translate themselves into the fact that the operative definition, and the measure of tourism production, coincide with a vector of goods and services purchased by tourists, and produced by firms belonging to the most diverse sectors of the traditional industrial classification. This vector gives us information on the sectoral composition of the tourism industry and measures the economic direct effect, but cannot capture by itself the intersectoral linkages producing more activation and more production than that directly required by tourists' expenditure, into the economy.

In this context we can define the tourist economy at two levels: the first one including the whole "front-line" activities, i.e. the sectors distinguishing themselves by the fact that they produce goods or services totally or pro quota purchased directly by tourists. The second one widens the boundaries of the tourism industry and includes the whole "back-line" activities which, even if do not sell directly their products to tourists, have to be included in the sector since they are suppliers of the "front-line" tourist activities, or suppliers of the suppliers of the "front-line activities, and so on.

After all, the chance to produce good information on the economic role of tourism seems to be linked to the availability of estimates on the tourism consumption, by definition equal to the direct tourist production. But then it requires a suitable methodology bringing out the whole tourist activities—front- and back-line—with their specific level of involvement in the sector.

From a methodological point of view, once the vector of tourism demand, and therefore of tourism products, is identified, the logic of measuring its macroeconomic effects—direct, indirect, induced—does not differentiate from that relative to any other production, however defined.

The impact of tourism on the economic system, then, can be measured, as can any other kind of expenditure, by means of aggregated models (Keynesian multipliers; see Archer, 1977a, 1977b, 1982) or, instead, disaggregated models. The fact that the tourism product is a vector of goods and services, makes it necessary to use the second ones, and in particular input-output analysis which allows us to reconstruct the pattern of interdependencies which goes from the items of tourism expenditure to the tourism industry in all its complexity.

The usefulness of this analysis and its role in measuring tourism economic impact has been described in a myriad of studies and articles. In particular Fletcher (1989; 1994) and Fletcher & Archer (1991) draw up a list of

its advantages —and limits— when compared with alternative methodologies —from the simple comparison of the available data for some “front-line” tourist sectors, to the cost-benefit analysis, to the construction of ad hoc multiplier models—. Briassoulis (1991) discusses possibilities for improving the input-output model and gives suggestions for future research. Frechtling (1994b, 1994c) examines the input-output approach inside the broad range of studies and literature on the economic impact of travel and tourism and comes to the conclusion that “... there have been too many divergent techniques employed owing more to the imagination of the designer than to the reality they attempt to measure. ... But some useful conclusions can be drawn from comparing efforts so far”. One of these is that “tourism multiplier analyses based on input-output models are superior to those dependent on other techniques of measuring total economic impact of tourism in an area”.

But also the sectoral analysis and the assessment of the interactions the tourism stimulates inside the production system do not give a complete glimpse of its impact, if the methodology is not performed at a local level (Briassoulis, 1991; Frechtling, 1994). The geographic distribution of the “primary tourism supply” (natural, artistic, cultural resources, etc.) and the consequent phenomena of territorial concentration of tourist demand, in fact, imply a local concentration of the activities more directly and typically linked to tourists’ needs.

But the variety and the heterogeneity of the composition of the travel and tourism industry (from accommodation, to food and drinks, to transports, to souvenirs, etc.) rule out the possibility that the geographic distribution of all these activities should coincide with that of the tourist demand. Even whenever this coincidence could be verified, the local and temporary character of tourism demand, combined with the vast dimension the phenomenon assumes in certain destinations, would however prevent the local production from quickly adapting its levels to those of demand. It is therefore unavoidable that an economic system extending beyond the limited geographic borders within which tourism demand shows itself, should provide for tourists’ needs.

So, it cannot be said that the geographic distribution of the demand corresponds to an analogous distribution of the economic benefits. These links can be explained only using a multiregional input-output model.

### 3. The MULTUR model

The study here presented uses a multiregional-multisectoral input-output model à la Chenery-Moses, originally built for the year 1980.

Given the Italian distribution of industrialised areas, a spatial disaggregation of the Italian economy into 10 macro-regions seems useful:

1. (PLV) Piemonte, Liguria, Val d’Aosta
2. (LOM) Lombardia
3. (VTF) Veneto, Trentino A.A., Friuli V.G.
4. (EMI) Emilia-Romagna
5. (TUL) Toscana, Umbria, Lazio
6. (CAB) Campania, Basilicata
7. (CAS) Calabria, Sicilia
8. (MAM) Marche, Abruzzi, Molise
9. (PUG) Puglia

## 10. (SAR) Sardegna

The following sectors describe the Italian and regional economic systems:

1. Agriculture
2. Energy
3. Industrial Products
4. Construction
5. Trade, Lodging and catering services
6. Transport and Communication services
7. Other market services
8. Non-market services

The mathematical structure of MULTUR is given by the matrix equation:

$$\mathbf{X} = (\mathbf{I} - \mathbf{TA}^{\wedge})^{-1} * (\mathbf{T}(\mathbf{Cti}) + \mathbf{T}(\mathbf{Cts}) + \mathbf{T}(\mathbf{Cf} + \mathbf{Cpa} + \mathbf{Inv} + \mathbf{E}) - \mathbf{MCt} - \mathbf{M} - \mathbf{x}_i) \quad (1)$$

where:

$\mathbf{X}$  = vector of 8x10 elements that describes sectoral outputs in each macroregion

$\mathbf{I}$  = identity matrix (80x80)

$\mathbf{T}$  = partitioned matrix (80x80) in 10x10 blocks of diagonal vectors (8x8) of interregional trade coefficients, each denoting the proportion of all of goods "i" used in "s" that comes from the region "r",  $t_{i}^{rs}$

$\mathbf{A}^{\wedge}$  = block diagonal matrix (80x80) with the blocks in the main diagonal describing the technical input-output matrices (8x8) by macroregion

$\mathbf{Cti}$  = vector of 8x10 elements that describes domestic tourism consumption by sector and by macroregion

$\mathbf{Cts}$  = vector of 8x10 elements that describes international tourism consumption by sector and by macroregion

$\mathbf{Cf}$ ,  $\mathbf{Cpa}$ ,  $\mathbf{Inv}$ ,  $\mathbf{E}$  = vectors, each of 8x10 elements, that describe remaining components of final demand by sector and by macroregion: private consumption, public consumption, gross fixed capital formation, increase in stocks, exports from abroad

$\mathbf{MCt}$  = vector of 8x10 elements of final imports for international tourism consumption in each macroregion

$\mathbf{M}$  = vector of 8x10 elements of imports from abroad by sector and by macroregion excluding final imports for international tourism consumption

$\mathbf{x}_i$  = vector of 8x10 elements of intersectoral allocation of secondary products

The contribution to the growth of national income and to its sectoral and regional disaggregation bears evidence of the macroeconomic impact of tourism in Italy, more than the output levels generated by tourism. So the following equation has to be added to equation (1):

$$\mathbf{V} = \mathbf{v}^{\wedge} \mathbf{X} \quad (2)$$

where:

$\mathbf{X}$  = vector of outputs by sector and by macroregion, already defined

$\mathbf{v}^{\wedge}$  = diagonal vector of added value coefficients per unit of output, by sector and by macroregion

$\mathbf{V}$  = vector of added value levels by sector and by macroregion

Finally, the model is "closed" with respect to the domestic tourism con-

sumption: the interregional linkage between income generated by international tourism in each of the 10 macroregions, and the residents' tourist consumption induced by that income in those regions, have been assessed:

$$\mathbf{CTI} = \mathbf{S VA} \quad (3)$$

where:

$\mathbf{CTI}$  = vector (10x1) of domestic tourism consumption level by macroregion

$\mathbf{VA}$  = vector (10x1) of added value level by macroregion

$\mathbf{S}$  = matrix (10x10) of coefficients of tourism expenditure in region  $r$  by Italians coming from region  $s$ , per unit of added value in region  $s$ . It describes the relationship between added value by macroregion and residents' tourism expenditure in all regions. The coefficient  $s^{rs}$  quantifies tourism expenditure in region  $r$  (destination region) by residents in  $s$  (region of origin) per unit of added value produced in region  $s$ .

As a consumption, residents' tourism demand depends on their income, and its distribution over the national territory is linked to the prevailing destination flows.

Formally:

$$\mathbf{S} = \mathbf{spe}^{\wedge} \mathbf{O}^{\wedge} \mathbf{VA}^{\wedge-1} \quad (4)$$

$$\mathbf{O}^{\wedge} = \mathbf{pr}^{\wedge} \mathbf{gv}^{\wedge-1} \mathbf{O}^{\wedge} \quad (5)$$

where:

$\mathbf{spe}$  = vector (10x1) of average expenditure per night of Italian tourists in each destination region  $r$

$\mathbf{VA}$  = vector (10x1) of added value total level by region of origin

$\mathbf{pr}$  = vector (10x1) of total nights spent by Italian tourists in all tourist accommodation, by macroregion

$\mathbf{gv}$  = vector (10x1) of total holiday days spent by Italian tourists, by macroregion (column sum of origin/destination matrix  $\mathbf{O}$ )

$\mathbf{O}$  = matrix of Italians' tourist flows (holiday days) (10x10) by origin macroregion (rows) and destination macroregion (columns).

Matrix equations (1), (2) and (3) make up MULTUR as a system of 100 linear equations and 150 variables described in Figure 1.

Rows from 1 to 80 describe input-output balance equations by sector and by macroregion:

$$(\mathbf{I} - \mathbf{TA}^{\wedge})\mathbf{X} - \mathbf{ci CTI} - \mathbf{cs CTS} - \mathbf{yY} - \mathbf{mt MCT} + \mathbf{mM} + \mathbf{xX}_i = \mathbf{0} \quad (6)$$

where the variables not yet explained are:

$\mathbf{ci}$ ,  $\mathbf{cs}$ ,  $\mathbf{y}$ , that are block diagonal matrices (80x10): each block of coefficients (8x1) measures the sectoral proportion of domestic tourism consumption level, of international tourism consumption level, of other final demand components level, by macroregion;  $\mathbf{mt}$  and  $\mathbf{m}$ , that are block diagonal matrices (80x10) describing sectoral coefficients of final tourist goods and services imports from abroad, and sectoral coefficients of other final goods and services imports from abroad, by macroregion;  $\mathbf{x}$ , that is a block diagonal matrix where each block presents regional coefficients of interregional allocation of secondary products;  $\mathbf{CTI}$ ,  $\mathbf{CTS}$ ,  $\mathbf{Y}$ , that are vectors (10x1) of regional total levels, respectively of domestic tourism consumption, of international tourism consumption, of remaining final demand;  $\mathbf{MCT}$  and  $\mathbf{M}$

that are vectors (10x1) of regional total levels (sum by sector) of tourist final imports and of remaining imports.

Rows from 81 to 90 describe macroeconomic equations of added value, by macroregion:

$$-V X + VA = 0 \quad (7)$$

where:

**V** is a block diagonal matrix (10x80); each block (1x8) describes regional coefficients of added value per unit of output by sector;

**VA** is a vector (10x1) of total added value by region.

Rows from 91 to 100, finally, close the model with respect to domestic tourism consumption:

$$-S VA + CTI = 0 \quad (8)$$

where we already explained all the variables.

MULTUR can be summarised as a linear and homogeneous equation system:

$$ZW = 0 \quad (9)$$

where **Z** is the matrix of coefficients (100 x 150) and **W** is the vector with the levels of the 150 variables: the solution requires us to define exogenously the level of 50 variables. This corresponds to the partitioning of matrix **Z** in two matrices **Z1** and **Z2**, and of the vector **W** in two vectors **W1** and **W2**, where **W2** is the subvector of exogenous variables.

The solution of the model will be:

$$W2 = Z2^{-1}(-Z1 W1) \quad (10)$$

The 50 exogenous variables of MULTUR are: international tourism consumption by macroregion (CTS), residents' consumption and other components of final demand (Y), imports for tourism demand (MTC), other imports from abroad (M), the intersectoral allocation of secondary products (X).

MULTUR has been calibrated for the year 1980: for that year the complete structure of the national and regional input-output tables was available.

The analysis for 1991 is based on the same multisectoral-multiregional structure, but the lack of information on the sectoral distribution of the other components of final demand allows for the solution of the model with reference to tourism demand only. So, the two vectors of international and domestic tourist consumption (**Cti** and **Cts**) describe the tourists' behaviour in 1991.

#### 4. The macroeconomic impact of tourism in Italy and by macroregion

The magnitude of tourism in Italy can first be summarised in these few figures. In 1991 tourism consumption amounted to 84,144 billion lire; 16,356 billion lire from international tourism and 42,864 from domestic tourism (39,285 excluding Italians' consumption as residents). The tourism demand, therefore, represented 6% of the Italian GNP of that year. The 1991 expenditure was spread over 326,741,000 nights spent in all tourist accommodations; the ratio of foreign to Italian nights was 24.2:75.8, as compared to 29.2:70.8 in 1989. The tourism expenditure by region, finally, shows that 40% was spent in the two northern tourist areas: "Veneto, Trentino A.A., Friuli V.G." and "Emilia Romagna".

The economic importance of travel and tourism industry has been measured by describing its contribution to added value, employment and the balance of payments (Table 1). The breakdown by macroregion is estimated for the added value effects and is shown in Table 2.

##### 4.1 Tourism added value and employment

The added value generated directly and indirectly by tourism consumption in 1991 was 62,262 bn lire with a multiplier effect of 1.69. This was 4.6% of the total national added value and 1.3% of this was from inbound tourism (Table 1).

The importance of tourism contribution is clear from the comparison with other sectors. The direct and indirect income generated by the travel and tourism industry is more than twice that of the "Food Industry" (L27,936 bn) and well above that of "Agriculture" (L46,805 bn), "Textiles, clothing, hides, skins and footwear" (L47,532 bn). It is 24% and 73% respectively of added value in "Commerce, hotels and restaurants" (L262,808 bn) and "Metalworking" (L84,557 bn).

Going on with the sectoral breakdown of added value, it is not surprising to find that two categories — "Commerce, hotels and bars", and "Transport and communications" — account for 77% of direct added value from tourism (60% and 17% respectively) and 56.8% of direct and indirect added value (42.6% and 14.2%). Therefore, the relative importance of the remaining sectors which are not thought of as being strictly tourism-related is notable.

The direct and indirect employment effects of tourism are expressed in annual full-time job equivalent and can be seen in Table 1.

In 1991 an estimated 1,343,000 jobs, 6% of the employment in Italy in that year, were the total result of tourism. Of these, 724,000 were for wage- and salary earners (4.5% of the total economy); 619,000 were for those in self-employment (8.3% of the total economy). The multiplier effect is, respectively, of 1.59, 1.56 and 1.63. Finally, the inbound tourism generated 30% of the total jobs.

##### 4.2 Tourism imports and the net exchange contribution

In the 1990-1992 period the Non-residents' Tourism Expenditure in Italy was 9.7% of exports and Italians' Tourism Expenditure abroad was 7.4% of imports. This is a steadily narrowing gap: the corresponding figures were 10% and 2% in 1980. As far as the contribution to the Italian balance of pay-

ments given by international tourism, in 1991 the balance of tourism surplus (i.e. the difference between inbound tourism expenditure and residents' tourism expenditure abroad) amounted to 8,459 bn lire, only 24.4% of what the trade deficit would have been without tourism. Remember that in 1983 the balance of payments changed the trade deficit (-6,890 bn lire) in a surplus (+1,158 bn lire) thanks to 10,582 bn lire surplus of the balance of tourism.

But balance of payment figures describe the balance of tourism, and do not take into account the very significant level of additional imports induced by tourism demand or the exports of Italian goods and services activated by Italians' expenditure abroad. In 1991 the net foreign exchange contribution from tourism (i.e. the balance of inbound tourism expenditure, Italians' tourism expenditure abroad and imports directly and indirectly generated by international demand) was 5,675 bn lire, 67% of the balance of tourism.

As far as the import sectoral effects are concerned, 42% of total imports generated by tourism are of energy products, 34% of industrial products, 15.6% of agricultural goods. Agriculture is the sector which feels the greatest indirect effects with a multiplier of 2.2, compared to 1.83 for manufactures and 1.28 for energy.

Finally, inbound tourism generates less imports of energy products than does domestic tourism (25% as opposed to 38%), but has an higher impact in most other sectors and in particular in manufactures (50.5% compared to 38.5%).

### 4.3 Regional breakdown of tourism expenditure and tourism added value

The territorial spread of tourism expenditure makes it possible to see which are the main tourist regions in terms of inbound and domestic tourism.

Table 2 shows the relationship between total tourism expenditure and the direct and indirect added value effects by macroregion. The extent to which the source of regional impacts is inbound or domestic tourism varies widely: the Northern-East macroregion ("Veneto, Trentino Alto Adige, Friuli Venezia Giulia", VTF) drives almost half of its added value from inbound tourism, while at the other end of the spectrum, inbound tourism accounts for only 10% of the added value in "Puglia" (PUG). It is evident that the redistributive effects of indirect added value narrow significantly the gap among the macroregions. The ratio of tourism expenditure in the VTF region to expenditure in "Puglia", for example, is about nineteen to one whereas the ratio between direct and indirect tourism added value in the same regions is about six to one.

## 5. The regional and interregional economic impact of international tourism in Italy

Table 3 shows for 1991 the added value effects generated by international tourism consumption by macroregion, both by excluding the relationship between income and residents' tourism consumption (exogenous domestic tourism demand), and by including it (endogenous domestic tourism demand). In the first case, the results are presented in terms of **direct and indirect effects of added value**; in the second case the **induced effects** are also quantified.

The 22,935 bn lire spent in 1991 for tourism in Italy by foreigners generated 19,094 bn lire of added value —approximately 1.4% of the Italian GNP of that year— or 18,316 bn lire, according to whether or not we close the model with respect to domestic tourism consumption. The **“income effect”**, quantified for 1991 in 778.4 bn lire, was in its turn produced by the 934 bn lire domestic tourism expenditure, sustained by multiplier stimulus of international tourism (Table 4). In other words, 1000 lire spent by a foreigner tourist stimulates, by means of 799 lire produced added value, 41 lire expenditure for tourism by residents.

Figure 2 summarises the multiplier processes going from international tourism demand, to tourism income, to domestic tourism demand and again to income, emphasising, for 1991, the regional distribution of each effect. The **“interregional multipliers of tourism consumption”** quantify the regional importance of income multiplier effects; they are presented in Table 4. With respect to the average national multiplier of 1.781, the macroregions which get a higher multiplicative effect are “Puglia” (2.342), “Lombardia” (2.166), “Piemonte, Liguria, Val d’Aosta” (1.954); the less relevant impact concerns “Veneto, Trentino A.A., Friuli V.G.” (1.552).

The results of the analysis per macroregion have to be explained by comparing:

- a) the regional distribution of direct and indirect added value generated by international tourism demand and that of the demand itself (Table 3);
- b) the regional distribution of domestic tourism demand stimulated by income from international tourism and that of the income itself (Tables 3 and 4);
- c) the regional distribution of induced income created by domestic tourism consumption, and the distribution of the quantities previously described (Tables 3 and 4).

**The first comparison** allows us to read the geographic location of the travel and tourism industry as regards that of the tourism demand it satisfies. The highest shares of tourist added value are shown to be in the centre-northern regions, where the tourism demand is higher; nevertheless it is easy to distinguish the redistribution process of economic impacts, which, though not altering the classification compiled on the basis of consumption, minimises the distance between macroregions, often considerably. “Veneto, Trentino A.A., Friuli V.G.” is the first region, not only in terms of international tourism consumption, but also in terms of added value effects. Nevertheless, its share diminishes from 43.7% of expenditure to 28.8% of activated added value; “Lombardia”, with 14.9% of tourism income against 5.9% of expenditure, rises from sixth to third position immediately after “Toscana, Umbria, Lazio”, and before “Emilia Romagna” which, with 10.9% of income and 11.6% of expenditure, goes down from third to fourth place. The redistribution of the added value effects, though confirming their diversity, favours, among the macroregions of the South, Puglia (from 0.5% of expenditure to 2.5% of income it generates) and “Calabria, Sicilia” (from 3.75% to 4.75%). Finally, gains of less than 0.5% for “Marche, Abruzzi, Molise” and “Sardegna” are observed. The spreading of economic benefits is further underlined relating the added value from international tourism, to the expenditure which produced it. For every 1000 lire of international tourist consumption in Italy, 799 lire of direct and indirect added value is produced. The national effect averages out regional results which are very differentiated, and which are acted on by the interindustry and interregional tran-

sactions, as discussed in detail further on: 1000 lire spent in Puglia corresponds to 3946 lire of added value activated in the region; 1000 lire spent in Lombardia relates to 1997 of added value; while, a 1000 lire purchase by foreign tourists in "Veneto, Trentino A.A., Friuli V.G." is associated with 535 lire of added value.

The second comparison allows us to highlight how, in general, the income from international tourism is divided among the macroregions of the North (excluding Emilia Romagna), and in "Campania, Basilicata", with higher quotas compared with those which describe the distribution of the induced tourist expenditure of Italians. An expenditure which, however, reaches the highest absolute levels in such areas again. Those presenting this characteristic are "Lombardia" (14.9% of income, against 12.2% of induced tourist expenditure of Italians); "Veneto, Trentino A.A, Friuli V.G." (29% of income against 26.5% of expenditure); "Campania, Basilicata" (5.6% against 4.6%); "Piemonte, Liguria, Val d'Aosta" (8.6% against 8.3%). Among the macroregions which behave in the opposite way, "Marche, Abruzzi, Molise" stands out in the size of the difference (4.5% of income against 8.6% of expenditure). It is followed by two macroregions which are strong in tourism, Emilia Romagna (10.9% against 11.8%) and "Toscana, Umbria, Lazio" (18% against 18.6%).

As a last point, the effect of the income generated by the further expenditure of Italian tourists can be explained according to a process of spatial diffusion which depends on the regional and sectoral composition of such an expenditure. Italians spend in some regions rather than others, but this income largely ends up by activating the same regions which had given origin to the highest incomes, and therefore to the most relevant tourism consumption. So, if in "Lombardia" they spend 12.2% of the 934 bn lire domestic tourism expenditure activated by the income linked to foreign demand, and in "Piemonte, Liguria e Val d'Aosta" 8.3%, then that very 934 bn lire stimulates in the same macroregions respectively 13.9% and 10.9% of the 778 bn lire induced income.

## 6. International Tourism added value: interregional-intersectoral effects

The interregional effects calculated for 1991 are explained in Table 5. Made up of ten lines and ten columns, one for each macroregion, it describes:

a) the level of direct, indirect and induced added value sustained in each macroregion by international tourism carried out in it; such an amount is measured by values along the main diagonal. The international expenditure in "Piemonte, Liguria, Val d'Aosta", for example, activated the regional travel and tourism industry by 1,289 bn lire of added value;

b) the level of direct, indirect and induced added value in each macroregion generated by international demand in all the other macroregions. These links, whose intensity is proportional to the level of transactions between macroregions, required by that tourism demand, are the "centralising effects" and can be read horizontally in the table. Therefore, still in terms of added value, the travel and tourism industry located in "Piemonte, Liguria e Val d'Aosta" was activated by approximately 127.8 bn lire by the international expenditure in "Lombardia", by 91.4 bn lire by that in "Veneto,

Trentino A.A., Friuli V.G.", and so on. The total impact is given by adding up Table 5 by row, excluding the value in the main diagonal;

c) the "**leakage**" towards other macroregions of direct, indirect and induced effects which has been stimulated by international tourism expenditure in each macroregion, through imports of goods and services required to satisfy it. This reading allows us to evaluate the capacity of each macroregion to internalise the economic benefits produced by local tourism, limiting their leakage towards the industries of other regions. International tourism demand in "Piemonte, Liguria, Val d'Aosta", e.g., are partly satisfied by goods imported from "Lombardia", where, due to these imports approximately 94.5 bn lire of added value is generated; partly with goods imported from "Veneto, Trentino A.A., Friuli V.G." where 19.6 bn lire of added value is activated, and so on. The addition by column, therefore, always net of value in the main diagonal, measures the linkage between the travel and tourism industry of each macroregion and the productive system of the rest of Italy.

The magnitude of the "**centralising effects**" of added value, and that of the "**leakage effects**" are summarised by macroregion in Table 6 and in Figure 3. The balance between the two effects selects the **net centralising** regions of economic benefits deriving from tourism demand localised everywhere, with respect to those regions producing a **net leakage** of positive effects, the tourism demand localised in them being stimulated (Ministry of Tourism and Performing Arts of Italy, 1993).

"Veneto, Trentino A.A., Friuli V.G." and "Emilia Romagna", belong to this second category. These are two of the areas with an excellent vocation for tourism, and they match a high concentration of international demand, to an equally high contribution to the leakage towards the whole national productive system of economic benefits stimulated by that demand. Following them with a slight difference between the two effects, the macroregion "Campania, Basilicata". Figure 4 describes the regional leakage of direct, indirect and induced effects of added value generated by international tourism consumption localised in "Veneto, Trentino A.A., Friuli V.G." (third column of Table 5).

As well as "Lombardia", which is characterised by high levels both of centralising effects and leakage effects, and "Piemonte, Liguria Val d'Aosta", the other important net centralising regions are "Puglia", "Sardegna" and "Calabria, Sicilia".

The leakage process of benefits linked to tourism demand concentrated in the North, towards the macroregions of the South goes mainly through Agriculture and Energy sector. Large improvements in industrial activities are registered in "Puglia" only. Table 7 summarises for each macroregion the direct, indirect and induced added value effects by sector. It can be observed, in the first place, that the national 44.1% of added value in "Trade, Lodging ..." sector, traditionally indicated as tourism, averages highly differentiated regional situations: from a maximum of 52.2% in "Veneto, Trentino A.A., Friuli V.G.", to a minimum of 32.8% in "Piemonte, Liguria, Val d'Aosta".

Comparing the sectoral composition in the main net centralising regions with the average national one, it can be seen that:

a) both the macroregions of the North show a higher concentration in the products of industrial transformation (25.6% for "Lombardia" and 18.6% for "Piemonte, Liguria and Val d'Aosta", against the national average of

14.4%) and in "Other market services" (20.7% and 19.5% respectively, against the national average of 18.3%). "Piemonte, Liguria, Val d'Aosta" is also characterised by a high quota of tourism added value in the transport activities (18.6% against the national average of 12.5%);

b) "Puglia" and "Calabria, Sicilia" register very high percentages of tourism added value in "Agriculture" (20.4% and 12.9%, respectively against the national average of 7%) and in "Energy" (5% and 7% against the 3.2% of Italy). In its turn, "Puglia" presents the highest percentage of tourism added value in industrial activities of the whole of the South (10.9%); "Calabria, Sicilia", on the other hand, show a good concentration in the transport sector (17% against the national average of 12.5%), while in "Sardegna" the energy sector (10.6% of the tourism added value against 3.2% for Italy) and the transport sector (15.8%) gain importance compared to the Italian average.

## 7. Conclusions

This work implements a multiregional-multisectoral input-output model à la Chenery-Moses for the analysis of the economic role of the travel and tourism industry.

Since such a model, which we use for Italy, allows us to evaluate the sectoral and regional impacts of any kind of demand and of production, and to calculate the effects which localised expenditure can generate on the economic system of all the other regions, even the most distant, it is one of the most useful tools for investigating the economic importance of tourism demand and of the related travel and tourism industry, by explaining their main characteristics and their local dimensions.

In order to analyse the economic impact of tourism in Italy:

a) the interrelationships between tourist consumption and the travel and tourism industry have been described;

b) the international part of tourism demand has been separated from the domestic one;

c) the direct and indirect effects on income and employment together with the net currency contribution of tourism to the balance of payments, via the direct and indirect tourist imports, have been assessed;

d) the interregional multipliers of international tourist consumption for each macroregion have been calculated.

Furthermore, new information on the economic role of tourism by macroarea with the estimation of the "centralising effects" and the "leakage effects" are given.

On this subject, as far as the Italian tourism industry is concerned, the analysis stresses that from the attribution of the tourist expenditure to each of the ten macroregions considered, 40.5% is spent in the two northern tourist areas: "Veneto, Trentino A.A., Friuli V.G."; "Emilia Romagna". Nevertheless, these macroregions balance a high concentration of tourism demand with an elevated contribution to the diffusion of the economic benefits over the national territory. The net beneficiary regions are, apart from "Lombardia" the most industrialised one, some southern areas, principally "Puglia", "Campania, Basilicata", "Calabria, Sicilia".

Finally, the "interregional multipliers of tourism consumption" quantify the local importance of income multiplier effects produced through the domestic tourist expenditure induced by foreign tourists consumption.

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Tab. 1. Italy 1991. Macroeconomic impact of tourism consumption. Direct and indirect effects by sector

	Added Value (billion lire)			Employment ('000)			Imports (billion lire)		
	from:			from:			from:		
	Non residents	Italians	Total	Non residents	Italians	Total	Non residents	Italians	Total
Agriculture	1239	3479	4718	61.1	171.5	232.6	428	1094	1522
Energy	534	1751	2285	3.0	8.9	11.9	696	2656	3352
Industrial Products	2480	4454	6934	49.8	75.8	125.7	1406	2688	4094
Construction	109	287	396	2.6	6.7	9.3	0	0	0
Trade and lodging	8007	18513	26520	182.8	424.3	607.1	63	128	191
Transport & Commun.	2161	6678	8839	38.2	118.2	156.4	62	128	190
Other Market Serv.	3783	8774	12557	62.4	137.4	199.8	129	285	414
Non-Market Services	3	10	13	0.1	0.4	0.5	0	0	0
<b>Total</b>	<b>18316</b>	<b>43946</b>	<b>62262</b>	<b>400</b>	<b>943</b>	<b>1343</b>	<b>2784</b>	<b>6979</b>	<b>9763</b>

Tab. 2. Italy 1991. Breakdown by macroregion of tourism consumption and of added value direct and indirect effects (billion lire)

	Tourism consumption			Added Value from		
	Non residents	Italians	Total	Non residents	Italians	Total
Piem., Lig., Val D'Ao.	1741	10003	11744	1552	6161	7713
Lombardia	1347	4740	6087	2690	6417	9107
Veneto, T.A.A., F.V.G.	10014	12956	22970	5360	7113	12473
Emilia Romagna	2654	8471	11125	1994	4764	6758
Toscana, Umbr., Lazio	3619	10285	13904	3316	8987	12303
Campania, Basilicata	1370	2782	4152	1023	2693	3716
Calabria, Sicilia	859	2300	3159	864	2157	3021
Marche, Abruz., Mol.	941	7762	8703	814	3373	4187
Puglia	112	1092	1204	442	1558	2000
Sardegna	278	818	1096	261	724	985
<b>Total</b>	<b>22935</b>	<b>61209</b>	<b>84144</b>	<b>18316</b>	<b>43947</b>	<b>62263</b>

Tab. 3. Italy 1991. International tourism consumption and regional effects of added value  
(current billion lire)

	International Tourism Consumption	Added Value (a)	Added Value (b)	Added Value (c)	GNP
<b>Macroregions</b>					
Piem., Lig., Val d'Aosta	1741	846	1552	1653	161147
Lombardia	1347	1309	2690	2836	284966
Veneto, T.A.A., F.V.G.	10014	3545	5360	5501	176048
Emilia Romagna	2654	1170	1994	2076	116230
Toscana Umbria, Lazio	3619	1971	3316	3442	251476
Campania, Basilicata	1370	581	1023	1063	98672
Calabria, Sicilia	859	471	864	903	112781
Marche, Abruzzo, Molise	941	482	814	873	65552
Puglia	112	202	442	473	68931
Sardegna	278	146	261	274	28466
<b>Total</b>	<b>22935</b>	<b>10723</b>	<b>18316</b>	<b>19094</b>	<b>1364269</b>

(a) Direct effects

(b) Direct and indirect effects

(c) Direct, indirect and induced effects

Tab. 4. Italy 1991. Domestic tourism consumption induced by international tourism consumption,, by macroregion

Macroregions	Induced Domestic Tourism Consumption (Billion lire)	% of International Consumption	Income Effect (Billion lire)	Interregional Multipliers of tourism consumption
Piem., Lig., Val d'Aosta	77.3	4.4	100.8	1.954
Lombardia	114.1	8.5	145.7	2.166
Veneto, T.A.A., F.V.G.	247.7	2.5	141.5	1.552
Emilia Romagna	109.9	4.1	81.8	1.774
Toscana Umbria, Lazio	174.0	4.8	125.6	1.746
Campania, Basilicata	42.8	3.1	40.5	1.830
Calabria, Sicilia	45.2	5.3	39.3	1.918
Marche, Abruzzo, Molise	80.0	8.5	58.9	1.811
Puglia	28.4	25.3	31.0	2.342
Sardegna	14.7	5.3	13.3	1.879
<b>Total</b>	<b>934.1</b>	<b>4.1</b>	<b>778.4</b>	<b>1.781</b>

Tab. 5. Italy 1991. Interregional direct, indirect and induced effects of added value generated by international tourism consumption (current billion lire)

	PLV	LOM	VTF	EMI	TUL	CAB	CAS	MAM	PUG	SAR	TOT.
Piem., Lig., Val D'Ao.	1289.0	127.8	91.4	45.1	54.6	9.0	14.4	9.0	3.8	8.7	1652.8
Lombardia	94.5	2131.0	352.7	142.5	61.7	12.3	14.0	18.4	5.8	2.7	2835.7
Veneto, T.A.A., F.V.G.	19.6	76.5	5251.6	83.9	36.8	7.0	9.1	11.4	4.2	1.3	5501.5
Emilia Romagna	21.5	76.5	185.7	1680.3	60.6	8.8	7.6	28.5	5.0	1.3	2075.8
Toscana, Umbr., Lazio	26.9	44.4	94.9	99.8	3029.5	49.4	18.7	59.1	8.8	10.2	3441.7
Campania, Basilicata	6.6	9.8	19.4	11.3	54.0	902.5	12.8	20.7	25.1	1.2	1063.5
Calabria, Sicilia	8.9	10.4	43.4	11.8	24.8	22.7	767.1	5.0	5.8	3.2	903.2
Marche, Abruz., Mol.	5.7	13.5	40.4	42.3	59.0	12.9	3.0	687.9	7.6	0.6	872.9
Puglia	5.6	7.8	24.8	16.2	14.4	41.3	3.1	21.7	337.6	0.5	473.0
Sardegna	4.8	2.8	8.1	2.7	19.0	4.6	3.9	1.0	1.0	226.4	274.3
Italy	1483.1	2500.6	6112.4	2136.0	3414.4	1070.7	853.6	862.7	404.8	256.1	19094.3

Tab. 6. Italy 1991. Centralizing effects and leakage effects (percent)

	Centralizing Effects	Leakage Effects
Piem., Lig., Val D'Ao.	22.01	13.09
Lombardia	24.85	14.78
Veneto, T.A.A., F.V.G.	4.54	14.08
Emilia Romagna	19.05	21.33
Toscana, Umbr., Lazio	11.98	11.27
Campania, Basilicata	15.13	15.70
Calabria, Sicilia	15.07	10.14
Marche, Abruz., Mol.	21.19	20.26
Puglia	28.63	16.64
Sardegna	17.45	11.57

Tab. 7. Italy 1991. Direct, indirect and induced effects of added value generated by international tourism consumption, by sector and by macroregion (current billion lire)

	PLV	LOM	VTF	EMI	TUL	CAB	CAS	MAM	PUG	SAR	TOT.
1. Agriculture	115,0	135,5	298,8	193,2	167,3	111,7	116,2	76,8	96,3	19,2	1330,1
2. Energy	50,4	113,6	117,6	43,1	84,7	36,1	63,1	46,0	23,5	29,1	607,2
3. Industrial Products	307,3	726,8	671,6	294,7	416,3	109,8	55,4	90,4	51,4	21,6	2745,1
4. Construction	7,8	19,1	30,8	12,4	22,3	7,8	8,6	5,8	4,3	2,5	121,4
5. Trade and Lodging	542,2	998,3	2869,9	929,5	1567,4	442,0	345,1	420,4	186,9	111,1	8412,7
6. Transport, Commun. Serv.	308,1	254,9	567,2	246,4	483,4	192,0	153,6	95,9	41,7	43,2	2386,4
7. Other Market Services	321,6	587,3	943,8	356,2	699,4	163,7	161,1	137,3	68,5	47,1	3486,1
8. Non-Market Services	0,3	0,2	1,8	0,4	0,9	0,3	0,2	0,3	0,4	0,6	5,4
<b>TOTAL</b>	<b>1652,8</b>	<b>2835,7</b>	<b>5501,5</b>	<b>2075,8</b>	<b>3441,6</b>	<b>1063,5</b>	<b>903,3</b>	<b>872,9</b>	<b>473,0</b>	<b>274,3</b>	<b>19094,4</b>

FIG. 1. : THE MULTUR MODEL

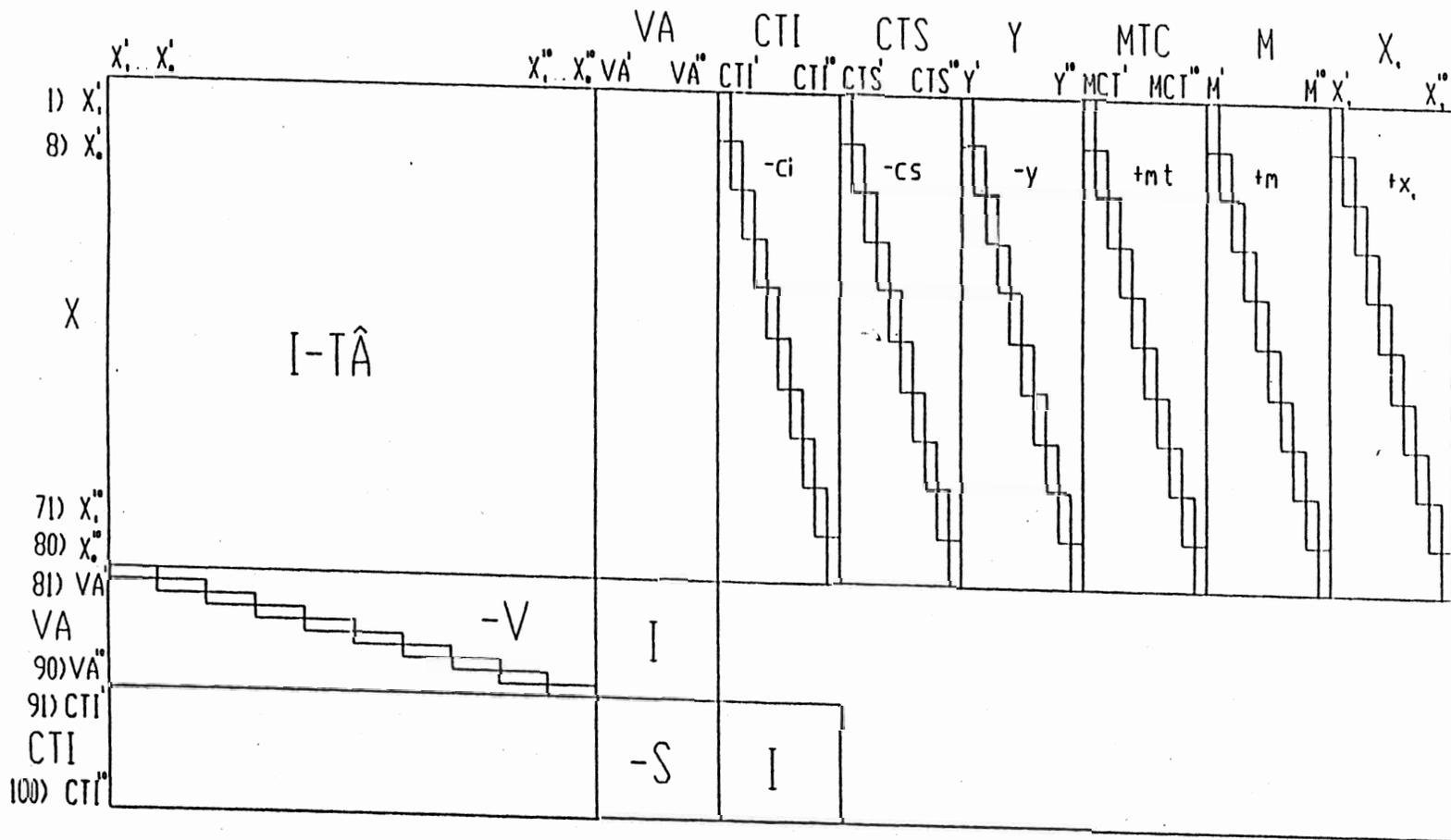


Fig. 2.: MULTIPLIER PROCESS OF INTERNATIONAL TOURISM CONSUMPTION

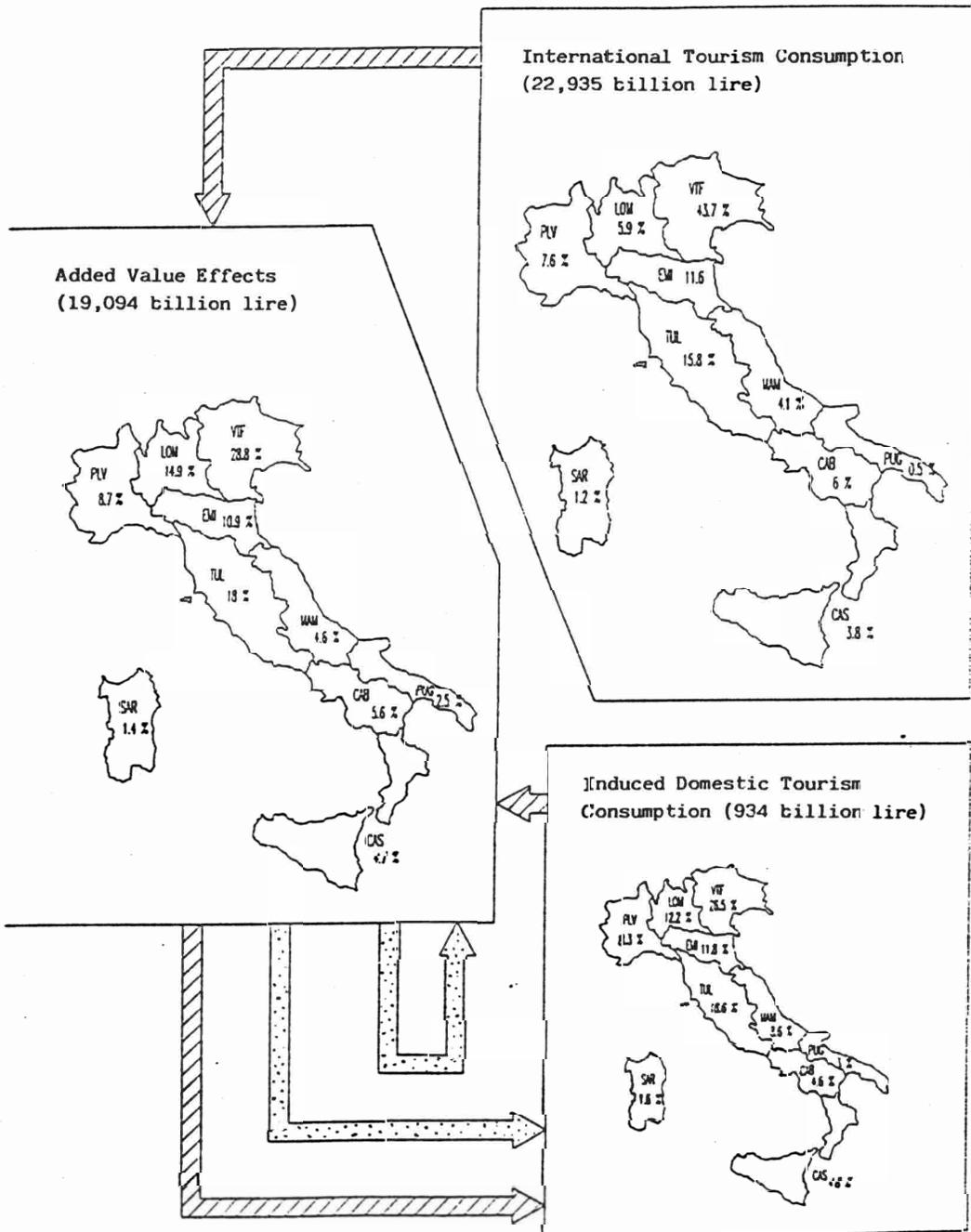


Fig.3 Centralizing and leakage effects  
(billion lire 1991)

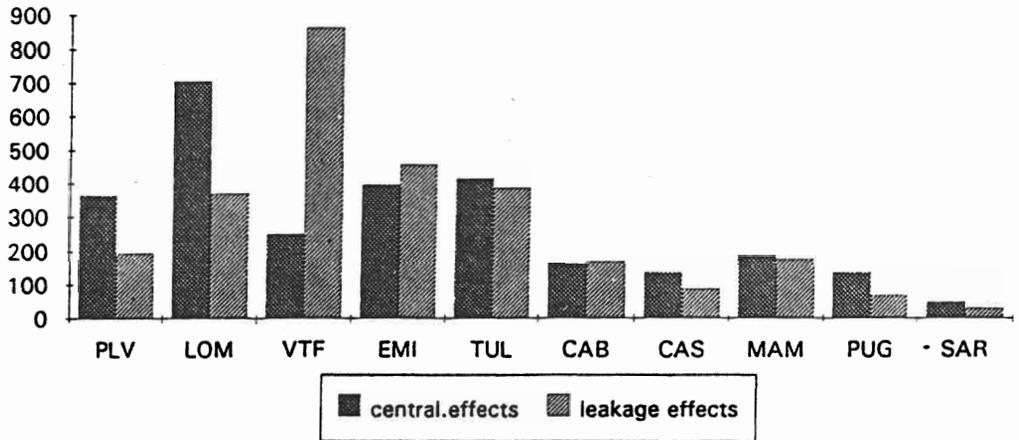
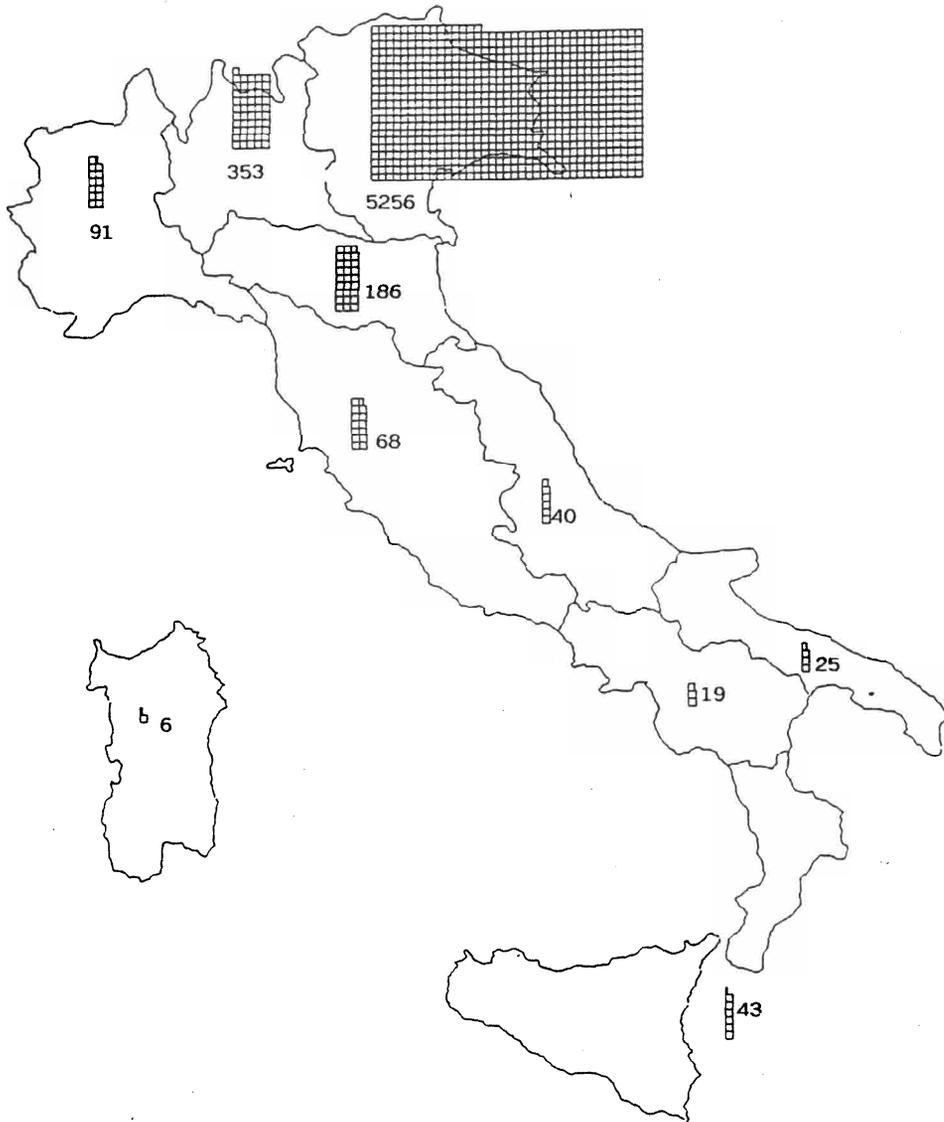


Fig. 4.: INTERREGIONAL ADDED VALUE EFFECTS GENERATED BY 10,014 BILLION LIRE OF INTERNATIONAL TOURISM DEMAND IN VTF (VENETO, TRENTINO ALTO ADIGE, FRIULI VENEZIA GIULIA)





# TOURISM ECONOMIC ACCOUNTS AND THE NEW SYSTEM OF NATIONAL ACCOUNTS: THE ITALIAN EXPERIENCE

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## **1. Introduction \***

Tourism is an international, social, business, image-carrying phenomenon for a country, a product that is susceptible to major improvement, a growth factor of strategic importance in Italy.

Examined from the standpoint of national accounting, an attempt is made to evaluate the importance of this sector and its contribution to the development of the overall economy. Following this approach it is fundamental to consider the contribution of the new System of National Accounts (SNA93)<sup>1</sup> and the European System of Accounts (ESA95)<sup>2</sup>.

The new framework for national accounting is reviewed in the light of indications given at an international level (WTO, OECD, EUROSTAT) regarding the identification of the tourism sector. In particular, a detailed analysis is made of the economic accounting system for tourism, as defined in the "Manual on Tourism Economic Accounts" (TEA) published in 1991 by OECD, which is based on a structure borrowed from that of national accounting, even though there are obvious differences. When examining the relationship between TEA and SNA/ESA it is important to distinguish between what is foreseen in the new international regulations and what, based on Italian experience, can effectively be achieved.

When developing economic accounts for the tourism sector it is often useful to make the estimates starting from the demand level which, as a result, can be considered a kind of cornerstone, a foundation on which to build the entire statistical framework. The Italian approach follows this model. One of the first accounting studies relating to tourism, carried out by Costa (1984), was made thanks to the decisive contribution of statistical information on final demand.

The social-economic aspect, highlighted by use of the satellite accounts and, therefore, in the tourism accounts, must include an *in-depth* estimate of the labour input. In this sector in particular it is fundamental to approach the employment problem taking into account both the variety of subjects participating in the labour market (regular and non-regular) and also the various types of contract existing (seasonal, part-time etc.).

Based on the methodology used in Italian national accounting, the estimate of labour input constitutes the basis on which the evaluation of sup-

ply is founded. This evaluation will be significantly modified by the introduction of ESA95 which, on the one hand, will contribute to an improved quantification of the tourism phenomenon but, on the other hand, will complicate the procedure for estimation of the aggregates.

The national accounting system, notwithstanding the step forward made by comparison to the previous version, presents certain limitations when studying specific aspects of social and economic life. In fact, by observing principles of homogeneity and simplification it is not possible to make all those particular forms of analysis connected with the tourism phenomenon. The introduction of satellite accounts allows these limitations to be overcome and, therefore, a specific section of SNA93 has been dedicated to this subject.

The layout of this paper is as follows: section 2 is dedicated to final demand, the next section discusses problems related to quantification of labour input, section 4 covers the principal innovations related to evaluation of output, in the fifth section a summary is made of the conceptual outline covering satellite accounts included in SNA93, and, last of all, certain conclusions of this paper.

## **2. Final demand**

### *2.1 Final consumption*

When considering the contribution made by SNA93 and ESA95 concerning final expenditure two significant new elements can be identified which stated briefly are:

- the classification of expenditure
- the definition of consumption<sup>3</sup>

The impact of these innovations differs, inasmuch as the second could lead to a review of the theoretical approach to the tourism economy as described in the TEA manual, whilst the first will bring about improvements in the quality and timeliness of estimates.

SNA93 and ESA95 foresee the introduction of a classification of consumption by purpose (COICOP<sup>4</sup>) with substantial innovations when compared to the previous classifications, both from a point of view of definition, the old classification (COHEP<sup>5</sup>) considered the family unit rather than the individual<sup>6</sup> as the economic subject, and from the standpoint of purposes. The SNA manual published in 1968 had a classification of consumption divided into 8 categories of expenditure, subdivided into 32 purposes of consumption which were further divided into sub-purposes. Purpose 8.3 (hotels and catering) and 8.4 (package tours and holidays) were entirely dedicated to tourism whilst other tourism expenditure had to be estimated. ESA (1981) took into account the approach of SNA even though certain aspects were modified, also with regard to aspects of the tourism economy. In particular, there was absolutely no reference to a purpose related to package tours and holidays, as a result the expenditure for these had to be apportioned to various purposes of consumption. The new COICOP base in accordance with SNA93 establishes 10 categories of expenditure subdivided into 36 purposes of consumption (Table 1).

This initial classification already confirms how the national accounting system intends to place a greater emphasis on tourism and holidays by the fact that there is now a new expenditure category dedicated entirely to hotel and catering expenditure. Furthermore, certain other important asso-

ciated expenditures are included in the sub-category dedicated to recreational and cultural services.

Each consumption purpose has specific relevance as far as tourism is concerned although certain purposes are particularly important, for this reason, they are highlighted and will be subject to further comment.

EEC countries through EUROSTAT and countries belonging to the OECD are evaluating the possibility of using a more analytical COICOP than the standard two-digit version in order to identify many items of expenditure covered by TEA, thereby allowing a greater visibility of the tourism phenomenon.

The debate within EUROSTAT is taking place on the basis of a document which mentions the PROCOME<sup>7</sup> classification that contemplates an ample level of subdivision using four digits. The OECD has produced a document<sup>8</sup> which, although making no explicit reference to the PROCOME classification, establishes a three-digit subdivision of the COICOP that is almost the same as the EUROSTAT proposal. In order to try and find one's way whilst faced with the many different (in substance or appearance) acronyms and classifications it is wise to start from the analysis using the higher number of subdivisions to highlight its contribution towards the identification of tourism expenditure.

From Table 2 it can be seen that tourism is examined in a detailed manner and the level of subdivision is, in certain cases, greater than that established by TEA in accordance with the directions of the OECD. It is not possible to note, however, any significant improvement with regard to an estimate of consumption of food, health expenditure and communications services (postal and telecommunications) connected with tourism. But above all, the most significant deficiency from a TEA standpoint is the lack of an estimate of the tourism market as related to travel agencies. The COHEP of 1968 contemplated an estimate of package tour and holiday expenditure and, in this sense, the new classification takes a step backwards with regard to the needs of the sector. In order to better clarify this point it is worthwhile making reference to the OECD (1995) document that includes a conversion table from COHEP to COICOP. As far as *all-in tourist packages* are concerned COICOP does not identify a specific category for the purpose and so one should, in theory, break down the overall expenditure into its component parts (accommodation, food, transport, recreational services etc.).

The case is different for expenditure regarding travel agency commissions: in this case the OECD document explicitly recognises their existence. Travel agency commissions must be considered, particularly with regard to transportation expenditure. It is interesting to note that the OECD has established that the entire amount of these commissions become a part of transportation expenditure whereas they really cover a whole range of different services.

When examining the items in the economic account to which family tourism expenditure is attributed according to the OECD approach<sup>9</sup> it will be noted that the breakdown is not particularly detailed. It is less than the level contemplated for other accounts such as, for example, that of value added. Leaving aside the reasons that might have caused the OECD to establish only a small number of consumption purposes, this choice seems cor-

rect, in the light of Italian experience, even if the new international classification could favour certain changes. It would seem particularly useful to make a more detailed analysis with regard to both transportation and recreational expenditures. As far as the first category of expenditure is concerned, the analysis proposed by COICOP as reported in table 2 would not seem to be immediately applicable even though it must constitute an objective to be pursued in order to estimate the impact of tourism on transportation demand, thereby establishing which are the main sectors requiring development to satisfy a tourism economy which is expanding and becoming ever more international.

Further thought needs to be given to recreational and cultural services. The analysis carried out by EUROSTAT (to 4 digits) covers 6 different classes of expenditure: (1) cinemas, theatres, concerts, (2) stadium, zoo and museums, (3) recreational and cultural services while on holidays (4 days or more), (4) sport and leisure activities, (5) television and radio taxes and hire equipment, (6) other services (gambling expenses, veterinary expenses, home entertainment services, etc.). Starting from this breakdown it can be noted that, from the tourism standpoint, there are certain weak areas which cause the aggregate to be inappropriate with respect to that required. In particular, expenditure for the purchase of tickets to sporting events cannot be classified, for the most part, as tourism and for this reason it should be isolated so that the appropriate quota can be assigned. In miscellaneous recreational activities there is a combination of such heterogeneous expenses as skiing lessons and music lessons. The same can be said for other services in which recreational activities relevant to tourism are confused with others that are part of normal daily life (a stake made at the casino table is very different from a wager on the football pools). Therefore, from a theoretical research standpoint, it would be important to distinguish between recreational activities connected with tourism (ski or riding instructors the same as an equipped amusement place) which are not only an integral part of the economic account of tourism but are also of ever increasing importance for the future development of the sector.

To conclude this analysis of the relationship between ESA and TEA it is necessary to consider the possible changes that can stem from the application of the new accounting system. These changes are the result of two different definitions of consumption: consumption expenditure (refers to the direct expenditure of families) and actual consumption (includes in addition such expenditures identified as made by Government and various non-profit organisations serving households).

Taking this question further reference can be made to the indications given in SNA93 which establish that *"by convention, all government final consumption expenditures under each of the following headings should be treated as expenditures on individual services except for expenditures on general administration, regulation, research ecc.: 04 Education - 05 Health - 06 Social security and welfare - 08.01 Sport and recreation - 08.02 Culture"*<sup>10</sup>

From indications given in SNA93 it can be noted that part of the expenditure for sport, recreation and culture is included in the tourism sector. The activity of the Government affects tourism to a lesser degree than in other sectors (health, education, etc.) although it needs to be taken into account. Government and non-profit making organisation participation affects real consumption particularly in the area of holidays organised for the eco-

nomically weaker social classes. In the Italian context it is necessary to evaluate the expenditure for holidays organised for children, the old-aged and handicapped<sup>11</sup>, etc. Furthermore, subsidies must be taken into account for recreational and cultural services<sup>12</sup> (reductions on cinema and theatre tickets, recreational infrastructures used free of charge by certain categories, etc.); this question opens up a whole new area for discussion and analysis in order to achieve an ever wider overview of tourism.

## *2.2 Gross fixed capital formation*

The changes regarding capital formation contemplated in the new SNA/ESA are more far-reaching than those applying to consumption. The first element of change concerns the definition of the aggregate inasmuch as the concept of goods produced now substitutes that of reproducible goods. This allows the inclusion of both non-material goods (software and original artistic works) and certain goods produced but which are non-reproducible as part of capital goods. As far as the tourism sector is concerned these goods do not make a large quantitative impact but do, however, open up a new area with regard to the type of goods (material of non-material) that can be considered as capital formation<sup>13</sup>.

It should be emphasised that, as far as purchases are concerned, ESA95 includes a distinction between goods purchased under operative leasing contracts as opposed to financial leasing which will require a particular effort of analysis in order to identify these expenditures; this covers the entire range of capital formation and, therefore, will affect the estimated economic account for tourism.

When considering the single components of gross fixed capital formation, a further change may be noted which, at least at a theoretical level, must be taken into account. In addition to gross capital formation and variations in stocks, ESA95 contemplates net purchases of valuable items which are acquired by the various economic subjects as valuable reserve items. These items include: (1) precious stones and metals - (2) antiques and objects of art - (3) other valuable items (jewellery and collectors' items<sup>14</sup>). When tourists purchase such goods, under the new accounting method the expenditure will be included in capital formation. Previously certain expenditures (e.g. jewellery) were considered in the accounts as part of final consumption.

In the OECD evaluation of the relationship between the TEA<sup>15</sup> accounting structure as compared to that of SNA (1968) it was pointed out that the latter contained a less detailed breakdown of the estimates. From the standpoint of tourism, the account regarding capital formation gives information on the overall receptive capacity of the sector and connected services, however, as far as Italian experience is concerned, no estimate has still been made of the accounting aggregate referring to tourism.

When considering, for example, the work of Costa (1984) and Costa, Manente (1993) the investigation of demand is limited to an examination of final tourism consumption. This oversight does not reduce the importance of empirical studies carried out in this period but it does suggest a need to give consideration to the reasons that caused it.

Estimates of gross fixed capital formation are carried out in a manner appropriate to examine either the production branch, the user branch or the ownership branch. In the case of the tourism sector, estimates for the pro-

duction branch are of no use when evaluating the increase in the receptive capacity of the sector<sup>16</sup>, whereas estimates for the ownership branch tend to exclude the use of capital goods either rented or obtained under a leasing agreements. For this reason attention must be concentrated on the user branch. After having clarified which capital formation must be included in the economic account for tourism, there remains the problem of identifying the activities which comprise it. As far as the hotel and catering category is concerned it is evident that it must be entirely, or almost, attributed to the sector being examined. The evaluation is more complex with regard to other categories.

The TEA manual, in fact, when considering activities connected with tourism<sup>17</sup>, states that many activities cannot be considered as specifically of a tourism or non-tourism nature; a typical example is railway transport. To attempt an estimate of railway transport capital formation, for example, it would be logical to exclude the purchase of freight wagons but the question of how to treat locomotives and passenger carriages still remains considerable. In order to resolve this problem it does not seem reasonable to apply the criterion of predominant use as it is difficult to estimate carriages to be used for transporting commuters as opposed to tourists. One possible solution could be to impute a quota of capital formation which could potentially be tourist transport to the tourism sector. The estimate of such a quota, in the case of Italy, is difficult to calculate even though it would be of great interest. It would require a detailed study of the sector based on passenger flow, final consumption and the technical characteristics of the products being examined.

As Italy is a country with a *vocation for tourism* it would seem appropriate to conduct a similar type of study also for water, air and land transportation, etc. Similar reasoning can also be applied to capital formation in the recreational and cultural sector. In the light of the previous considerations and because of the relative lack of statistical sources (compared to consumption) it is easy to understand why there is no specific account for capital formation for the TEA in Italy. However, it is not possible to accept this *defeat* and, therefore, the hypothesis of sectorial studies must be considered. The evaluation of capital stock and formation could initially be made starting with those areas most easily attributable to tourism (e.g. hotels and restaurants) followed by a progressive widening of the analysis.

In the process of change in methods and rules for the estimation of gross fixed capital formation it is relevant to examine the new classification which is particularly important considering that it requires an estimate of the amount of capital formation.

ESA now requires, in fact, an estimate of capital formation in accordance with the ISIC (REV.1) classification and no longer by branches (Table 3).

At the level of the two-digit breakdown shown in the table those sectors mainly connected with tourism are highlighted even though other sectors, as in the case of consumption, can be related to the tourist industry. In order to compare the classification in the TEA manual with the new classification of capital formation it is necessary, however, to examine the ISIC<sup>18</sup> REV.1 at the maximum level of detail possible. Particularly with regard to transportation a further breakdown is foreseen to identify (a) land transport, (b) maritime and water transport, (c) air transport, (d) support and ancillary transport activities - travel agency activities.

If for transportation it is sufficient to apply a 4-digit breakdown, in order to identify the support and ancillary transport activities this is no longer sufficient. In fact, the category relating to support and ancillary transport activities - travel agency activities is further divided into two parts, the first refers to goods and warehousing, the second (other activities connected with transport) is mostly concerned with tourism although it does also include activities related to commerce (forwarding agents), infrastructures (port and quay management) together with travel agency activities and tourist guides.

This detailed review of transportation should also be extended to recreational, cultural and sporting services inasmuch as included in the category "Other public, personal and social services" (Table 3) there are four different types of activity: (a) disposal of refuse, (b) activities of associations, (c) recreational, cultural and sporting activities, (d) other service activities. It will be noted that the category being examined is extremely heterogeneous which implies not only a need for investigation of definitions but also an in-depth knowledge of the sector in order to identify those capital formation that make a direct and significant impact on the tourism sector. The estimate of an economic account with reference to tourism in Italy requires a detailed knowledge of activities connected with tourism which can be used, however, in more than one manner. On the one hand, it can be used to identify the minimum required breakdown on the basis of which statistics can be collected and, in this regard, it may be opportune to initially reduce the level of detail in respect to that proposed by the OECD. On the other hand, when identifying the classes of activity involved in tourism it is necessary to ensure a correct utilisation of the sources<sup>19</sup> which, although reduced with respect to consumption, will allow a coherent and circumscribed estimate of the capital formation in the sector being examined.

### 3. Labour inputs

When preparing an account for tourism it is not possible to leave out an estimate of employment which is the key variable in almost all social-economic analyses.

In the OECD manual there is, in fact, a table dedicated to employment in the tourism sector which calls for both a breakdown between employees and self-employeds and also a quantification, for those employees only, of the per capita hours worked even though it is admitted that this information is difficult to acquire.

On the other hand, neither did the concept of employment included in the European system of accounts of 1981 help in the acquisition of statistical information to properly represent this phenomenon.

The concept of "total domestic employment", in fact, referred to the number of persons (heads) participating in the productive process. Inherent in the definition was the assumption of the complete identification of an activity with an employee without considering, however, the number of activities that a single person may carry out or, in other terms, the number of jobs that one person might occupy. Taken in this sense an estimate of the hours worked turns out to be a poor representation of the quantity of labour really used in the productive process. The actual quantity of labour, in fact, is the product of an overall sum of positions which refer to a number of workers,

however, only on condition that the activity for each worker is a sole or main one. Instead, outside of this definition the quantity of labour corresponds to an overall number of positions made up of second jobs.

This problem is adequately dealt with both in SNA93 and ESA95; the concept of employment is abandoned to be replaced by the much exhaustive concept of labour input. In particular, the new ESA95 manual states that it is necessary to have information as to:

- persons employed;
- working positions;
- total hours worked;
- full-time equivalence;
- permanent employee work input at constant remuneration.

The concepts of "working positions" and "full-time equivalence" mentioned above are especially important. The former is defined as a contract, implied or explicit, between a person and an institutional unit whereby the person concerned may occupy one or more jobs, whilst the latter is relationship between the number of hours actually worked and the average annual hours worked for the job on a full-time basis. In OECD (1991) it is recommended that the average annual work hours be defined as the contractual hours and that this figure is then used to calculate the estimated full-time jobs. In this manner, the total hours worked, obtained using the estimated jobs, is certainly more appropriate to reflect labour input than that which could be obtained using the number of employed.

Furthermore ESA95 specifically recognises the existence of the underground and illegal economy. As far as the underground economy is concerned there are two different types that must be analysed separately: the first is of an economic nature and arises from the intention on the part of the economic subjects to evade taxes and/or social insurance contributions, to not respect prescribed minimum salary levels, hours of work etc.. This leads to a deficiency in administrative records and statistical sources. The second, of a statistical nature, refers to a deficiency in the information base such as a failure to update the basic files.

ISTAT for many years has pointed out that in the real economy, in addition to occasional or marginal work, there is a continuing increase in the number of workers who during the same period of time carry out a number of activities and therefore occupy a number of working positions, even in different branches of economic activity. Based on this ISTAT has emphasised the fact that the definition of ESA (EUROSTAT 1981) should be broadened specifically to encompass the quantity of labour applied to create a product. With this in mind, already in the 1987 revision the old concept of employed person was replaced by that of *labour units*, defined as the quantity of work performed in one year by a full-time worker or alternatively the equivalent quantity performed by part-time or second-job workers.

It is evident that the concept of full-time equivalence (FTE) corresponds to labour units as used by ISTAT and that the method suggested as most appropriate in order to estimate it is conceptually very close to that used in the national accounts, where equivalence is estimated based on work hours as defined contractually for each branch of activity. Furthermore, FTE is also the tool used to estimate underground and non-regular activities<sup>20</sup>. In fact, labour input is divided into 5 segments each identified by means of the connections existing between administrative, juridical, fiscal, social insurance aspects and by those of a predominantly statistical nature. These catego-

ries are indicated in Table 4 and in Table 5 whilst the definitions of these categories can be found in ISTAT (1990). It is appropriate to emphasise that labour input is also used to obtain the overall total estimates for production and value added (see section 4).

It is therefore possible to examine, based on Italian experience, by what degree adoption of ESA95 will contribute to a better understanding of the labour phenomenon in a sector such as tourism which, at least in this country, is characterised by rather differentiated typologies of work.

#### 4. Output

The current section examines the impact on economic accounts for tourism, as outlined in OECD (1991), caused by the main changes introduced by SNA93 and ESA95 as they affect production accounts by branch of economic activity. Therefore, attention will be focused specifically on the approach seen from the standpoint of supply and treatment of the subject, which does not claim to be exhaustive<sup>21</sup>, will concentrate on the main innovative aspects connected with the adoption of the theoretical outlines contained in SNA93 and ESA95.

The first point of contact between the system of accounts for tourism and the national accounts can be found in the choice of the statistical unit of observation that, in theoretical terms, is defined in ESA95 as the economic activity at a local level (KAU)<sup>22</sup> that produces a product recognised at a 4-digit level in the ISIC Rev.1 classification. In addition to this definition there is, however, a further definition can be found which allows for also a secondary activity<sup>23</sup> within the same local unit. In fact, the identification of secondary activities is one of the cornerstones of the relationship to be found between the national accounts and those of tourism. It will be seen that in order to obtain the overall supply of those products characteristic of tourism it is necessary to make an adjustment to the secondary production of certain economic activities. This adjustment, as outlined in OECD (1991, page 56), is as follows:

Total output of characteristic tourism producers	+
Characteristic tourist output of non-tourism producers	-
Output of characteristic tourism producers that is non itself characteristic of tourism	=
Supply of commodities characteristic of tourism	

A useful tool to identify secondary production which, therefore, makes it easier to form connections between the national accounts and those of tourism, is the matrix of the productive structure of the economy. ESA95 introduces a further tool in this regard; alongside the symmetrical input-output tables there are the supply and use tables<sup>24</sup>. In this paper it is not our intention to dwell on the utility of applying symmetrical input-output tables to tourism accounts as almost all of the existing literature on this subject leads to the conclusion that these tables represent one of the principal tools available for the analysis of the tourism phenomenon<sup>25</sup>. It does seem important, however, to underline the important role of the supply and use matrix by means of which can be traced, on the one hand, the creation of total resources of goods and services and, on the other hand, the intermediate and final uses of the same goods and services.

Without going into the theory underlying the supply-use matrix, it is suf-

ficient in this context to draw attention to the table supply in which total resources are subdivided into imports and output produced and the latter is further analysed by industry and product. The quadrant related to output, in fact, shows on the horizontal axis the total of products and in the columns the industries that produce them. The conclusion can be drawn immediately that, if there is no secondary production (and/or by-products), this matrix will be perfectly diagonal inasmuch as each industry produces only its own characteristic product and that there exists a biunique relationship between industries and products.

It is also evident how a supply table offers a clear identification of secondary products and so facilitates the task regarding a reclassification of supply to bring the national accounts into line with those typical of tourism.

And so the EUROSTAT request for the annual provision of supply and use tables following the adoption in Italy of ESA95 requires, on the one hand, a considerable effort on the part of the national statistical system but, on the other hand, furnishes a valid tool for analysis both of the overall macroeconomic view and the single realities which make up the tourism sector.

An element which will in the future complicate the drawing up of an overall relationship between national economic accounts and those of tourism is represented by the new limits of production activity foreseen in SNA93 and ESA95. The most obvious aspect in this respect regards the inclusion of illegal<sup>26</sup>, underground and non-regular activities within the concept of production. Although the inclusion of these activities will make the estimate of Gross Domestic Product more complete and coherent it will certainly constitute a difficulty when attempting to attribute this activity to tourism or non-tourism consumption.

As a result of experience over the last few years Italian national accounting has developed a system for identifying underground and non-regular activities which makes it possible to estimate the labour input for these activities and an estimate of output. As far as the first aspect is concerned reference is made to the concept of the work unit outlined previously which makes it possible to determine the regular and non-regular work force employed in the productive process. With regard to output, a check for coherence is made on the declarations of businesses to verify the accuracy of the declared revenue. This check is particularly necessary in the area of small businesses, which are very numerous in Italy and are subject to a lower level of fiscal and administrative control. The procedure is based on a comparison of the income of the self-employed worker and the employee. Whenever the latter is greater than the former, the revenue figure is corrected to re-establish a parity between the two incomes<sup>27</sup>. Using a similar system it is possible to reconstruct a complete and detailed account by branch from which it is then theoretically possible to derive a subset to complete the information requirements for tourism.

From the standpoint of the illegal economy there is no official experience and so it will be necessary to experiment over a future period in order to also bring this aspect into the national economic accounts.

A further innovative element with regard to national accounting concerns the reference price for output valuation. According to ESA95 the reference price must be that level which conditions the decision of a producer with reference to production activity to be undertaken. This price is defined as the base price and represents the price receivable by the producer

for the sale of one unit of the goods or services produced, excluding every tax payable and including every subsidy receivable on that unit as a result of its production or sale. As far as subsidies are concerned there is a distinction between a subsidy for production and for a product; the latter, being closely related to the volume of output produced, are included in the base price. The difference between the base price and that actually used in the national economic accounts is due to the fact that the latter includes taxes (net of Value Added Tax) and excludes product subsidies. In this manner, when comparing sectors of economic activity in general and those characteristic of tourism in particular, all variations of a regulatory and fiscal nature are excluded whereas the modifications induced by different levels of subsidy are included. A similar system will provoke significant changes for certain branches of activity typical of tourism, for example internal transportation, which in Italy receives a high level of product subsidy.

A further consideration regarding the criteria for evaluation of output must be made in relation to the economic account for tourism following ESA95; the moment of recording of transactions. The new system, in fact, strongly emphasises again that the guiding principle for when movements should be recorded in the accounts is the moment of pertinence. According to this principle each movement must be recorded at the moment when economic value is created, transformed, eliminated or when credits and obligations arise, are transformed or are extinguished. The correct application of the criterion of the moment of pertinence will cause quite a problem for the economic account of tourism since in this field the moment when the service is produced does not always coincide with that when it is acquired by the user. Furthermore, the situation in this field is made even more difficult by virtue of the fact that not all these lags compensate each other within the same calendar year; for example tourism has a seasonal peak between the months of December and January.

Finally, the attention paid in ESA95 to the sector of intermediation in tourism, already reviewed in OECD (1991, pages 44-49), should again be mentioned since this matter is an integral part of the tourism sector. ESA95 goes into detail on the distinction in the evaluation of production activity of tour operators and travel agencies. The production of the latter mentioned sub-sector is taken as the value of compensation obtained for the activity of intermediation performed (fee or commission). In this way the expenses incurred by the agency, for the purchase of goods and services necessary to satisfy the requirements of clients, are excluded. From the point of view of the national accounts the significance of this definition lies in the fact that it specifically introduces the concept of margin of intermediation on a service activity. In the previous version of the ESA this concept was only contemplated for the commercial sector, that is it was applied only in relation to an exchange of goods. In ESA 95 the intent was to recognise the increasing complexity of modern economic systems by specifically contemplating the performance of a service which permits a consumer to use another service, from which the need derives to consider the concept of margin applied to the service activity.

The situation of the tour operator is different since production is taken as being the total amount of receipts from tourists. The latter solution means that the service offered by the tour operator is considered as a distinct product, obtained from the combination and transformation of other services (transportation, lodging, catering etc.). Furthermore, this solution is in line

with the recommendations in OECD (1991, page 49) under which the output of tour operators acting in their own name should be recorded gross of all expenses incurred for the organisation of the travel and the stay.

## 5. Satellite accounts

The former version of the national accounting system was frequently criticised for its rigidity. On certain occasions this rigidity did not take into account the different realities of countries; the different concepts and definitions adopted by various international organizations; of existing relationships between macro and microdata and, furthermore, did not facilitate the integration between information of differing natures (economic, social, demographic and environmental).

Taking into account these limitations, the new system now attempts to furnish a complete overview of economic activities whilst being adaptable to the different national contexts, reinforcing the central role of national accounts as an integrated, coherent and consistent body of available statistics. The system, moreover, has acquired increased flexibility since it now foresees the possibility for each country to adopt the classifications, the categorisations and accounts in the system, leaving each to model them in accordance with its own economic and institutional structure.

The central framework of national accounting, notwithstanding the progress made, in certain circumstances poses limits when studying specific aspects of economic and social life: adopting certain principles of homogeneity and simplification means that not all forms of specific analysis are possible<sup>28</sup>.

In this regard, certain characteristic aspects necessary for the analysis of some sections stand out as being in conflict with the frame of reference at a conceptual and accounting level.

The classification of activities and products cannot be easily adapted to the circumstances, both because they do not allow isolation of production units producing characteristic activities (tourism) and because expenditures recorded in one sector are difficult to isolate from other expenses (environment).

The central framework does not isolate ancillary production<sup>29</sup> and, therefore, in some cases does not enable an evaluation of the efforts sustained for certain services (research, transportation). Last of all the national accounts privilege monetary reference in order to guarantee homogeneity of evaluation.

The introduction of satellite accounts provides a solution to these problems.

Satellite accounts make it possible to broaden the scope of the accounting system by adding non-monetary information and therefore act to modify certain basic concepts. Furthermore, these accounts remain connected with the central framework of the national system of accounts and, as a consequence, with the principal structure of integrated economic statistics. Being more appropriate for sectorial analysis they are all the more pertinent to the specific information system of the subject area, integrating physical and monetary data.

The definition of satellite accounts is a matter which is still being discussed. Attention is being concentrated on the problem of their connection and coherence with the central framework. On the one hand, the natu-

re of satellite accounts presupposes that the differences with respect to the central framework are highlighted since the latter has shortcomings with regard to the study of certain particular subject matters. On the other hand, there is a desire to cancel out the differences and make connections that would bring the satellite accounts within the system in order to place the subject areas within the context of the economy and enabling comparisons to be made both between different sectors and at an international level.

This double interpretation has brought about the identification of two types of satellite account in accordance with the relationship that each has with the central framework of the system: satellite accounts developed for alternative analyses and satellite accounts aimed at a particular function or purpose.

Satellite accounts developed for alternative analysis allow an expansion of the limits of the central system with regards to definitions, classifications and evaluations; to test new concepts and methodologies and to influence future improvement of national accounts outlines.

The second type of satellite account, that is to say those which address a particular function, follows a different arrangement of the central classifications, by foreseeing the introduction of complementary elements which do not distort the concepts of the central structure and, furthermore, are organised in such a manner as affords the possibility of being "families" of satellite accounts, a standard outline for the construction of which can be proposed.

Nevertheless the new national accounting systems emphasise that a satellite account must above all answer questions regarding expenditures made in a specific field, the financing, the beneficiaries and the production of the characteristic activities. It must also enable international comparisons. For example, in relation to the phenomenon of tourism, it would seem important above all to learn the consumption of tourists and the corresponding external balance.

In general satellite accounts regard those collective functions subject to a strong influence on the part of government officials. The notion of function, standing side by side in a complementary manner to the classifications and definitions adopted in the central system, is utilised in the satellite accounts to pinpoint the objectives of the operations carried out.

The satellite accounts should be able to gather all information, whether monetary and non-monetary, which is lost within the central system, also taking advantage of external statistical sources: the elaboration of these accounts is conceived as a means to progressively structure the overall quantitative information relative to a particular subject area in order to give birth to a coherent system of knowledge and of economic and social analyses.

In order to evaluate certain significant aggregates, for example the national expenditure in a specific field, the first thing to be done is to precisely define the subject area being examined. This definition is achieved by identifying the expenditures specific to the area in question: these include the expenditures in specific products (characteristic products and connected products), the gross capital formation of the characteristic activities in specific products and the specific transfers to the subject area. Their definition is sometimes complex. The characteristic activities need to be distinguished from characteristic products: the former refer to production in the sector being examined whilst the latter bring about consumption.

The purpose of the Tourism Satellite Account is to measure the eco-

conomic activity generated by tourism, that is, the demand for commodities created by tourism and the production required to meet that demand<sup>30</sup>

Production is normally identified by observing the products which arise from it, independent of the use they have. In the case of tourism this is possible only for a part of the production, the services furnished by travel agencies and hotels are products typically destined for tourists. On a more general level, however, the activities of tourism are defined by the fact that the goods and services produced are offered principally to tourists - that is to say persons who spend at least one night away from home for leisure, business and other purposes<sup>31</sup>. From this standpoint, it is reasonably clear to assume that long distance transportation concerns a tourist activity whilst that over a short distance will depend on who utilises the means of transportation. The same can be said for shops located in a tourist area.

In France, in the satellite account for tourism, the characteristic activities are defined as those almost exclusively destined to satisfy the needs of tourists or those of for which the production is directly connected to tourism<sup>32</sup>. By applying these conditions hotels, bars, restaurants and travel agencies are included but transportation is excluded.

The exact identification of characteristic activities strongly depends on the classification of activities adopted and, above all, on the level of detail attained. Certain activities, although clearly tourism, can only be identified by an extremely narrow level of definition, but for which no accounting data is available. For example, it is possible to isolate the activities of hotels, bars and restaurants because the classifications allow for this, the same operation, however, is not easy for all those activities which are not specifically identified or those which have been introduced recently or those where the tourist use is closely linked to a non-tourist activity. Consequently the definition of tourist activities may cause many problems.

For this reason, the approach in many cases has to be indirect: starting from an analysis of the structure of tourist expenditure by product in order to be able to trace back to the producer of the goods or services in question<sup>33</sup>.

It has been mentioned that a characteristic activity is intended as a typical activity within the context of the subject area and that this implies including the satellite account in the relevant production sector. Within the context of national accounting, the units of production are classified based on their principal activity and, where necessary, their secondary activity. Ancillary activities, that is those used in the primary and secondary production processes, are not analysed and classified according to their own nature but as part of the activities of the unit they serve. This means that ancillary activities are not undertaken by distinct producer units and the related products do not appear as autonomous products. When examining certain kinds of activity and products, it may be necessary to identify some ancillary activities and their output within the producer units (a typical case is own-account transportation which has a considerable impact on transportation activities)<sup>34</sup>.

As mentioned in a previous section of this paper, the new system of national economic accounts provides for the compilation of supply and use tables which refer to specific products and permit the evaluation of internal and national consumption including that of non-residents to the benefit of residents. This type of analysis would be desirable for the tourism sector for which national accounting estimates are insufficient.

And so it must be stated that all activities forming part of a certain sector should be included in a relevant satellite account in the most analytical manner possible, even based on a more detailed classification than that of the central system. For example, in the case of tourism accommodation could be defined based on the form it takes (hotels, inns, camping sites, etc.) and in accordance with the type of stay (long or short stay, business tourism, etc.).

As far as goods and services connected with the sector being examined are concerned, attention has been given to their financing and their consumption but not to their production. In fact, concerning the latter, no consideration is given to the capital formation made by the activities which produce these products whereas it is covered in the case of characteristic activities. In the case of tourism these expenditures refer, for example, to the purchase of recreational services which are closely linked to the tourist phenomenon but are not dedicated entirely to this use.

It is fundamental that the classifications by purposes are such as to permit the identification of certain typical expenditures in order to quantify consumption of associated products: the fact that tourism is not a principal category in the functional breakdown of family expenditures complicates matters as many products purchased by tourists are difficult to trace.

Specific transfers which benefit a particular subject area must be quantified inasmuch as receipt of them is contingent on their use in the same sector: study grants a specific transfer appearing in the education account. Specific transfers are usually monetary but can also be made in kind.

The quantification of expenditure assignable to the different agents in society who operate in the subject area being examined is given by the total effective expenditures referring to characteristic products, the purchase of associated goods and services and specific transfers. The viewpoint taken concerns who makes the cash outlay.

There is not only one method for evaluating expenditure as far as satellite accounts are concerned. That of SNA93 only estimates the national expenditure of resident units. This expenditure includes final and intermediate real consumption for specific products, including consumption relevant to an ancillary production, the capital formation made for the production of specific products, that for non-specific products and finally current and capital transfers which do not give rise to the previous uses. For these five aggregates only the part consumed or financed by resident units is estimated. In order to evaluate national expenditure, current and financed capital expenses from the rest of the world to the benefit of resident units are deducted.

One of the objectives of a satellite account is to identify the users-beneficiaries of a certain expenditure. As families are the greater proportion of the beneficiaries, a satellite account should provide for breakdown of the beneficiaries of expenditure by type of family following such criteria as are deemed necessary: income bracket, social-professional category, sex, age, place of residence etc.. Clearly obtaining such information depends to a major degree on how exhaustive and capable one's statistical system is.

It should be pointed out that, with regard to the identification of the operator financing certain activities, the unit of financing can be an institutional unit or a part of that unit; this particular detail would allow a move from the central framework of classification to that which is useful in the context of the satellite account.

In conclusion, if national accounting is unable to provide a microeco-

conomic overview, it would be wrong to burden a satellite account with a purpose for which it was not intended. However complete it is, it cannot cover all cognitive elements of a sector. As they have to be immediately comprehensible and utilisable, at the outset the objective of satellite accounts will not be overly ambitious, they will seek to present additional information to the existing statistical and accounting information in a clear manner. In particular, their purpose will be to highlight, as a coherent whole, expenditure and financing data and additionally they will attempt to offer a tool for economic policy-making to operators in the public administration.

### *6. Final remarks*

The relationship between tourism statistics and national accounting, as it has been discussed in the previous sections, is important in order to give a macroeconomic view of the sector. Several aspects which characterise this relationship may be part of a debate between experts either of tourism or of national accounting.

The framework of SNA93 and of ESA95 presents several innovations which must be attentively considered in the building up of tourism economic accounts. Concerning tourism demand, new concepts and definitions bring forth substantial changes which determine differences in the identification of the aggregates. These changes lead to the conclusion that this is a suitable time for setting up (or implementing) a system of sources, classifications, methodologies capable of monitoring all aspect of tourism activities. Naturally the main urgency is to find out how to trace a line around the sector, to choose a level of the details for the classifications. Theoretical and practical choices are substantial for a correct functional analysis of tourism.

Furthermore there are consistent obstacles both in the estimation of demand aggregates and in the assessment of labour inputs and, as a consequence, of supply aggregates. On the last subject it is necessary to state that the International Standard Industrial Classification of all Economic Activities (it doesn't matter the revision) considered by SNA93 is a first step towards a better knowledge of economic activities. A further step is represented by the building up of supply and use tables which provide analytical information integrating the supply approach.

SNA93 and ESA95 introduce satellite accounts because working with the central framework is not sufficient. The intent to describe more in depth a certain field is common with OECD's TEA manual. For this reason concepts, transactors and transactions, classifications, rules of accounting, tables, collection of sources connected with tourism activity, identified by OECD represent a legacy which has to be received by those who will build up a tourism satellite account. Nevertheless the framework of TEA is not out-of-date for the introduction of satellite accounts because intents are different. As a consequence TEA can take advantage of satellite analysis because of additional information on particular social problems, and in consideration of the linkage between physical data sources and monetary estimates and, finally, taking into accounts the possibility of a costs and benefits analysis of tourism activity.

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\* Whilst this paper is the result of the combined effort of the authors, specific content of sections 2, 3, 4 and 5 is attributable respectively to Federico Di Leo, Susanna Mantegazza, Stefano Pisani and Sandra Maresca.

<sup>1</sup>UN and others (1993)

<sup>2</sup>EUROSTAT (1994)

<sup>3</sup>A more in-depth treatment of this subject may be found in ISTAT (1995) section 4.3, shortly to be published

<sup>4</sup>The English acronym for *Classification of Individual Consumption by Purpose*

<sup>5</sup>The English acronym refers to *Classification of Household Expenditure by Purpose*

<sup>6</sup>This change in perspective may have an impact on the estimate of the tourist industry as will be seen later.

<sup>7</sup>According to the French acronym this refers to *Produits de Consommation des Ménages* (Products consumed by families).

<sup>8</sup>The OECD (1995) document includes the OECD proposal for a revision of COICOP.

<sup>9</sup>See OECD (1991) page 63.

<sup>10</sup>See UN and others (1993) page 215. Individual consumption also takes into account a part of Government expenditure in other sectors (housing, refuse collection, operations regarding the transport system) which, however, do not affect tourism in a significant manner. The code mentioned in the quote is part of the COFOG classification.

<sup>11</sup>That part of Government expenditure in favour of individuals can be identified within recreational and cultural expenditure of the COFOG. This point is an important consideration inasmuch as it tends to exclude the contribution of expenditure for social well-being and security services in the evaluation of an enlarged view of the tourism sector.

<sup>12</sup>As far as effective consumption is concerned ESA95 makes reference to items 8.1 (Sport and recreation) and 8.2 (Cultural services) of the Classification of the Functions of Government (COFOG) developed at the same time as COICOP.

<sup>13</sup>See ISTAT (1995) section 4.5

<sup>14</sup>See UN and others (1993) page 233

<sup>15</sup>See OECD (1991) page 64

<sup>16</sup>The value of newly-constructed hotels, for example, is reported in the category of non-residential construction together with other constructions destined for entirely different uses.

<sup>17</sup>See OECD (1991) page 35

<sup>18</sup>See ISTAT (1991)

<sup>19</sup>One of the principal sources for the estimate of capital formation in Italy is the *Annual survey of the economic accounts of business* that is based on data from a large number of businesses which can be identified by business sector to a degree which is adequate for producing an economic account of capital formation for tourism.

<sup>20</sup>See ISTAT (1993)

<sup>21</sup>For a complete review of Italian problems in applying ESA95 see ISTAT (1995).

<sup>22</sup>UAEL coincides with the introduction of SNA93.

<sup>23</sup>From this standpoint ESA95 identifies three types of activity, that is: principal, secondary and ancillary. The first is that activity in which the value added is greater than that of all other activities in the same unit. Secondary activity is an activity carried out within a single local KAU in addition to the principal activity. The ancillary activity is a support activity carried out within a business in order to create suitable conditions for the pursuance of the principal or secondary activities of the local KAU (it is considered an integral part of the principal or secondary activity).

<sup>24</sup>For an analysis of relationships existing between supply and use tables and symmetrical input-output tables see ISTAT (1995) section 6.2.

<sup>25</sup>On this subject see Archer (1984) and Costa (1984), for a more recent application in Italy see Costa and Manente (1993).

<sup>26</sup>With regard to illegal activities, included are those which give rise to an operation (as in the sale of drugs) whereas those acts leading to a redistribution or destruction of assets (such as theft, blackmail and extortion) are not included.

<sup>27</sup>The methodology is based on the procedure outlined in Franz (1985).

<sup>28</sup>See ISTAT (1995)

<sup>29</sup>See SNA93 and ESA95

<sup>30</sup>See Lapierre J. and Hayes D. (1994)

<sup>31</sup>See OECD (1991)

<sup>32</sup>See Braibant (1994)

<sup>33</sup>See SNA94

<sup>34</sup>See SNA94

**Table 1 - Classification of individual consumption by purpose (one and two digit level)**

<b>Categories</b>	<b>Purposes</b>
1. Food, beverages and tobacco	1.1 Food 1.2 Beverages 1.3 Tobacco
2. Clothing and footwear	2.1 Clothing 2.2 Footwear
3. Housing, water, electricity, gas and other fuels	<b>3.1 Gross rents</b> 3.2 Regular maintenance and repair of dwelling 3.3 Other services relating to the dwelling 3.4 Electricity, gas and other fuels
4. Furnishing, household equipment and routine maintenance of the house	4.1 Furniture, furnishing and decorations, carpets and other floor coverings and repairs 4.2 Household textiles 4.3 Heating and cooking appliances; other electric household appliance including fittings and repairs 4.4 Glassware, tableware and household utensils 4.5 Tools and equipment for the house and the garden 4.6 Goods and services for routine household maintenance
5. Health	5.1 Medical and pharmaceutical products and therapeutic products 5.2 Non-hospital medical and paramedical services 5.3 Hospital services 5.4 Sickness and accident insurance services
6. Transport	6.1 Purchase of vehicles 6.2 Operation of personal transport equipment <b>6.3 Transport services</b>
7. Leisure, entertainment and culture	7.1 Equipment and accessories, including repairs <b>7.2 Recreational and cultural services</b> 7.3 Newspapers, books and stationary
8. Education	8.1 Educational services 8.2 Educational materials 8.3 Ancillary educational services
9. Hotels, cafés and restaurants	<b>9.1 Catering</b> <b>9.2 Accommodation services</b>
10. Miscellaneous goods and services	10.1 Personal care 10.2 Personal effects n.e.c. 10.3 Communications 10.4 Social services 10.5 Financial services n.e.c. 10.6 Other services n.e.c.

**Table 2 - Households final expenditure exclusively regarding tourism (to 4 digits)**

<b>3. Housing, water, electricity, gas and other fuels</b>			
3.1.3.2	Imputed rents for secondary residence	3.1.3.3	Actual rents for secondary residence
<b>6. Transport</b>			
6.3.2.1	Train, coach, taxi (holidays of 4 days or more)	6.3.2.5	Sea transport (holidays of 4 days or more)
6.3.2.2	Train, coach, taxi (holidays of less than 4 days)	6.3.2.6	Sea Transport (holidays of less than 4 days)
6.3.2.3	Air transport (holidays of 4 days or more)	6.3.2.9	Other transport services <sup>9</sup>
6.3.2.4	Air transport (holidays of less than 4 days)		
<b>7. Leisure, entertainment and culture</b>			
7.2.1.3	Recreational and cultural services while on holidays (4 days or more)		
<b>9. Hotels, cafés, restaurants</b>			
9.1.1.1	Restaurants (holidays of 4 days or more)	9.2.1.1	Accommodation services (holidays of 4 days or more)
9.1.1.2	Restaurants (others)	9.2.1.2	Accommodation services (stay of less than 4 days)
9.1.1.3	Cafés, bars...		

**Table 3 - Gross fixed capital formation according to ISIC**

6 Categories (one digit)	17 Categories (two digits)
1. Agriculture, hunting, forestry and fishing	1.1 Agriculture, hunting and forestry 1.2 Fishing
2. Mining and quarrying	2.1 Mining and quarrying
3. Manufacturing	3.1 Manufacturing
4. Electricity, gas and water supply	4.1 Electricity, gas and water supply
5. Construction	5.1 Construction
<b>6. Services</b>	6.1 Wholesale and retail trade; repair of motor vehicles, motorcycles and personal household goods <b>6.2 Hotels and restaurants</b> <b>6.3 Transport, storage and communications</b> 6.4 Financial intermediation 6.5 Real estate, renting and business activities 6.6 Public administration and defence; compulsory social security 6.7 Education 6.8 Health and social work <b>6.9 Other community, social and personal service activities</b> 6.10 Private households with employed persons 6.11 Extra-territorial organisations and bodies

<sup>19</sup> See ISTAT (1991)

**Table 4 - Total working positions - Year 1993 (percentage distribution by conditions)**

Activities connected with tourism	Regular	Irregular	Unregistered	Non resident foreigners	Secondary activity	TOTAL
	Workers					
Hotels and Restaurant	48,8	4,3	1,6	6,5	38,8	100,0
Land Transport	33,6	5,3	0,4	-	60,7	100,0
Air-water transport	47,1	6,1	0,2	45,0	1,6	100,0
Supporting transport activ.	64,5	15,6	2,0	-	17,9	100,0
Recreational, cultural and sporting activities	72,3	9,6	4,0	0,2	13,9	100,0
Total market services	67,6	6,2	2,6	1,9	21,7	100,0
Total industries	80,1	13,1	1,3	0,8	4,7	100,0
Total economy	62,5	8,9	2,0	2,2	24,4	100,0

**Table 5 - Total labour units - Year 1993 (percentage distribution by condition)**

Activities connected with tourism	Regular	Irregular	Unregistered	Non resident foreigners	Secondary activity	TOTAL
	Workers					
Hotels and Restaurant	63,3	5,8	1,2	8,8	20,9	100,0
Land Transport	52,5	8,5	0,3	-	38,7	100,0
Air-water transport	45,5	6,4	0,1	47,3	0,7	100,0
Supporting transport activ.	71,8	18,6	1,0	-	8,6	100,0
Recreational, cultural and sporting activities	79,9	11,1	2,5	0,1	6,4	100,0
Total market services	78,1	7,4	1,8	2,3	10,4	100,0
Total industries	81,9	14,3	0,9	0,9	2,0	100,0
Total economy	77,3	10,5	1,6	2,8	7,8	100,0

# THE CANADIAN TOURISM SATELLITE ACCOUNT: A CASE STUDY OF A NEW TOOL FOR MEASURING TOURISM'S ECONOMIC CONTRIBUTION

by Scott MEIS, Jocelyn LAPIERRE and John JOISCE

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## **Abstract**

The measurement of tourism's economic importance is of vital importance to governments and industry members alike. Governments throughout the world are under increasing pressure from the tourism industry to recognize and give support to its potential. A major plank of the argument is that tourism has the capacity to create employment and income faster and more effectively than other industries. It therefore meets many declared economic policy aims of government spokespersons, and it is thus worthy of support grants, subsidies and public-sector promotion. In Canada, the production of a Tourism Satellite Account—basically, a means of using established principles of national income accounting to measure the economic significance of tourism so that it can be credibly compared as an "industry" amongst other industries in Canada's economic structure—is an important first step in refining measurement techniques. While the importance of tourism to the Canadian economy is clearly established in this analysis, the Canadian approach produces some estimates that are substantially at odds with (and a good deal smaller than) those produced by others. This presentation summarizes the approach adopted, the basic concepts, methodological challenges, the results obtained and their uses, discusses how the approach differs with others, such as the OECD's Tourism Economic Accounts, and discusses how the technique will be adopted and expanded in the future to provide a vital tool for the tourism industry and for governments.

## **Introduction**

In October of 1994 Canada released the first results of a new analytical tool for the tourism industry, a Satellite Account on tourism.

This note describes the Canadian Tourism Satellite Account (TSA) and some of its significant features including the approach adopted, the basic concepts, methodological challenges, the results obtained and their uses.

It also discusses how the approach differs with others such as the OECD's Tourism Economic Accounts (TEA), and how the technique will be adopted and expanded in the future to provide a vital tool for the tourism industry and for governments.

### **Purpose and background**

In its basic form this new tool has the ability to measure the economic activity generated by tourism in a country — the demand for commodities created by tourism in that country and the production required to meet that demand.

Canada's interest in this new tool dates back to 1984 when it first emerged as an idea proposed during the examinations of the Canadian National Task Force on Tourism Data. The final report of the Task Force (March, 1989) described the original concept and the important characteristics and benefits of a Tourism Satellite Account:

"The Tourism Satellite Account is structured in "layers" of information ... Layer 1 is the Core Account Module containing the key monetary measures that provide the link to comparative measures in the System of National Accounts. It is designed to provide an overview of tourism activities in current and constant dollars. In these monetary terms, it establishes the relative importance of identified tourism components to the overall tourism activity and to other economic activities...One of the primary needs of the tourism industry...has been to measure the overall economic contribution of tourism to the rest of the economy.

The benefits of applying the concepts of satellite accounting to tourism were clear: the account demands consistency in data — it must balance in terms of demand and supply... A Satellite Account builds a data base that is comprehensive, internally consistent and balanced. Thus the data become **justifiable and credible.**"

Later, in June 1991 at the International Conference of Travel and Tourism Statistics held in Ottawa Canada, Statistics Canada presented a detailed vision of the full scope of the Canadian concept of a Tourism Satellite Account.

In 1993, the World Tourism Organization and the United Nations Statistical Commission adopted this visionary Canadian ideal as the recommended model for the future — a distinct comprehensive system of ordered socio-economic data pertaining to tourism, linked with the System of National Accounts.

With the recent release of results from the initial development of the first core layer of the TSA, industry analysts at last have a chance to examine the results of this new economic tool and assess for themselves the benefits and their significance.

Initial reactions to the recently released results have been positive. It appears that the TSA lives up to its original promise in providing, for the first time, a credible and comprehensive methodology for assessing the economic significance in national economies of a complex hybrid industry such as tourism. It provides a new and credible means for answering questions such as:

- How important is tourism demand for commodities produced by a country and what are the main commodities purchased by visitors?
- Which industries benefit from tourism?

- How much direct and indirect value added is generated from satisfying tourism demand?
- How much taxes does government receive from tourism?
- How much employment depends on tourism?
- How important is tourism in a particular national economy?

Already initial reactions suggest that as this new tool gains recognition it will become the benchmark by which tourism is measured as an economic activity. As a result, international organizations, industry groups and governments are beginning to consider the Canadian TSA as a prototype for other similar assessments at both national and international levels.

## **Basic concept**

### *Tourism Satellite Account (TSA)*

The term "Satellite Account" has taken on a variety of meanings, and it is frequently taken to mean different things by different users of the phrase. Accordingly, it is appropriate to clarify what is meant by a Tourism Satellite Account in the Canadian context.

In its broadest form, the TSA is envisaged as a comprehensive multi-layered information system which collects, orders and interrelates statistics describing all significant statistical aspects of tourism. Thus, it brings together economic flow data, employment data, quantity supply and use data (such as capital employed and occupancy rates and load factors), as well as a host of related statistics. It is called a Satellite Account because it is an extension with some modification of the System of National Accounts (SNA).

The Canadian Tourism Satellite Account, as developed by Statistics Canada, has used the Canadian Input/Output tables as the basis for the development of the TSA. The Input/Output tables were used because they provide the greatest articulation of the Canadian economy, providing industry intermediate inputs and gross output by commodity, as well as final demand and primary inputs of GDP. The Input/Output framework allows for a confrontation of demand and supply of commodities by industry and user.

In the SNA, industries are defined as collections of producing units engaged in similar types of activities in relation to similar types of goods and services, irrespective of the purchaser of the output. The "tourism industry" does not exist in the SNA as it is not an industry in the "normal" meaning of the term: it is defined by its end use (for example, the restaurant industry's output can be consumed by both tourists and non-tourists, but the output — the meals — are the same irrespective of the user); furthermore, tourism consumption cuts across various individual industries such as accommodation, transportation, food services, etc. A Satellite Account is required to allow for a meaningful analysis of tourism's economic contribution in a way that it can be credibly compared as an "industry" amongst other industries in Canada's economic structure.

The TSA provides, for the first time, a tourism dimension to the Input/Output framework of the SNA. It extracts the "tourism" dimension of the output of tourism-related industries, such as the restaurant industry, and combines it with the "tourism" dimension of non-tourism industries, such as retail sales.

In doing so the TSA provides the ability to examine both the supply and demand sides of tourism within a balanced accounting system.

But, what about some of the other key component definitions and assumptions used within the TSA? They provide the foundation building blocks for the construction of the Account.

### *The Economic Activity of Tourism*

The most important concept used in developing the Account is that of "tourism" itself. Here the TSA turns to the demand side definition adopted by the World Tourism Organization (WTO) and the United Nations (UN) Statistical Commission in 1993 as follows... "the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes." This definition is more inclusive than merely leisure travel. It includes travel for business purposes, to visit friends and relatives or for personal reasons such as health treatment. Excluded, on the other hand, are commuting, travel for study purposes, travel to obtain employment in a new location, and travel by migrants, diplomats and armed forces on military assignments.

Secondly, the definition of tourism comprises several different types in relation to a particular country of study. In Canada, where the TSA has been developed, "domestic tourism" refers to travel by Canadians within Canada. "Inbound tourism" refers to travel by non-residents in Canada and "outbound tourism" refers to that by Canadians in another country.

Lastly, in Canada, the "usual environment" for domestic travel is taken as being within 80 kilometres (or fifty miles) of home. Any travel to a Canadian location less than that distance is not considered "domestic tourism" in the TSA.

### *Tourism Expenditures*

The next most important concept of the TSA is that of tourism expenditures. Following from the WTO/UN definitions of tourism again, the TSA defines total tourism expenditures as the sum of goods and services purchased by visitors before, during and after a trip. This includes both same-day visitors, and tourists (overnight visitors), as well as business and government employee travellers. This again excludes certain types of travel expenditures such as travel expenditures by diplomats, military and immigrants.

The TSA includes only direct current personal expenditures plus business and government employees' travel expenditures. In accordance with WTO/UN definitions, The TSA does not include investment expenditures on tourism capital or government expenditures on tourism services and public infrastructure capital as part of tourism expenditures. However, the TSA will make this supplementary information available at a later stage of development (but not as part of tourism expenditures).

### *Tourism and Non-Tourism Commodities*

Given these broad definitions of tourism activity and tourism expenditures, the TSA then further specifies both tourism and non-tourism commodities, as well as tourism and non-tourism industries. It then uses Input/Output tables to allocate the interlocking flows of commodities to tourism and non-tourism industries.

In the TSA, a good or service is referred to as a "tourism commodity" if

a significant part of its total demand in Canada is by tourists and same-day visitors. One example is accommodation because a substantial proportion of its demand comes from tourism. Commodities with low tourism consumption rates are referred to as “non-tourism commodities”. However, two exceptions exist in the definitions of tourism commodities included in the Account: urban transit and parking. The TSA includes these as tourism commodities even though the total demand accruing from tourism is not significant because many tourists and same-day visitors use these services, especially in major urban areas. Without these commodities, tourism to many major urban areas would be significantly reduced.

### *Tourism and Non-Tourism Industries*

Similarly, a “tourism industry” is defined as an industry which relies on tourism for a significant part of its revenue. Thus a “tourism industry” is defined within the TSA by two criteria: it would cease to exist without tourism, or it would continue to exist only at a significantly reduced level of activity. Respective examples include air transportation and food and beverage services.

“Non-tourism industries”, such as the retail food stores industry would continue to exist without tourism or would exist without a significant reduction in their level of activity, even though food purchases by tourists and same-day visitors are important for this industry, especially in certain locations.

Several important implications emerge here in the way that the TSA views the economic activity associated with the consumers of tourism. First, not all goods and services purchased by tourists and same-day visitors are tourism commodities. In addition to passenger air transportation and accommodation, visitors also purchase clothes and groceries. Conversely, many tourism commodities, such as meals, are also purchased by non-visitors.

Again, from an industry perspective, many tourism industries also supply non-tourism commodities. For example, the accommodations services industry also produces revenues from the sale of goods and equipment. In this case too, the converse also applies. Meals are supplied to visitors by cafeterias in retail stores as well as in licensed restaurants and hotels.

## **Methodology**

What the Account provides is a methodology by which demand side data from expenditure surveys (eg. household surveys on travel) are brought together in special tourism specific Input/Output tables with data from supply side surveys from the industries producing “tourism” commodities, such as accommodation, transportation, food and beverage services, etc. Only in this way can a proper balance be achieved between supply and demand relating tourism in the economy. Similarly, only through this process can tourism GDP (value added) be calculated.

The derivation of the Canadian TSA from the I/O framework starts with the demand side data, because tourism output, unlike other industries, is determined by the purchaser’s activity - tourism. Because the “tourism industry” and “tourism” are fictions — in normal economic statistics — the “industry” must be created from other industries. This involves first determi-

ning what commodities visitors purchase. In Canada's case, this is primarily done through a domestic household survey — the Canadian Travel Survey — but other sources of data are also used including four interrelated border surveys of Canadians travelling outside of Canada and non-residents travelling in Canada.

In this way, the TSA provides separate estimates of personal expenditure disaggregated by commodity and industry for the three basic forms of tourism identified in the UN/WTO classifications: domestic tourism, inbound tourism and outbound tourism.

Once the commodity detail has been determined, the supply side must be addressed, as it is from the supply side that industry GDP is determined in the I/O tables. However, most industries do not produce just one product, nor are tourism commodities produced solely by one industry, or even all "tourism industries" identified in the Account. For example, visitors may purchase meals from any and all of restaurants, hotels, chip wagons, and retail stores. Similarly, meals are produced by canteens as well as restaurants, hotels etc., but it is very unlikely that visitors will purchase meals from a canteen. In addition, while restaurants and hotels sell alcoholic beverages as well as meals and accommodation, alcohol may also be purchased in stores. All have different input structures.

Accordingly, to the extent that the data permit, industry output for "tourism" industries has to be purified of non-tourism output. Similarly, to the extent possible inputs that are not related to tourism output have to be separated. For non-tourism industries producing tourism products, the same process is involved — to identify that portion of their outputs and inputs that is directly related to sales for tourism demand. Once the data have been "cleaned" of non-tourism aspects, the supply and demand of tourism products can be brought together.

In this way, the features of tourism demand — in part final demand, in part intermediate consumption — are confronted with tourism supply. The demand for each tourism commodity is assessed against the supply of each commodity, produced by both tourism and non-tourism industries.

Through these calculations the TSA provides internally consistent and balanced tourism data. Thus, all estimates are cross validated several times. The TSA requires a balance between the supply and demand for every commodity as well as between the inputs and outputs of every industry. The TSA specifically states that: "The total supply of each tourism or non-tourism commodity must equal the sum of its tourism and non-tourism demand. Similarly, for each tourism and non-tourism industry, gross output, which corresponds to the sum of all revenues, must equal the sum of all inputs or production costs, including returns to both labour and capital."

The use of the I/O framework provides the additional computational tool and elements necessary to derive tourism value added or GDP for Canada— the removal of inputs for non-tourism outputs in each industry. Simply put, this amounts to:

Tourism GDP for industry n =  
 Total supply by industry n,  
 Less non-tourism supply by industry n,  
 Less inputs into industry n not related to tourism output.

## Difficulties and challenge

As with all statistical exercises that require balancing data from different sources and surveys, there are inevitably problems. To try and overcome these difficulties, statisticians must analyze the data at a very detailed level to impute values for those areas where data are incomplete, misleading or merely wrong. For example, the Canadian Travel Survey asks Canadians for their travel expenses over the previous period (usually a month or a quarter) by type of expenditure, for several commodities, such as travel, accommodation, food. Frequently, however, the traveller is unable to answer all the details and provides a total, whereas in some instances, not even a total is provided. In cases where data are incomplete, similar characteristics of travellers are found in the data base and used to impute values for those empty or apparently incorrect cells.

In other instances, available expenditure data indicated a substantially lower proportion of total output than might be expected from the supply data. In these cases further adjustments are necessary.

In other cases, no equivalent supply data existed; such as, when we found \$166 million of tourism expenditures from the demand side on private cottage and recreational property rental with no corresponding balance from data on domestic supply. In this case the total demand was adjusted downward, until a means of estimating imputed rents for cottages and recreational properties can be included in the Account.

Other difficulties with supply side data emerged because the commodity produced is rarely, if ever, 100% purchased by visitors or the data on the commodity supplied are not "clean". Here again adjustments to the data are required to remove non-tourism commodities, as far as possible. One typical example in rail and air transportation involves removing the data on shipments of freight.

One area of particular difficulty is package tours. How are these totals allocated across commodities that are "wrapped" into one package? How are airfares separated from accommodation costs or food services, or other commodities? The approach taken by Statistics Canada was to find in the demand side data travellers with similar characteristics (destination, time away, etc.) who had been able to identify separately these costs and substitute their commodity shares. This assumed that the costs to the operators are the same, regardless of the type of traveller. This might not be strictly true, but it is nevertheless a reasonable working assumption.

Other difficulties emerged in the process of examining the inputs into the various producing industries to derive the GDP of tourism. Again, this process required additional assumptions and imputations. Not all the input data for the various industries were as "clean" as would be liked. That is for several industries the data for tourism commodities were not readily separable from non-tourism, and the same applied for non-tourism industries that provided outputs purchased by visitors.

A further set of assumptions were necessary with regard to the production functions of the tourism and non-tourism parts of the component "tourism" industry. The remaining inputs, both primary and intermediate were assumed to be proportional between the tourism and non-tourism outputs. That is, if 30% of the output of an industry has been identified as tourism, then all the remaining inputs (after having removed the non-tourism features) are assumed to have 30% attributable to tourism. Again this is a

reasonable assumption for the most part. Restaurant input structure, for example, will be the same whether the output is tourism or non-tourism. But, in other instances such as rail transport it may be more questionable.

Another challenge arises from the questionable timeliness of the reference year data in the Account. The current set of TSA results pertain only to 1988. That was the latest year for which all the required sources of data were available when development work was initiated to build the new Account. Given that the data in question are now seven years old, are they still relevant?

Obviously, in 1995 the data appearing in the first version of the Account already appear dated. However, more current updates are expected in the near future. Now that the initial core Account has been constructed updates are a much simpler exercise.

### **Selected detailed results**

Table 1 shows the resulting TSA estimates of travel-related expenditures made by Canadian and non-resident visitors on domestic commodities in 1988. The first significant result that stands out is the total tourism demand in Canada. The TSA indicates that the total of all tourism purchases made in Canada amounted to \$30.3 billion dollars in 1988. This figure is even larger than the largest previous official estimate of \$24.2 billion for that year.

Out of this \$30.3 billion, \$3.7 billion were commodity taxes, constituting seven percent of all commodity taxes levied by all levels of government in Canada in 1988.

In the sixth column of Table 1, the commodity distribution of this \$30.3 billion shows that over 40 percent of these tourism dollars were spent on commercial and private transport, 13 percent on accommodation, 19 percent on food and beverage services, 8 percent on other tourism goods and services (commodities) such as recreation, entertainment and travel agency services, and 16 percent was spent on commodities such as groceries, souvenirs, clothing, camping equipment and such things. A few noteworthy findings are:

- Domestic air transportation services were purchased for the most part by visitors (92% of the total domestic supply) and accounted for 20% of total tourism demand (and nearly half of all tourism expenditures on transportation).

- Accommodation services were also heavily tourism supported, with about 90% of all tourism supply of this commodity being tourism purchases, but as proportion of total tourism expenditures accommodation was about one eighth.

- Tourism expenditures on meals (from restaurants and hotels, etc.) accounted for one fifth of total tourism expenditures. Meals purchased from restaurants by visitors was a relatively high 26% of total domestic supply, while accommodation services' sales of meals to visitors was slightly over half.

Table 2 shows TSA estimates of the value added of both tourism and non-tourism industries from performing tourism economic activities, that is supplying the commodities shown previously directly to visitors.

Overall, in 1988 tourism generated \$13.4 billion of direct value added in the Canadian economy, of which \$10.0 billion came from the tourism in-

dustries, and \$3.3 billion from the non-tourism industries.

The second column of this table shows that this \$13.4 billion in direct value added resulted in 467,000 full time equivalent jobs in the Canadian economy.

Column four shows that tourism activities in all industries averaged about 29,000 dollars of GDP per full-time equivalent job. The industry breakdown of this average ranges from a high of 54,000 dollars for the transportation industry to a low of 16,000 dollars for the food and beverage services industry. In comparison, non-tourism activities in all industries averaged about 49,000 dollars of GDP per job.

Table 3 shows another output of the new Tourism Satellite Account, the composition of tourism and non-tourism GDP by industry. One notable feature here is found in the comparison of line seven with line eight in this table. The labour income portion of the GDP attributable to tourism activities is about twenty-two percent higher than the corresponding figure for non-tourism activities — 66 percent for tourism activities versus 54 percent for non-tourism industries. This twelve percentage point differential indicates the more labour intensive character of tourism economic activity.

This output of the TSA also reveals that the twelve percentage point differential in the returns to labour is gained at the expense of returns to capital, shown in the "other operating surplus" category which is equivalent to the combination of corporation profits, interests, dividends and any depreciation charges.

Column four of Table 3 reveals another result of the of the new TSA, the relative importance of tourism activity for each of the tourism industries.

One surprising finding here is that in 1988 in Canada only 30 percent of all GDP generated by the tourism industries comes from supplying commodities to Canadian and non-resident visitors.

As one would expect, not all tourism industries benefited equally from tourism. In this instance, the food and beverage services industry has only 23 percent of its GDP attributable to tourism, while the accommodation industry results show a much larger percentage of 67 percent.

Two reasons lie behind the low thirty percent tourism share of all GDP generated by tourism industries in Canada. First, as noted just previously, a substantial portion of the output of tourism services, such as food and beverage services, is purchased by non-visitors. This result was also found earlier in the fifth column of Table 1. Second, as was also mentioned earlier during the discussion of basic definitions underlying the Account, many tourism industries produce, and gain substantial revenues from, non-tourism commodities. One very significant instance in Canada is freight transportation in the air transport industry.

Table 4 introduces yet another set of outputs from the new Satellite Account for tourism, estimates of the relative importance of tourism in the total business sector of the economy, both in terms of GDP and employment.

In this table, line seven showing "Total tourism activities" indicates that tourism activities in the business sector account for 3 percent of all GDP generated in the economy by that sector. Moreover, other results in the same table show that 5 percent of all employment in the business sector is attributable to tourism. Or, in other words, we can say that 5 percent of all employment in the business sector exists because of tourism in Canada.

As indicated, here and elsewhere in the Account results, tourism activities tend to be more labour-intensive than non-tourism activities.

## Summary of main results

Aside from the particular detailed results described above, the most important general findings were as follows:

-The tourism GDP of tourism industries was 2.3% of the Canadian business GDP at factor cost. The tourism GDP of non-tourism industries (mainly retail) was a further 0.8%.

-Domestic tourism expenditures by households (part of final demand) amounted to 3.8% of Canadian GDP at market prices.

-Exports of tourism were 4% of Canadian total exports, but 37% of Canadian exports of services.

-Canada is a net importer of tourism, with imports amounting to over 50% more than exports.

## Other application

The recent release of these first results of the new Canadian Tourism Satellite Account demonstrates that the concept of a Satellite Account for tourism is no longer merely an abstract theoretical construct. The results just shown are both significant and relevant to the long standing need for comprehensive statistical estimates describing the otherwise fragmented economic activity of tourism.

As time series of tourism estimates from the Account become available, it will be possible to study the evolution of tourism related industries with a precision never previously possible.

It is quite possible that the internal structure of the industry has changed significantly since 1988. A number of new conditions have emerged in the interval that could lead to significant changes in tourism production functions. For example, while as yet no definitive evidence exists, the structure of tourism related industries in Canada has likely been affected by both the Free Trade Agreement with the United States in 1989 and the North American Free Trade Agreement of 1993. Furthermore, other evidence from econometric forecasting models suggests that the structure of North American tourism demand has been significantly affected by the recession of the early 1990's, the introduction of a Canadian value added tax in 1991 and major exchange rate fluctuations since 1993. Successive versions of the TSA result will provide for the first time a comprehensive and consistent basis for examining such structural changes.

A second major application question relates back to the original primary benefits of the Account — how do the tourism industry's results from the Account compare on an industry-by-industry basis with other sectors of the economy. Further work in progress indicates that this important potential benefit of the Account is indeed feasible.

Such cross-industry comparisons will provide specific details on the relative importance of the Canadian synthetic tourism industry on a range of key economic variables. Some currently being examined include gross output, exports, labour income, net income of unincorporated businesses, other operating surplus, value added, persons employed, labour compensation per person employed and value added per person employed.

Initial results of this Canadian cross industry comparison suggest that the synthetic Canadian tourism industry is one of the largest and most important industries in Canada. In particular, this new synthetic industry ranks

in the "top ten" in terms of total revenues, exports, total labour income and employment.

Furthermore, for most economic variables, the synthetic tourism industry ranks ahead of many leading manufacturing industries in Canada, such as motor vehicles and primary metals, and ahead of all resource sector industries agriculture, fishing, mining, logging and forestry, and petroleum and natural gas.

### **Comparisons with other approaches and estimates**

As mentioned at the outset, one of the primary long standing needs of the tourism industry has been to measure the economic contribution of tourism to the rest of the economy, and to do so in away that is recognized as justifiable and credible. Within Canada, tourism has now achieved this goal! The development of a Tourism Satellite Account as an extension of the Canadian System of National Accounts and the publication, by Statistics Canada, of the resulting estimates for its first year provides that credibility.

Despite this recent progress, divergent industry figures continue to pose credibility challenges. Usually these figures on the volume and economic significance of tourism in Canada, or similar statements for selected sectors such as accommodation or food services, emerge from other independent industry sources such as research institutes, industry associations and lobby groups. Sometimes, however, the divergent figures emerge from international organizations' treatment of Canadian base data.

The emerging OECD Tourism Economic Accounts (TEA) represent one such potential source of contradictory estimates of tourism GDP. In general terms, however, the apparent conflict is indirect, since as yet, the TSA and the TEA do not produce directly comparable results. Furthermore, where direct comparisons can be derived, such as in calculations of tourism related GDP, the TEA provides much cruder estimates than those derived from the TSA.

There are five tables to the TEA but for comparative purposes only tables 1 and 2 are relevant. Table 1 provides data on the supply and demand of a number of tourism characteristic products at the 2-, 3- and 4- digit level. Supply is from both domestic production and imports. Demand is for personal, business and government as well as for non-residents.

In cases such as Canada's, where all or most data are provided, a reasonable indication of total supply and demand for tourism products is possible for some outputs such as accommodation, transportation and meals. While supply of many of these products will be for more than tourism purposes, total tourism supply can be determined by the commodity detail from the demand side. However, tourism GDP cannot be determined from this table by itself.

Instead, Table 2 of the TEA provides data on gross output, intermediate consumption and gross value added (GDP) — with returns to capital and labour — for those industries which produce the tourism characteristic products of Table 1. However, as these industries produce more than one product and as some of their output is purchased by non-visitors, deriving their tourism GDP is not possible without making some very heroic assumptions.

Nonetheless, where all the required data are available, the following can be estimated. From table 1 the characteristic tourism output for each product is determined from the demand side. The proportion of that gross

output that is tourism related could then be assumed to be the same across all industries producing that output, and so applied to the value added for those tourism industries in Table 2.

Compared with the more disaggregated TSA approach, this method is very crude, because as has been mentioned previously there is rarely, if ever, a one to one relationship between an industry and a commodity in tourism. Most industries produce more than one product, and most tourism products are produced by more than one industry. As a result, production functions for these different industries vary substantially. Moreover, even within one commodity, such as accommodation, there is a vast difference between the production function for the provision of hotel accommodation and that for camping sites. The importance of this distinction is dependent on the importance within each country of the relative weights of the different products within each commodity grouping.

An indication of the disparities that emerge from the results of this approach can be obtained by comparing the Canadian numbers for the TEA with those for the TSA.

In the case of this comparison of the treatment of tourism supply using the two different approaches the results are very close in the case of accommodation. For the other three, however the results are quite different although the relative magnitudes and direction of difference are consistent, and may not therefore fundamentally affect the overall picture that emerges.

In the case of difference in definition and estimation of GDP between the TSA and the TEA, however, the differences are clearly more substantial.

One obvious difference here is that in the TSA, the GDP figure is related to passenger rail transportation for tourism only whereas in the TEA the estimate is much more inclusive representing all rail transportation including all passenger types (tourism and non-tourism) and freight.

Similar differences can be found in comparing "tourism ratios" - the tourism share of domestic supply) from Table 1 in both the TSA and the TEA.

One further problem between the TEA and the TSA is their respective treatment of package tours. In the TEA, there is a strong preference for package tours to be treated on a gross basis, whereas for the TSA they must be included on a net basis only, as the output of the industry is considered to be the packager's margins rather than the individual components of accommodation, meals, etc.

Currently, investigations and discussions are between Canada and OECD are attempting to specify and explain these differences. The resulting knowledge and understanding gained will hopefully result in improved reports for the future, that acknowledge and reference for all readers the differences, their causes and their significance.

## **Future development**

The work reported to date from the Canadian Tourism Satellite Account is only the first product of this long term development project. To date only the first layer of the core Account has been developed. A number of further improvements and expansions are planned or foreseen in the future:

- One immediate priority for the next year is to update the Account for 1990 and 1992. The output data need to be more timely.

- As part of the Satellite Account release, Statistics Canada also announced the work in progress in developing a Tourism Input/Output Impact Model associated with the Account. This supplementary tool will provide a means of measuring the indirect economic effects associated with tourism, while still remaining within the same economic framework as the TSA. This forthcoming new product of the Account will be applied in the near future to ongoing industry decisions.

- Another application under investigation is the development of a series of regularly reported (quarterly) industry performance indicators anchored to the Account.

- Another key requirement is the preparation of documentation of the sources and methods used in developing the account calculations.

- Other future developments include expanding the Account to include the other layers and modules (such as human resources) described in the original concept paper presented to the World Tourism Organization, and provincial/regional versions of the account.

- Lastly, consideration is being given to the measurement of certain additional components not yet in the TSA such as, quantitative measures and characteristics of tourism activities, imputed rent on vacation homes, depreciation on vehicles used for tourism, fixed capital formation (public and private) attributable to tourism, current government expenditure on tourism and related activities, spending by hosts for their visitors, indirect impacts, expenditures on bank charges, travel insurance, currency exchange and commissions, and further desegregation and identification of expenditures on recreation and entertainment.

As more products emerge from the Canadian Tourism Satellite Account and similar projects in other countries, we will no doubt gain new knowledge of the tourism industry and discover many new applications. At the moment our situation is a bit like that of Galileo and the telescope — the potential is exciting, but only a few of the possibilities can be foreseen at this time.

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\* Whilst this paper is the result of the combined effort of the authors, specific content of sections 2, 3, 4 and 5 is attributable respectively to Federico Di Leo, Susanna Mantegazza, Stefano Pisani and Sandra Maresca.

<sup>1</sup> UN and others (1993)

<sup>2</sup> EUROSTAT (1994)

<sup>3</sup> A more in-depth treatment of this subject may be found in ISTAT (1995) section 4.3, shortly to be published

<sup>4</sup> The English acronym for *Classification of Individual Consumption by Purpose*

<sup>5</sup> The English acronym refers to *Classification of Household Expenditure by Purpose*

<sup>6</sup> This change in perspective may have an impact on the estimate of the tourist industry as will be seen later.

<sup>7</sup> According to the French acronym this refers to *Produits de Consommation des Ménages* (Products consumed by families).

<sup>8</sup> The OECD (1995) document includes the OECD proposal for a revision of COICOP.

<sup>9</sup> See OECD (1991) page 63.

<sup>10</sup> See UN and others (1993) page 215. Individual consumption also takes into account a part of Government expenditure in other sectors (housing, refuse collection, operations

regarding the transport system) which, however, do not affect tourism in a significant manner. The code mentioned in the quote is part of the COFOG classification.

<sup>11</sup> That part of Government expenditure in favour of individuals can be identified within recreational and cultural expenditure of the COFOG. This point is an important consideration inasmuch as it tends to exclude the contribution of expenditure for social well-being and security services in the evaluation of an enlarged view of the tourism sector.

<sup>12</sup> As far as effective consumption is concerned ESA95 makes reference to items 8.1 (Sport and recreation) and 8.2 (Cultural services) of the Classification of the Functions of Government (COFOG) developed at the same time as COICOP.

<sup>13</sup> See ISTAT (1995) section 4.5

<sup>14</sup> See UN and others (1993) page 233

<sup>15</sup> See OECD (1991) page 64

<sup>16</sup> The value of newly-constructed hotels, for example, is reported in the category of non-residential construction together with other constructions destined for entirely different uses.

<sup>17</sup> See OECD (1991) page 35

<sup>18</sup> See ISTAT (1991)

<sup>19</sup> One of the principal sources for the estimate of capital formation in Italy is the *Annual survey of the economic accounts of business* that is based on data from a large number of businesses which can be identified by business sector to a degree which is adequate for producing an economic account of capital formation for tourism.

<sup>20</sup> See ISTAT (1993)

<sup>21</sup> For a complete review of Italian problems in applying ESA95 see ISTAT (1995).

<sup>22</sup> UAEL coincides with the introduction of SNA93.

<sup>23</sup> From this standpoint ESA95 identifies three types of activity, that is: principal, secondary and ancillary. The first is that activity in which the value added is greater than that of all other activities in the same unit. Secondary activity is an activity carried out within a single local KAU in addition to the principal activity. The ancillary activity is a support activity carried out within a business in order to create suitable conditions for the pursuance of the principal or secondary activities of the local KAU (it is considered an integral part of the principal or secondary activity).

<sup>24</sup> For an analysis of relationships existing between supply and use tables and symmetrical input-output tables see ISTAT (1995) section 6.2.

<sup>25</sup> On this subject see Archer (1984) and Costa (1984), for a more recent application in Italy see Costa and Manente (1993).

<sup>26</sup> With regard to illegal activities, included are those which give rise to an operation (as in the sale of drugs) whereas those acts leading to a redistribution or destruction of assets (such as theft, blackmail and extortion) are not included.

<sup>27</sup> The methodology is based on the procedure outlined in Franz (1985).

<sup>28</sup> See ISTAT (1995)

<sup>29</sup> See SNA93 and ESA95

<sup>30</sup> See Lapierre J. and Hayes D. (1994)

<sup>31</sup> See OECD (1991)

<sup>32</sup> See Braibant (1994)

<sup>33</sup> See SNA94

<sup>34</sup> See SNA94

Table 1  
Tourism Expenditures by Commodity, Canada, 1988

Commodities	(1)	(2)	(3)	(4)	(5)	(6)
	Domestic Demand	Exports	Total Tourism Demand in Canada	Total Domestic Supply	Tourism Share In Total Domestic Supply	Distribution of Total Tourism Demand In Canada
	Millions of Cdn\$				Percent	
Passenger Air Transport	4,968	1,077	6,044	6,566	92.1	19.9
Owned Vehicle	4,673	650	5,324	20,557	25.9	17.5
Other Passenger Transport	1,319	606	1,925	4,249	45.3	6.3
All Transportation	10,960	2,333	13,294	31,372	42.4	43.8
Accommodation	2,824	1,051	3,875	4,131	89.8	12.8
Food and Beverage	4,186	1,499	5,685	22,206	25.6	18.7
Other Tourism Commodities	1,919	637	2,556	7,889	32.4	8.4
Other Commodities	3,915	1,014	4,930	--	--	16.2
All Commodities	23,805	6,535	30,340	--	--	100.0
Of Which: Taxes	--	--	3,713	--	--	--

-- Figures not appropriate or not applicable.

Source: Tourism Satellite Account, Statistics Canada

Table 2  
Tourism GDP and Employment by Industry, Canada, 1988

Industry	(1) GDP at Factor Cost	(2) Persons Employed	(3) Labour Compensation Per Person Employed	(4) GDP Per Person Employed
	Millions of Cdn\$	Thousands of FTEs <sup>a</sup>	Cdn\$	Cdn\$
<b>Tourism Activities:</b>				
Transportation	4,141	77.3	34,600	53,600
Accommodation	2,717	129.0	15,700	21,100
Food and Beverage	2,026	123.6	13,400	16,400
Other Tourism Industries	1,155	32.0	21,700	36,400
<b>Total Tourism Industry</b>	<b>10,039</b>	<b>361.6</b>	<b>19,500</b>	<b>27,800</b>
Other Industries	3,338	105.5	23,000	31,600
<b>Total Tourism Activities</b>	<b>13,377</b>	<b>467.1</b>	<b>20,300</b>	<b>28,600</b>
<b>Total Non-Tourism Activities<sup>b</sup></b>	<b>430,497</b>	<b>8,704.3</b>	<b>31,100</b>	<b>49,500</b>
<b>Total Business Sector</b>	<b>443,874</b>	<b>9,171.4</b>	<b>30,500</b>	<b>48,400</b>

<sup>a</sup> FTEs stands for "full-time equivalents".

Source: Tourism Satellite Account, Statistics Canada

Table 3  
Composition of Tourism and Non-Tourism GDP, Canada, 1988

Industry	(1) Total Labour Income	(2) Net Income of Unincorporated Business	(3) Other Operating Surplus	(4) Total	(5) Tourism Share of Industry's GDP
	Percentage				
<b>Tourism Activities:</b>					
1 Transportation	62.8	1.7	35.5	100.0	30.5
2 Accommodation	67.9	6.6	25.5	100.0	66.6
3 Food and Beverage	76.2	5.4	18.3	100.0	23.2
4 Other Tourism Industries	51.6	8.0	40.5	100.0	23.9
5 Total Tourism Industry	65.6	4.5	29.9	100.0	32.0
6 Other Industries	69.2	3.6	27.2	100.0	--
7 Total Tourism Activities	66.5	4.3	29.2	100.0	--
8 Total Non-Tourism Activities <sup>b</sup>	54.3	8.5	37.2	100.0	--
9 Total Business Sector	54.7	8.4	36.9	100.0	--

-- Figures not appropriate or not applicable.

Source: Tourism Satellite Account, Statistics Canada

Table 4

## Share of Tourism and Non-Tourism Activities in Total Business Sector GDP and Employment, Canada, 1988

	Industry	(1) GDP at Factor Cost	(2) Employment
Percentage			
	<i>Tourism Activities:</i>		
1	Transportation	0.9	0.8
2	Accommodation	0.6	1.4
3	Food and Beverage	0.5	1.3
4	Other Tourism Industries	0.3	0.4
5	Total Tourism Industry	2.3	3.9
6	Other Industries	0.8	1.2
7	<b>Total Tourism Activities</b>	<b>3.0</b>	<b>5.1</b>
	<i>Non-Tourism Activities:</i>		
8	Agriculture	2.6	5.1
9	Fishing and Trapping	0.3	0.5
10	Logging and Forestry	0.8	0.6
11	Mining and Oil Wells	4.6	1.6
12	Manufacturing	23.6	20.9
13	Construction	8.2	8.3
14	Transportation and Storage	4.2	4.3
15	Communications	3.3	2.3
16	Other Utilities	3.9	1.2
17	Wholesale Trade	6.3	6.5
18	Retail Trade	7.3	15.5
19	Finance Ins. and Real Estate	18.7	7.2
20	Business and Personal Services	13.3	20.9
21	<b>Total Non-Tourism Activities</b>	<b>97.0</b>	<b>94.9</b>
22	<b>Total Business Sector</b>	<b>100.0</b>	<b>100.0</b>

Source: Tourism Satellite Account, Statistics Canada



**SESSION 5**  
**THE STRUCTURE AND THE ANALYSIS OF**  
**TOURIST DEMAND**



# INTERNATIONAL PASSENGER SURVEY IN THE UNITED KINGDOM

By G.GOODWIN

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*Central Statistical Office, UK*

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Government uses  
Balance of Payments, Travel Account  
International Migration  
Informing Tourism Policy  
Travel Information on Routes  
Fares information  
Consumers' spend on package holidays  
Alcohol and Tobacco purchases

## **What is the IPS?**

- 200,000+ face-to-face interviews with passengers as they enter or leave the UK by the principal air, sea and tunnel routes;
- stratified by route, mode of transport, and time of day/week;
- response rate of 85%+, rising to 90%+ with minimum information.

## **DATA COLLECTED**

### **VARIABLES BY**

- number of visits
- purpose of visit
- total expenditure
- country of residence
- length of stay
- age and sex
- fares
- main country visited
- regions in UK

### ■ **DATA COLLECTED PERIODICALLY**

- Expenditure on specific types of goods and services;
- Type of accommodation used by overseas residents;
- States of residence of overseas residents visiting the UK;
- Use of regional airports;

### ■ **DATA COLLECTED PERIODICALLY**

- Reason for business trip

- Alcohol and tobacco purchases
- Travel trends, including income
- Method of transport
- Kilometres driven and fuel consumption

#### ■ IPS CUSTOMERS

- Central Statistical Office
- Department of National Heritage
- British Tourist Authority
- OPCS Migration Unit
- Home Office
- HM Customs and Excise
- Department of Health
- Ministry of Defence
- Department of Environment
- Department of Transport
- Foreign Office
- Civil Aviation Authority
- British Airways
- Eurotunnel
- Manchester Airport
- European Passenger Services
- Other Private Sector Companies
- International Organisations
- Academics
- The Wider Public

#### PUBLICATIONS

##### MONTHLY FIRST RELEASES

Available: CSO, Enquiries 0171-270 6363/6364

##### ■ QUARTERLY BUSINESS MONITORS

■ available: HMSO, Enquiries 0171-873 9090

##### ■ - ANNUAL BUSINESS MONITOR

■ available: HMSO, Enquiries 0171-873 9090

##### ■ MARKETING AGENTS

■ - "IPS SALES" (SH&E and Steer Davies Gleave) enquiries: 01342-300589

##### ■ INFORMATION RESEARCH NETWORK

■ enquiries: 0171-416 8107

■ MDS TRANSMODAL enquiries: 01244-348301

##### ■ PRODUCING NATIONAL ESTIMATES

- initial weight = sampling interval
- non-response by nationality group
- minimal responses by residence
- out-of-hours traffic by arrivals/deps and origin/destination
- grossed to actual traffic volumes
- adjusted for "imbalance"
- add-ons (Irish, cruise travel, Channel Isles expenditure)

#### EU DIRECTIVE

- accommodation annually

- social class/occupation
- expenditure trailer
- accuracy of sample survey on monthly basis
- method of analysis (exclude nil-nights, children)

■ ACCURACY LEVELS

- Sampling Errors
- 95% Confidence Intervals for 1993

Overseas residents visiting the UK	+/- 1.0 per cent
Visitor Nights and earnings	+/- 2.2 per cent
US residents to UK	+/- 2.2 per cent
Former Yugoslavia residents to UK	+/- 28.9 per cent
By Quarter: Number of Visits	+/- 1.9-2.4 per cent

ACCURACY LEVELS

Sampling Errors	
95% Confidence Intervals for 1993	
UK residents visiting abroad	+/- 0.7 per cent
Visitor Nights and expenditure	+/- 1.6 per cent
UK residents to France	+/- 1.9 per cent
UK residents to Former Yugoslavia	+/- 34.9 per cent
By Quarter: Number of Visits	+/- 1.2-1.6 per cent

Invitation

- Discussion and documentation on the UK survey
- Observation of interviewing on Ferries, at airports or through the Channel Tunnel
- Data disks with records of UK residents visiting individual countries and vice versa (but at a cost!)

...the ...

# INBOUND TOURISM: FROM BORDER- TO ACCOMMODATION-SURVEY

Roel WITTINK

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*Statistics Netherlands*

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## **1. Introduction**

Statistics Netherlands produces statistical information on several aspects of the Dutch society. One of these aspects is tourism.

During almost half a century the section Tourism and Leisure Industry gathers information on the capacity and use of accommodations in the Netherlands. This 'Tourism Accommodations' survey - on the supply side of the tourism economy - functions as a base for producing figures on the number of guests and overnight stays in that accommodations. Next to the results of this survey we also produce data on products, business sales, investments and employment in the tourism industry.

Another survey - on the demand side - amongst a sample of the Dutch population gives insight in the spending and characteristics of the Dutch tourists. The same sort of data from foreign tourists is seen as an essential piece of information to make the insight in the Dutch tourism industry more complete. The gathering of this information unfortunately is not part of the regular program of Statistics Netherlands.

As a supplement to that program - and financed by the Department of Economic Affairs - a survey on this demand-side subject has been held three times until now. A more detailed description of the spending and characteristics of the foreign tourists has been produced for the first time in 1979. The survey 'Inbound Tourism' has been repeated in 1984 and with the latest survey of 1993/94 we are able to present the most recent profile of the foreign tourists visiting the Netherlands.

## **2. Inbound tourism in revision**

In 1979 and 1984 the research on inbound tourism was conducted by interviewing tourists at the border at the moment they were leaving the Netherlands. One of the consequences of opening up the borders between the countries in the European Community is that conducting a border-survey on tourism became much more complicated.

Especially interviewing travellers by car became problematic and they are a to important category foreign tourists to deny. For the purpose of illustration, car-users represent more than 50 percent of the total of foreign tourists visiting the Netherlands.

In the survey of 1993/'94, foreign tourists were interviewed at the moment they were leaving the accommodation. The interviews were held at accommodations like hotels or similar establishments, tourist campsites, holiday dwellings or other collective accommodations.

One of the implications of this method is that the population under research didn't include tourists on daytrips and those who resided in a boat, their second home or exclusively with family and/or friends. Another difference with the 'Inbound Tourism' research of '79 and '84 is that the survey of 1993/'94 does not cover all existent accommodations. To create the population under research we used the data of the 'Tourism Accommodations'-survey. The lower limit for every identified accommodation-category in that survey is 20 bedplaces for hotels and similar establishments, 50 bedplaces for holiday dwellings and other collective accommodations and 400 bedplaces for tourist campsites. Although it does not cover all accommodations, the volume of this population is at least 90 percent of the total capacity.

We made another important amendment: the survey's of '79 and '84 only covered the summer-period whereas the interview-period in the latest survey was extended to a whole year. A last difference to mention here is that the accommodation-approach had the implication we could observe tourists travelling by train for the first time in an inbound tourism survey.

### **3. Inbound tourism revised**

Tourists were selected for an interview by a two-step sample-model. In the first step 1 400 interview-periods were spread at random over a sample of all observed accommodations. In this first step we took account of the following variables: the number of foreign guests in the accommodation, type of accommodation, region and the spread of the number of guests during the year. For all these data we made an appeal on the survey 'Tourism Accommodations'.

During every interview-period ten foreign tourist parties were interviewed at the day of leaving. A interview-period is one week.

A tourist party is a person travelling alone or a group of people travelling together which has collective spending during the trip.

One person of the tourist-party was interviewed. When many foreign tourists left at the same time, a time-span between every interview was taken of 10 to 15 minutes.

This method resulted in a sample of more than 400 tourism accommodations where 14 000 tourist party(members) were to be interviewed. Of this total, 7 000 were to be interviewed in hotels and similar establishments, 3 000 in holiday dwellings, another 3 000 on tourists campsites and 1000 in youth-hostels and other collective accommodations. Every accommodation was visited at least two times by the interviewers. The large accommodations were visited more than 25 times.

### **4. Fieldwork**

The fieldwork of Inbound Tourism 1993/'94 consisted of interviewing tourists. Interviewers were sent out to the accommodations equipped with laptops and the interviewee only had to answer questions in a language familiar to her or him. Interviewers inquired into questions like 'age', 'motive to visit the Netherlands', 'total spending', 'travel-mode', 'the composition of

the tourist party' and 'net income'. Each interview took only about five minutes.

The choice for this personal approach of the tourists was an outcome of a pilot-study in search for the most appropriate method.

Compared with for example a questionnaire which could be filled in by the tourists at the desk of the accommodation, this method resulted in a higher response and more reliable answers.

Before the sample was taken, we prepared a letter to introduce the survey 'Inbound Tourism' to the accommodations perceived by the survey 'Tourism Accommodations'. All accommodations, which reported more than 365 foreign guests in a year received this letter with a request for cooperation. Most of the sample consists of the accommodations which replied affirmative on this request. It took nevertheless a lot of time and effort to persuade the managers of a number of the large accommodations to cooperate to the survey. The main reasons for non-cooperation were reported to be out of respect for the privacy of the guests and the idea that it would bring along a lot of extra work. Especially in the last case we tried to convince the managers to cooperate with the argument that the pilot-study had shown that it wouldn't take that much of their time.

We also had to make some concessions to the sample-model by not burdening the large accommodations with too many interviews.

Another problem arose at accommodations that refused to cooperate while they gave their commitment for cooperation in first instance.

This could happen because of a change in the management, a renovation or a change of mind. To encounter these problem we build up a file of stand-in-accommodations which could be addressed at the moment of dropping-out of accommodations.

## 5. Response-rate

The fieldwork was done between october 1993 and october 1994 and resulted in total in 10 436 interviews. This number implies a response-rate of 75.

The reasons for the difference between the planned and realized number of interviews were the following: during some periods there were simply not enough or even no foreign tourists to interview.

This was mainly the case in autumn and winter. In a peak-period on the other hand some interviewers didn't reach the planned number of ten interviews per interview-period. In high-season for example too many foreign tourists left at the same time or in the time the interviewers were busy interviewing other guests. In the third place we had to deal with partial non-response which in most cases could be solved by imputation.

For the weighing-procedure the data of the survey 'Tourism Accommodations' did function as a important reference. The results of the survey 'Inbound Tourism 1993/'94' are consistent with 'Tourism Accommodations on the number of tourists and the number of overnight stays. We also reached consistency on the level of four types of tourism accommodations, four tourist-areas in the Netherlands, five regions on base of province and eight world geographical zones.

## **6. Inbound tourism to be continued**

The objective of the survey Inbound Tourism 1993/'94 was to get insight in the composition of the foreign tourist-stream coming to the Netherlands per geographical zone, reason for coming, age, the pattern of stay, the volume of the tourist party, pattern of spending etc. The outcome of the survey is that we have a clear impression now of which tourists visit our country. The results of the survey will be issued in the beginning of July 1995. The survey is essential in making an overview of the dutch tourist industry mre complete. It also enables policy-makers to make a profile of theforeign tourists visiting the Netherlands. The results are that encouraging that an accommodation-approach of inbound tourismresearch is worthwhile to be continued.

# COLLECTING INTERNATIONAL TOURISM EXPENDITURE STATISTICS. THE SURVEY FOR THE VENETO REGION

by Mara MANENTE and Valeria MINGHETTI

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*CISSET, Venice*

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## 1. Introduction

This paper presents objectives, methodology and organisation of the "Survey on tourist expenditure in the Veneto" carried out by CISSET on behalf of the Veneto Region, as part of a project of estimation of regional economic impact of the travel and tourism industry.

The whole project is developed in two phases:

- assessment of tourist expenditure in the Veneto, and in particular of the international component, through the survey here discussed;
- definition and analysis of the peculiar sectoral composition of the regional travel and tourism industry, cutting crosswise the productive system of the Veneto, and evaluation of its sectoral economic impact in terms of revenue, employment, balance of payments. The Input-Output methodology will be used to this end.

The results of the survey, which took place over one year (from May 1994 to April 1995), will outline the consumption behaviour of tourists who decide to stay overnight in the Veneto at least for one day, by distinguishing them by district (art cities, lake, sea, mountains and spa resorts), holiday resort, type of accommodation and origin. Excursionists, those who stay less than 24 hours in the holiday resort, were excluded. Their consumption behaviour and their choices are strongly influenced by the fact that they do not stay overnight: a specific survey aiming to define those peculiarities would have to be carried out.

In this context, therefore, the objectives of the survey are:

- 1) to describe the consumption habits of international tourists in the region, by evaluating their expenditure in terms of consumption functions and productive sectors. The questionnaire, as it is specified, connects such behaviour with the diverse socio-cultural features of tourists (country of origin, socio-occupational conditions, travel and holiday characteristics, etc.). Furthermore, because of the role of the Veneto in the Italian tourism market, the results for the region can be suitably extended over the local scale. The Veneto region is in fact one of the most representative in Italy as far as the international tourism movement and its typologies are concerned. In fact, it adds up to 4.3 million of international arrivals (20.4% of the total for Italy)

and 18.4 million nights (21.5% of the total for Italy). What's more, it contains an enormous number of tourist attractions: from the extensiveness and quality of the natural resources, especially the coastal areas and the mountains, to the wealth of particularly important historical, artistic and, more generally, cultural attractions, to the naturalist and spa resorts;

2) to represent the plot of interactions going from the tourist consumption to the tourism industry, by measuring the economic role of each step (direct, indirect, induced). The survey, which represents one of the implementations of the "travel expenditure estimation methods", is the first level of analysis for the assessment of economic impact of tourism. Costa and Manente (1995) discuss the methodology based on the building of multiregional-multisectoral input-output models which, starting from the tourists' purchases of goods and services, estimate the economic impact of the travel and tourism industry in a given area measuring direct, indirect and induced effects of added value, employment and balance of payments generated by sectoral and territorial interrelationships;

3) to contribute to the building of a regional informative system on tourism up-dated and up-datable, and suitable for research, planning and programming;

4) to allow comparisons with analogous implementations at a national and international scale. For this end, the survey was carried out according to the WTO's recommendations on the collection of international tourism expenditure statistics (WTO, 1994). In particular, since the breakdown of the expenditure by item is particularly important for measuring the effects of tourism on the economy, great attention was paid in the questionnaire to the level of detail. The seven categories recommended by WTO (Package travel, Package holidays and Package tours; Accommodation; Food and drink; Transport; Recreation, culture and sporting activities; Shopping; Other) were split into 46 items. At the same time, the consumption items were selected according to the consumption functions of the national accounts.

A number of 9300 questionnaires, 7600 to international tourists and 1700 to Italian tourists, were distributed throughout the whole accommodation system of the region taking into account the role of each tourist area and each resort, and then of each typology of means of accommodation (measured in terms of nights). The seasonal characteristics of international flows in each resort were also considered for the monthly distribution of the questionnaires.

The usefulness of collecting and estimating expenditure data is focused on in Session 2. In the following Sessions the paper, in comparison with the WTO recommendations, describes the methodology and the expenditure statistics issues that have been used for inbound tourism, and focuses on the problems and the difficulties encountered, and on the practical solutions it was necessary to adopt.

## **2. From tourists' purchases to the travel and tourism industry**

The discussion on the importance of implementing a data bank on tourist expenditure in order to evaluate the economic role of tourism into the whole productive system originates from the controversy on the subject: can all the activities linked in some way to tourism be identified in an industry?

At the root of the debate remains the peculiarity of the tourist industry:

the product and technology heterogeneity of the manifold activities setting it up, and then the complexity of its production which can be acknowledged and defined only where and when it is purchased by tourists. But:

- a) tourists can consume different goods and services at different moments and places;
- b) the whole of goods and services produced for tourists is complex and indefinable a priori once and for all;
- c) a few goods and services are only for tourists, the others are purchased in a small quantity by tourists, serving residents first of all.

This preliminary topic points out the key factor of the whole issue, namely the manifest centrality of the concept of tourist, from which it clearly emerges that the travel and tourism industry is a whole of "end use" activities not determined once and for all.

In addition, the centrality of the concept of tourist in the different fields of research explains why the most important statistics on tourism demand, those founded on the notion of arrivals (to the frontiers or to the means of accommodation) and nights, are traditionally devoted to the measure of flows and characteristics of tourists. Such data, basic and irreplaceable for the estimation and the analysis of tourist movement, are completely useless as economic indicators of the performances of the phenomenon compared with those of the remaining production sectors. For this end the same variables—production, revenue, employment—used for the other industries have to be taken into account.

These arguments pinpointed, the existence of the travel and tourism industry can be acknowledged only if we accept the concept of industry whenever among many sectors and organisations there is a whatever linkage able to change different products into one product, and which generates among the subjects such an aggregation function with a specific role and an accredited weight into the economic system (Wahab, 1975; Lundberg, 1976; Mc Intosh, 1977 e 1986). The contrary issues assert that because of the fact that this hypothetical industry can be defined only through an "end use" function, a distinct tourist product, produced with a specific production function by a well determined productive sector, does not exist (Chadwick, 1981).

In addition, the conceptual uncertainty of the existence of the travel and tourism industry—due to its multidimensional character and its distribution across the production system—and the consequent fuzziness of its definition and delimitation (Mieczkowski, 1981) has created a strong bond to the development of an informative system suitable for the economic description and analysis of the phenomenon following the same interpretative lines used for every other activity.

But once the concept of a travel and tourism industry has been approved, there can be no further justification for setting up an analysis, which by choosing a priori only a few activities—those supposed to be the more significant—agrees to adopt their evolution and their performances as being representative of the whole aggregate. Thus, the understanding of such an entity is the understanding of the plot of interdependencies going from the tourist consumption to the tourist production in all its complexity.

The most effective approach to fill in these gaps is the "Travel Expenditure Estimation Method" or "Demand Approach", which lies in deriving the tourist product and, tautologically, the activities belonging to the industry,

from what tourists consume. "Once travel expenditure estimates are produced by the appropriate expenditure model, the economic impact the expenditures generate can be simulated. Estimating the expenditures of individuals while travelling away from home is a formidable task", but "judging from the extensive literature on travel impact estimation, there is no consensus on the best approach" (Frechtling, 1994). The literature on the subject, in fact, describes eight major recognised approaches: direct observation, sample survey, bank returns, residual receipts models, seasonal difference models, supply-side judgmental models, cost factor models.

The survey here discussed is part of the "sample surveys" approach, and in particular of the "visitor survey" method since it has been conducted while travellers stay in the area.

### **3. The tourists' survey: a methodology for the collection of inbound tourism expenditure data in the Veneto Region**

The accurate evaluation of the impact that tourist behaviour has on the economy of the destination country and/or resort depends heavily both on the ability to capture the most important factors affecting the tourists' purchase habits and on the reliability of the information collected. From this latter point of view, the selection of an appropriate statistical collection methodology is crucial to ensuring the quality of the tourism expenditure statistics (WTO, 1994).

As for the former aspect, the most important factors affecting the features and the evolution of tourists' average expenditure per holiday are:

1) the country of origin. Manifold socio-cultural models may really favour varied consumption behaviours. Highly important is also the "exchange effect" conditioning frequently the destination choice and, once this has been selected, the amount of expenditures to be borne (that is true in particular for the mark and dollar area and more recently also for Japan);

2) the district and the chosen resort. Cultural tourism in cities of art, for example, is generally characterised by a very different pattern of expenditure in comparison to seaside, mountains or lake holidays. Moreover, stay spending may be quite different from one resort to another, even if overnighing is in accommodations of the same category (in Venice they are generally higher than those in Padua and Verona);

3) the type of accommodation chosen, hotels or other means. In the former case the level and the composition of the expenditure change depending on the hotel category (5-4 stars, 3 stars, 2-1 stars), in the latter depending on the specific solution chosen (camping/villages, rented accommodations, other structures) and on its qualitative level;

4) the length of stay, influencing the mode of transport to be chosen to reach the holiday resort and the means of transport for local excursions, as well as the type of accommodation and, more generally, the purchases to be made during the stay;

5) the seasonality of the holiday, affecting above all the travel and accommodation costs.

Every holiday distinguishes itself by a peculiar mix of these five factors and, consequently, by the choice of a specific pattern of tourist goods and services to be purchased. The fall-out in terms of direct, indirect, induced economic impacts in the different situations is easily understandable. All

these aspects are taken into account by the survey on the international tourist expenditure in Veneto through the questionnaire, as it was formulated and specified (see Session 4).

As far as the selection of the suitable methodology to be used according to WTO recommendations, it is influenced by a number of factors amongst which are the types of information to be obtained and how detailed they should be. First of all, the best methodology must be considered in the context of the type of tourism for which expenditure is being measured, that is:

- domestic tourism,
- inbound tourism
- outbound tourism.

Referring to inbound tourism, the methodologies suggested by WTO are:

1. Use of secondary data;
2. Visitor surveys:
  - a. At accommodations
  - b. At entry/exit points
  - c. In means of transport
  - d. At popular tourist places
3. Establishment surveys:
  - a. Tourism-related establishment surveys
4. Central bank data
5. Expenditure models

For our survey we used the visitor survey at accommodations. A specific survey at Marco Polo Airport was necessary to integrate the scarce number of responses at accommodations in Venice (see Session 6). Chart 1 describes the path of the methodology used by Ciset starting from the WTO's recommendations.

In our case the advantages the WTO (1994) highlights (detailed information on expenditure; reduction of recall difficulties; more accurate data to be collected; link between expenditure and characteristics of visitors) have to be added to those of the peculiarities of the area: the lack of check points at boundaries, the geographic dimension of the region, the manifold typologies of tourism the region offers and, last but not least, the fact that about 80% of international tourist flows to the Veneto come by road.

As far as disadvantages are concerned, those linked to the complexity of the sample procedures and to the costly needs of quantitative and qualitative human resources, together with the necessary cooperation by operators, are of course the most important. The former were dealt with thanks to the students of the Bachelor in Tourism Economics (DUET) of the University Ca' Foscari of Venice who have been involved in the survey as part of their practical training provided by their curriculum studiorum. As explained later, cooperation from operators has been recommended through the mediation of institutions and associations which they refer to or participate with (see Session 6). As for difficulties in surveying expenditures linked to the stay in private accommodation, this concerns the international flows here considered to a minimum extent. Finally, as to excursionists, they have been excluded since the beginning from the aims of the survey because

they would request a more specific and detailed estimation of the different typologies, in particular in cities of art and above all in Venice (Costa and Manente, 1995).

#### 4. The questionnaire

In order to simplify organisation, and in particular data collection and processing, only one questionnaire was formulated, valid for all tourist districts, for all resorts and for all accommodation establishments. District and/or resort peculiarities have been captured through a few questions aiming to outline specific items of holiday expenditure.

The questionnaire, quoted in Appendix 1, is introduced by a short communication to the tourist interviewed, directed to stimulate his cooperation, to assure him of the aims of the study and to inform him about the main contents of the survey. It is divided into four forms.

Form 1 gives a general view of the tourist interviewed (country of residence, age, socio-economic status, etc.), of the tourist nucleus (the number of people with whom the tourist interviewed spends the holiday and shares the expenses, for example members of the same family) and of the holiday (package holiday or not, motivations, length of stay, means of transport used, typology of accommodation chosen, etc.). The information collected in this way enables us to draw a profile of the type-tourist who stays in the Veneto region and to evaluate to what extent these characteristics can influence his purchase capacity and the choice of the mix of goods and services used during the holiday (see Form 2).

Form 2 produces a list of all expenses that can be made by the tourist during the holiday in the resort object of the survey. In particular, the tourist interviewed has to write:

- about accommodation and travel expenses to that resort, the whole amount spent during the stay. The reason is clear for travel expenses, and it helps to avoid misunderstandings and mistakes for accommodation expenses, taking into account that it is most probable, especially as far as hotel accommodation is concerned, that the tourist remembers the total amount, in most cases stated at the time of the reservation;

- for all other expenses, those made from the arrival in the resort to the day of the compilation of the questionnaire.

In this form we ask to mark, for every consumption item, the total amount spent and the number of people who benefited from this expense. Very often, in fact, the declared expense for some consumption functions also satisfies the needs of the people with whom the tourist is spending the holiday (family, friends, etc.). As a consequence, this consumption has to be disaggregated to have a more precise estimate of the average expenditure per person.

In addition, the specification per expenditure items includes not only the consumption directly connected with the holiday (as accommodation and travel expenses), but also tourist consumption broadly speaking, common for tourists and for residents (expenses in restaurants and bars, for food and drinks, for clothing, for personal hygiene products, etc.). This is coherent with the transversal character of the tourist industry.

In the end, the form includes some questions on specific expenses in each tourist district (access fees to public baths for the seaside district; thermal treatments in spa resorts; ski-lift fees in the mountains).

Form 3 wants to verify the frequency of use of some public services offered in the holiday resort and directly connected with the tourist activity (post office, bank and exchange office, tourist information office, etc.).

Form 4, finally, is reserved for holiday home owners and mainly concerns seaside, mountains and lake resorts. The object is to quantify the total amount spent during 1993 for electricity, gas, telephone, water consumption, upkeep and repair costs, etc., expenses that concern in any case the holiday in that resort, even if made independently from the period of the stay.

At a deeper level of analysis, the questionnaire characterises itself for:

A) key-questions (Form 1), devoted to selecting the most important characteristics of the tourists interviewed and of their holiday from the beginning.

- The organisation (individual or package tour: questions 6 to 8, Form 1). Three specifications are reserved to this aspect:

- Package travel, bought by those who apply to a travel agency for the organisation of the journey, e.g. travelling from the place of residence to the holiday resort. This journey, in theory, can be done by all means of transport, but is generally done by plane, train or coach.

- Package accommodation, bought by those who personally take care of the journey, but apply to a travel agent to search for and to book accommodation at the destination. This kind of package is particularly used by those who stay in hotels, and it is less used for rented apartments and campsites.

- Package holiday or package tour, which combines the previous two, and is the typology of the most frequent type of holiday and most used by groups. This typology, more than the previous one, can present some problems connected with the composition of the package, in terms of offered goods and services (besides accommodation and travel, entertainment, visits to museums and other) and in terms of offered destinations (national and/or international multi-destination packages providing itineraries through different Veneto resorts, or Italian resorts, or Italian and European resorts).

A further investigation of the main international intermediaries who orient tourist flows towards Veneto is made possible by question 7.

- The accessibility and mobility conditions. To this problem are dedicated both questions concerning the means of transport used to reach the Veneto and those to the specific holiday resort (questions 10 and 11 of Form 1), and questions on transport expenses (questions 13 to 19 of Form 2). As far as these latter are concerned, they have been specified so that to describe the tourists' consumption behaviour to reach the holiday resort and their habits about mobility expenditure during the stay. Their combination with questions 12 and 13 on the number of days spent in the Veneto and in the holiday resort help to outline to a first extent some itinerant holiday choices of international tourists in the Veneto, linked to their transport expenses.

- The typology of accommodation chosen (questions 16 to 20). The object is to point out the distinction between the many possible combinations, from hotel categories to rented accommodations, and for the first, from room only to full board, and to define the occupied places (room, beds, camping places, etc.).

B) check-questions (Form 1):

- questions 6 and 8 help to verify the coherence of expenses for package holidays to be collected with the questions from 1 to 3 of Form 2;
- questions 12 and 13 "number of days spent in the Veneto and in the holiday resort" aim to verify the length of stay in the region and in the chosen resort. This latter has to be compared with the day of the arrival and the day of compilation, both of them written in the introduction page of the questionnaire, and it is fundamental for the evaluation of the average expenditure per day;
- question 14 "total expenses budgeted by the tourist interviewed" is devoted to verifying both the plan and the expectations of expenditure of the tourist, and the inconsistency with the actual consumption;
- question 15 "members of the tourist nucleus who benefit from the expenses of the tourist interviewed" aims to verify that the number of people composing the nucleus is coherent with the maximum number of people written in Form 2 relative to the expenses made;
- questions 16 to 20 help to verify the coherence of expenses made for accommodation per typology and kind, asked in questions 4 to 12 in Form 2.

C) A classification of the expenditure —disaggregated in the 46 items presented in Chart 2— coherent with that suggested by WTO and compatible with the consumption functions and the production sectors classifications used by the national accounts. Charts 3 and 4 describe the comparison between the 46 items pointed out in the survey and the WTO's classification (Chart 3), and the link with the classification of the national accounts (Chart 4), useful for the economic impact analysis.

#### 5. The survey organisation

Chart 5 describes the survey plan and in particular the scheme of distribution of the questionnaires as well as the organisation of the equipe managing the survey and the participants or assistants.

Chart 6 summarises the sampling plan and its implementation, and outlines as an example the specific procedure adopted for the seaside district. The stratified random sampling plan with proportional distribution of the sample space was assumed; attributes and advantages of that choice are discussed later on.

The survey has been carried out by Ciset with the assistance of the Tourism Department of the Veneto Region and the Bachelor in Tourism Economics (DUET) of the University of Venice. The organisation required the partnership —crucial for success of the interviews— of the Aziende di Promozione Turistica (local public bodies for the tourist promotion), of the manifold associations of the tourist operators (U.R.A.V.<sup>1</sup>, Assocamping, Associations of hotel-owners, FIAIP<sup>2</sup>, ASCOM<sup>3</sup>, etc.) and of the personnel involved in the means of accommodation, hotels and others. Interviewers in each resort were supervised by a coordinator; the coordinators of the resorts in the same district were controlled by the district supervisor. Finally, the five district coordinators depended directly on the Ciset's organisers (Chart 5,

<sup>1</sup> Unione Regionale Albergatori Veneti.

<sup>2</sup> Federazione dei proprietari degli alloggi.

<sup>3</sup> Associazione Commercianti.

point 2). Interviewers were chosen among the students of the Bachelor in Tourism Economics; they have been taught about the suitable methods of approaching tourists, the interpretation of each question in the questionnaire and the correct procedure to fill them in, and finally the more appropriate solutions to the problems the misunderstanding of any questions could generate.

The survey was carried out at a sample of hotels and other means of accommodation (in particular campsites and villages, and rented accommodation) located in the most important tourist resorts of the region. 9300 questionnaires throughout the whole of the Veneto, 7600 of which to international tourists, in the period from May 1994 to April 1995 were distributed (Chart 5, point 1).

The sampling plan by district, by resort and by typology and category of means of accommodation was settled using the international tourist nights registered in 1993, or in 1992, depending on the data availability (Chart 6). In more detail:

- in the first phase the quota of the annual international tourist nights in each district over the total of the region was applied (Chart 6, point A);
- in the second phase the quota of international nights by resort, by typology of accommodation —hotels and extra-hotels— and by category (hotels 5-4 stars, 3 stars, 2-1 stars; campsites/villages and rented accommodation) over the total for each district was adopted (Chart 6, point B). The means of accommodation were chosen by random procedure, nevertheless some of them had to be substituted afterwards, in case of insufficient cooperation (see Session 6);
- in the third phase the seasonal peculiarities of international flows, related to the specific tourist product and attractions offered by each resort were taken into account. The quota by month of nights in each accommodation category over the total nights registered in that category during the period covered by the survey was calculated and used (Chart 6, point C).

In cities of art, for example, even if distributed throughout the year, the tourist flows are higher in spring and autumn, and reach the maximum level in April-May and September-October. This trend averages different behaviours: Verona shows bigger peaks in July and August, with music exhibitions at the Arena; Venice counts several peaks (besides those already mentioned, the Carnival in February and Christmas holidays in December-January are the other attractions). In this district tourist demand prefers hotel accommodation, and the questionnaires were mainly distributed there.

More or less the same seasonality concerns the thermal district, where international tourist nights are higher late in spring and early in autumn, with a preference for hotel accommodation.

The seaside and lake districts are interested almost uniquely by summer demand which prefers the June-September period and shows another peak during Whitsuntide. Nights are distributed both in hotels and in other means with a prevalence of these latter and, depending on the resort considered, of campsites (Cavallino) or rented accommodation (Bibione).

Finally, the mountains district presents two seasonal peaks: in summer, from mid-July to September, and in winter, from December to February. This district counts a few international tourists who overnight preferably in hotels or campsites. Rented accommodation, on the contrary, is the solution adopted by the great majority of the Italian tourists.

Referring to the five districts, the statistics for the year 1993 given by the Tourism Department of the Veneto Region show that international seaside tourism counts for 52.5% of total international nights in the region, against 21% of cultural tourism, 16% of lake holidays, 8.5% of stays in spa resorts and only 2% of mountains demand.

So, apart from the case of Venice, where interviews were also done at Marco Polo Airport, the methodology of the survey at accommodation establishments was the only one used in the other districts and art cities. It was implemented as follows:

- distribution at a sample of selected means of accommodation of the questionnaires and delivery (by interviewers or by the personnel of the establishments, where possible) to a random sample of tourists at their arrival, for the reading and the preliminary filling in;
- organisation of the interview plan by interviewers, by agreeing with both operators and tourists upon the best time, preferably the day of the departure or the day before at the most, to verify and complete doubtful questions;
- interview of tourists who accepted to collaborate, and check consistency in the main questions.

As to the advantages, this procedure allowed larger representativeness of the sample and higher rates of response, as well as more detailed information on the purchases made. In addition, qualified interviewers permitted more accurate data gathered and timely controls on possible connections between purchases made and tourists' features. On the other hand, it clearly appears that a highly complex plan of action and qualified personnel are the needs —and the disadvantages— to reach those benefits.

It was possible to apply this framework to about 65% of the selected accommodation. In the remaining 35%, which were concentrated mainly in the hotels of the art cities, tourists —and more frequently operators themselves— asked for permission to fill in the questionnaires and to give them back before the departure, and/or to manage the survey directly without the interviewers' mediation (see Session 6). These cases required a greater cooperation of operators (personnel at accommodation establishments and public institutions involved) besides the tourists.

## **6. Limits, difficulties and solutions**

### *General issues*

A broad literature on the subject underlines the problems given by "sample surveys approaches".

The first fact to be considered is that the most accurate direct-observation results are obtained by reducing the time lapse between expenditure and interview to a minimum. So, the visitor survey, i.e. interviewing travellers while travelling is the best solution in particular if visitors are from abroad. In any case, respondents cannot recall expenditures accurately after the fact because of the myriad of items they can purchase and the difficulty of remembering each of the cash or noncash purchases made and the amount as well. Secondly, travellers frequently don't know in detail their expenses when they purchase "package tours". In this case travellers are provided with transportation, accommodation, meals, entertainment or any

combination of these for a single price and cannot know how much of that price is attributable to each item of the package (Frechtling, 1994; WTO, 1994).

As far as the time lapse and the recall problems are concerned, these are the actions we undertook to minimise them :

a) the questionnaires were distributed for completion to tourists in the means of accommodation at the beginning of their holiday;

b) tourists were asked to cooperate by reading carefully the questionnaire, by collecting as many as possible bills, receipts and any other documentation of their purchases and by recording their expenditures day by day;

c) tourists were interviewed at the end of their stay. The interviewers had to verify the expenditure items indicated by the tourist and ask him about inconsistencies and other usual purchases not recorded.

As far as package tours are concerned, the solution was found first of all by asking directly in the questionnaire for the specific package purchased (Package travel, Package accommodation, Package tour) (Session 4). Isolated in this way, we requested information from the tour packagers on the breakdown of items where possible, and we used in conjunction both the "Allocation in proportion to non-package expenditure" and "Estimation from the cost of individual components" methodologies proposed by WTO (1994), trying to collect the maximum amount of information.

The breakdown in the different items was implemented by starting from the WTO recommendations and by modifying the proposed methodology, given the peculiarities of our survey.

Continuing with other issues, "visitor surveys can also suffer from 'length-of-stay' bias, linked to the fact that the probability of being selected increases with the length of stay". We chose for each resort the best periods for distributing and collecting questionnaires so as to be sure to capture the major components of actual tourist demand. For example, we asked the means of accommodation selected for knowing the periods just booked and the most important days of arrival and departure. Take note that each tourist area characterises itself for a specific pattern of demand and then for well known periods of arrivals and departures.

And again, "sometimes the estimates are distorted by a few travellers who make unusually large purchases while in the area and may bias the results upward". Our survey is carried out during twelve months and so samples over time can be used to adjust the survey results for these expenses (Haynes, 1975). Furthermore, this inconsistency is more frequent in cities of art where length of stay is shorter, consumption habits are richer and purchase occasions are greater (see for example glass for Venice or clothing items in general more easily available in the major cities) but is really limited in the other districts considered.

Finally, the survey requires an estimate of the population size to which the results from questions on expenditures can then be projected up, by using a statistical model to produce estimates of receipts coming from various types of tourism.

### *Specific issues*

#### **Approaching the tourist**

When tourists were approached, the main difficulties were linked to the persistence of strong prejudices generally against interviews, and mainly

against questions on purchase habits. Probably some of them were afraid of fiscal consequences. These worries were overcome introducing the questionnaire with a short written explanation about the promoters of the project (the University of Venice and the Veneto Region), and the objectives of the survey. Furthermore, interviewers were provided with a badge of the University of Venice and were taught on the more suitable ways of approaching and introducing methods. In addition, a booklet on the main tourist attractions of the Veneto was given as a gift to each cooperating tourist.

### **The language**

Questionnaires were translated into English, French and German. Possible difficulties were overcome with the preventive distribution and then, during the interview, by explaining doubtful questions. Even if this procedure extended the time for the interview, it certainly reduced a great many misunderstandings. However, the various nationalities in general did not generate any problems.

### **Operators and their cooperation**

The main difficulties were met in the relations with the operators involved in the project; these came from the worry that interviewers could bother guests or, in any case, that the filling in of the questionnaire could be felt as a trouble. This problem was particularly strong in the hotels of a higher category, whose clientele are normally richer and harder to please. In some cases the survey was felt as a sort of control of the level of activity and then with fiscal consequences.

Meetings and visits at accommodations to make operators sensitive to the aims of the survey and to involve them in the project, as well as mediations of the above mentioned institutions and associations were the measures undertaken to obviate these objections.

### **Understanding the questionnaire**

Some questions were misunderstood and then produced wrongly or there were incomplete responses in those cases where the interview couldn't take place. These are the most important examples.

#### **Form 1 - Data on tourist interviewed**

- Questions 4 and 5: Profession and Field of economic activity. Some tourists were unable to ascribe their professional activity to the items listed in the questionnaire. During the interview, the interviewer asked for more details about the profession and then marked the more appropriate item;

- Question 14: Total expenses budgeted by the tourist. A lot of tourists registered the actual amount of the expenditures, so showing either to have misunderstood the meaning of the question or, as frequently was checked, to be unable to remember this item or not to have budgeted at all their holiday (pre-trip expenses excluded);

- Question 15: Members of the tourist nucleus who benefit from the expenses of the tourist interviewed and listed in Form 2. The interviewed in a few cases answered by excluding himself, i.e. inscribing a number of members "n" lower than that marked in the Form 2 ("n+1").

#### **Form 2 - Expenses in the holiday resort**

Questions from 13 to 16: Transport expenses relative to the stay in the

holiday resort. In some cases tourists omitted to count transport expenses to reach the holiday resort and registered only those carried during the stay. As will be specified later on, in these cases travel expenditure has been inferred taking into account both the tourist's origin and the means of transport he used, and the average expenses registered in analogous situations, as well as available information from some travel agencies. The distinction and the quantification of the two items of the total amount spent for transport services is fundamental because, while both of them concur to form the tourism consumption basket, only purchases of transport services made in the holiday resort have to be considered when the local economic impact of tourism has to be assessed. The split in two different questions —the former on the travel expenditures to reach the resort and the latter on those during the stay— was tested in a preliminary phase of the survey without any success. It produced on the contrary greater confusion and mistakes: almost all the tourists interviewed answered only the second question or registered the same amounts in both of them. It is however important to notice that the specification by means of transport used in the final version of the questionnaire is so detailed that the distinction between the two components is clear enough.

## 7. Conclusions

This preliminary version describing objectives, methodology and organisation of the "Survey on tourist expenditure in the Veneto" aims to focus on two main aspects of the project:

a) its extensiveness as far as the number of questionnaires distributed (9300) and collected (60%), the territorial width interested (the Veneto Region), the holiday typologies surveyed (art cities, mountains, sea, lake, spa resorts), the number and the types of means of accommodation concerned (from hotels to rented accommodation), the time length (one year), the public and private organisations involved, the network started of interviewers and coordinators, are concerned;

b) its development according to the new guidelines suggested by WTO (1994) and then the possibility to compare those general and technical recommendations with the specific and practical problems and solutions we had to face and to adopt.

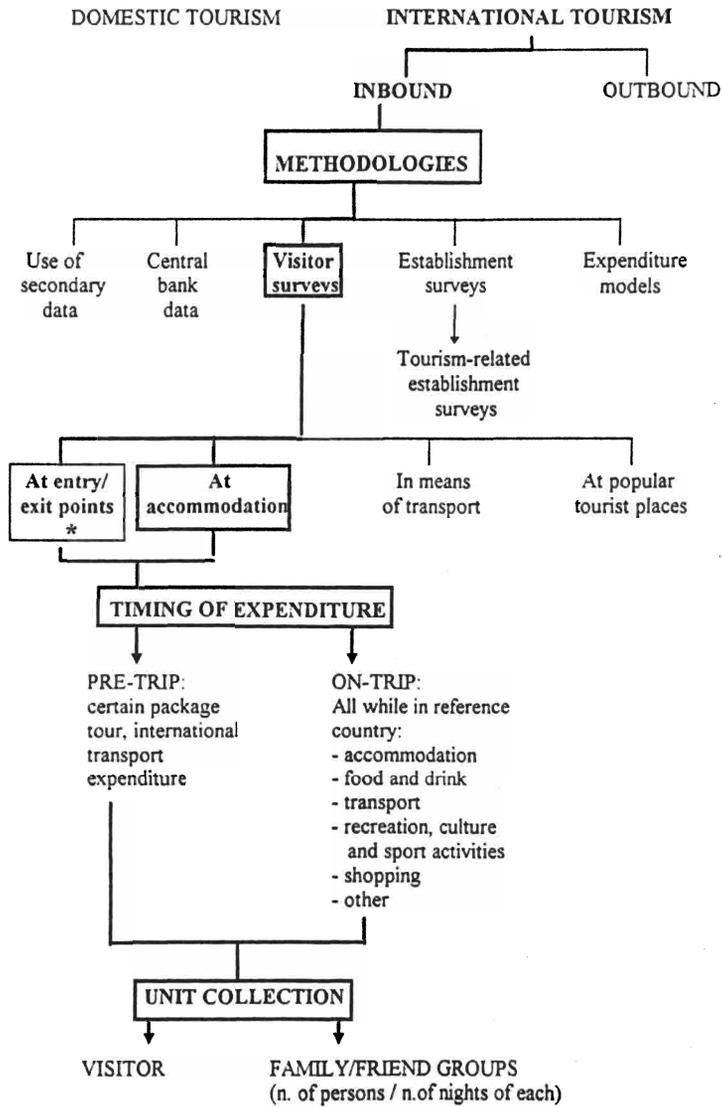
Since the survey was carried out over one year and the seasonal characteristics of international flows in each district were considered for the monthly distribution of the questionnaires, it ended in different periods. In particular, the seasonality of the seaside district (from mid-June to September) permitted to conclude the survey concerning this holiday typology at the end of September 1994 (for other districts —art cities and lake in particular— the survey was carried out until April 1995) and then to go on with the data processing. This phase is supposed to be concluded in October 1995.

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Chart 1.: *TOURISM EXPENDITURE STATISTICS COLLECTION: WTO AND CISET PROCEDURE*



[ ——— CISET PROCEDURE ]

[ \* ONLY FOR VENICE ]

Chart 2.: LIST OF CISET TOURIST EXPENDITURE ITEMS

Code	ITEMS
	<b>EXPENSES FOR PACKAGE HOLIDAYS</b>
1	Cost of organised travel only
2	Cost of organised accommodation only
3	Cost of package holiday (travel and accommodation)
	<b>ACCOMMODATION EXPENSES</b>
	<b>HOTEL</b>
4	Room only
5	Room and breakfast
6	Half board
7	Full board
8	Other food expenses in hotel (wine at meals, drinks at the bar, room service, etc.)
9	Other non food expenses in hotel (phone calls, air conditioning and other services not included in the room price)
	<b>CAMPING GROUND/TOURIST VILLAGE</b>
10	Rent of camping place (including electricity, water, gas, etc.)
11	Rent of bungalow (including electricity, water, gas, etc.)
	<b>RENTED APARTMENTS</b>
12	Rent (including furnishings, electricity, water, gas, heating, etc.)
	<b>TRANSPORT EXPENSES RELATIVE TO YOUR STAY IN THE HOLIDAY RESORTS</b>
13	Expenses for travel by plane
14	Expenses for travel by coach and train
15	Expenses for petrol, oil, lpg
16	Motorway tolls and parking fees
17	Expenses for travel by bus, taxi and water transports
18	Rent of a car
19	Rent of other means of transport (bicycles, scooters, boats, etc.)
	<b>SPECIFIC EXPENSES IN EACH TOURIST DISTRICT</b>
20	Percentage of expenses for thermal treatments on total accommodation cost
21	Expenses in seaside and lake resorts (deck chair, beach umbrella and bathing-hut hire)
22	Ski lifts, chair lifts, etc.
	<b>ADDITIONAL HOLIDAY EXPENSES</b>
	<b>AMOUNT SPENT IN SHOPS, SUPERMARKETS, ETC. concerning:</b>
23	Food and drinks
24	Household cleaning products
25	Beauty and personal hygiene products (cosmetics, tanning oil, perfumes, etc.)
26	Tot. (23+24+25)
	<b>AMOUNT SPENT IN RESTAURANTS, BARS, ETC. (outside the hotel)</b>
27	Meals eaten in restaurants, pizzerias, fast-food restaurants, etc.
28	Food and drinks consumed in bars, pastry-shops, ice-cream shops, etc.
29	Tot. (27+28)

Code	ITEMS
	<b>EXPENSES FOR VARIOUS ACTIVITIES</b>
30	Sporting activities (equipment hire, lessons, etc.) excluding the cost of buying equipment and clothing
31	Recreational activities (cinema, theatre, concerts, discotheques, fun parks, museums, etc.)
32	Purchase of sporting and camping equipment (skis, tennis rackets, mountaineering equipment, etc.)
33	Other activities
	<b>CLOTHING EXPENSES</b>
34	Clothing, footwear and leather goods (including sporting items)
35	Jewellery, trinkets, watches, etc.
36	<b>EXPENSES FOR SOUVENIRS, TOYS, ETC.</b>
37	<b>AMOUNT SPENT IN CIGARETTES AND POSTCARDS</b>
38	<b>AMOUNT SPENT IN NEWSPAPERS AND MAGAZINES</b>
39	<b>EXPENSES FOR BOOKS, MAPS, GUIDE BOOKS, ETC.</b>
	<b>PERSONAL EXPENSES</b>
40	Health costs (medicines, doctors' fees, etc.)
41	Personal hygiene and beauty costs in specialist centres (hairdresser, massages, sauna, etc.), with the exception of services supplied by thermal centres (if spa resorts)
	<b>OTHER EXPENSES</b>
42	Purchase of photographic films, video and music cassettes, compact discs, and of hi-fi, cameras and video equipment
43	Car and motorcycle accessories, etc.
44	Telephone expenses from public boxes (excluding phone bills)
45	Laundry and dry cleaning expenses
46	Other expenses

Chart 3.: **EXPENDITURE ITEMS. WTO CLASSIFICATION COMPARED WITH CISET CLASSIFICATION**

Code	WTO ITEMS	Code	CISET ITEMS (gathered through the survey)
1.	PACKAGE TRAVEL, PACKAGE HOLIDAYS AND PACKAGE TOURS	1 2 3	Cost of organised travel only Cost of organised accommodation only Cost of package holiday (travel and accommodation)  [Note: each expenditure has been broken into its components (accommodation, transport, etc.) and these ones have been included in the corresponding item].
2. 2.1. 2.1.1.  2.1.2. 2.1.3.  2.2. 2.2.1.	ACCOMMODATION <i>Collective tourism accommodation</i> Hotels and similar accommodation  Specialised accommodation Other collective accommodation  <i>Private tourism accommodation</i> Private tourism accommodation	4 5 6 7  - 10 11  12	Hotels room only room and breakfast half board full board  None Campsites (tents and caravans) Tourist villages (bungalows)  Rented apartments  [Note: the total amount spent yearly by holiday home owners for maintaining their houses has been broken down into its components (electricity, gas and telephone bills; furniture; upkeep, etc.), and these ones have been included in the corresponding item].
3. 3.1. 3.2.  3.3.	FOOD AND DRINKS <i>Prepared food consumed on premises</i> <i>Beverages consumed on premises</i>  <i>Food and beverages for preparation and/or consumption elsewhere</i>	8 27 28  23	Other food expenses in hotel Meals eaten in restaurants, pizzerias, fast-food restaurants, etc. Food and drinks consumed in bars, pastry-shops, ice-cream shops, etc.  Food and drinks purchased in shops, supermarkets, etc.
4. 4.1. 4.1.1. 4.1.2. 4.1.3.  4.2. 4.2.1. 4.2.2. 4.2.3.	TRANSPORT <i>Air</i> Scheduled flights Non-scheduled flights Other air services  <i>Waterway</i> Passengers lines and ferries Cruise Other waterway transport	13      17	Expenses for travel by plane      Expenses for travel by bus, taxi and water transports

Code	WTO ITEMS	Code	CISSET ITEMS (gathered through the survey)
4.3.	<i>Land</i>		
4.3.1.	Railway transport	14	Expenses for travel by coach and by train
4.3.2.	Motorcoach or bus or other public road transports	17	Expenses for travel by bus, taxi and water transports
		14	Expenses for travel by coach and by train
4.3.3.	Private vehicle	15	Expenses for petrol, oil, lpg
		16	Motorway tolls and parking fees
		43	Car and motorcycle accessories, etc.
4.3.4.	Vehicle rental	18	Rent of a car
		19	Rent of other means of transport (bicycles, scooters, boats, etc.)
4.3.5.	Other means of road transport	-	None
4.4.	<i>Other transport items</i>	-	None
5.	RECREATION, CULTURE AND SPORTING ACTIVITIES		
5.1.	<i>Recreation and sporting activities</i>	30	Expenses for sporting activities (excluding the cost of buying equipment and clothes)
5.2.	<i>Cultural activities</i>	31	Recreational activities (cinema, theatre, concerts, fun parks, discotheques, museums, etc.)
5.3.	<i>Entertainment</i>	33	Other activities
6.	SHOPPING		
6.1.	<i>Souvenirs</i>	36	Expenses for souvenirs, toys, etc.
6.2.	<i>Duty free goods</i>		None
6.3.	<i>Clothing and footwear</i>	34	Clothing, footwear and leather goods (including sporting items)
6.4.	<i>Luggage</i>	-	None
6.5.	<i>Tobacco products</i>	37	Amount spent in cigarettes and postcards, etc.
6.6.	<i>Personal care products</i>	25	Beauty and personal hygiene products (cosmetics, tanning oil, perfumes, etc.)
6.7.	<i>Other goods</i>	24	Household cleaning products (detergents, etc.)
		32	Purchase of sporting and camping equipment (skis, tennis rackets, etc.)
		35	Jewellery, trinkets, watches, etc.
		38	Amount spent in newspapers and magazines
		39	Expenses for books, maps, guide books, etc.
		42	Purchase of photographic films, video and music cassettes, compact discs, and of hi-fi, cameras and video equipment
7.	OTHER		
7.1.	<i>Financial services</i>	-	None
7.2.	<i>Travel items/charges not elsewhere classified</i>	-	None
7.3.	<i>Health/medical services</i>	40	Health costs (medicines, doctors' fees, etc.)
7.4.	<i>Education/training services</i>	-	None
7.5.	<i>Other services not elsewhere classified</i>	9	Other non food expenses in your hotel (phone calls, air conditioning and other services not included in the room price)

Code	WTO ITEMS	Code	CISSET ITEMS
			(gathered through the survey)
7.5.	(follows)	20	Percentage of expenses for thermal treatments on total accommodation cost
		21	Expenses in seaside and lake resorts (deck chair, beach umbrella and bathing-hut hire)
		22	Expenses for ski lifts, chair lifts, etc.
		41	Personal hygiene and beauty costs in specialist centres (hairdresser, massages, sauna, etc.), with the exception of services supplied by the thermal centres (if spa resorts)
		44	Telephone expenses from public phone boxes (excluding phone bills)
		45	Laundry and dry cleaning expenses
		46	Other expenses

**Chart 4.: LINK BETWEEN Ciset TOURIST EXPENDITURE ITEMS AND THE CLASSIFICATIONS OF NATIONAL ACCOUNTS**

Code	CISSET ITEMS	Code	CONSUMPTION FUNCTIONS	Code	PRODUCTIVE SECTORS
	<b>ACCOMMODATION</b> Hotels <b>4</b> room only <b>5</b> room and breakfast <b>6</b> half board <b>7</b> full board <b>10</b> Campsites (tents and caravans) <b>11</b> Tourist villages (bungalows) <b>12</b> Rented apartments	27	HOTELS AND PUBLIC SHOPS	590	HOTELS AND PUBLIC SHOPS
	<b>FOOD AND DRINKS</b> <b>8</b> Other food expenses in hotel <b>27</b> Meals eaten in restaurants, pizzerias, fast-food restaurants, etc. <b>28</b> Food and drinks consumed in bars, pastry-shops, ice-cream shops, etc.				
23	Food and drinks purchased in shops, supermarkets, etc.	1-12	FOOD AND DRINKS (as bread, meat, fish, milk, oil, fruit and vegetables, various beverages, etc.)	<b>011</b> industrial crops <b>013</b> Livestock products <b>015</b> Grapes and wine, olives, olive oil <b>019</b> Fishery <b>310</b> Meats, meat preparations and preserves, other products from slaughtered animals <b>330</b> Milk and dairy products <b>352</b> Bread and biscuits <b>353</b> Pasta <b>354</b> Pastry and confectionery <b>355</b> Sugar and other beetroot products <b>356</b> Fruit and vegetables preserves <b>357</b> Vegetable oils <b>358</b> Other food products <b>371</b> Liquors and alcoholics <b>373</b> Beer and malt <b>375</b> Non alcoholic beverages	

Code	CIS/ET ITEMS	Code	CONSUMPTION FUNCTIONS	Code	PRODUCTIVE SECTORS
	<b>TRANSPORTS</b>				
13	Expenses for travel by plane	21	PURCHASE OF TRANSPORT SERVICES	611	Railways
14	Expenses for travel by coach and by train			613	Inland transport services
17	Expenses for travel by bus, taxi and water transports			631	Maritime transport services
18	Rent of a car			633	Air transport
19	Rent of other means of transport (bicycles, scooters, boats, etc.)			710	Business services provided to enterprises
15	Expenses for petrol, oil, lpg	20	OPERATING AND MAINTENANCE EXPENSES FOR MEANS OF TRANSPORT	073	Refineries and petroleum products
16	Motorway tolls and parking fees			553	Repair services
43	Car and motorcycle accessories, etc.			650	Services allied to transport
	<b>ACTIVITIES</b>				
30	Expenses for sporting activities (excluding the cost of buying equipment and clothes)	25	EDUCATION AND RECREATION SERVICES	790	Recreational and cultural services, personal services, other market serv., n.e.c.
31	Recreational activities (cinema, theatre, concerts, fun parks, discotheques, museums, etc.)			810	Public administration, defence and social security
33	Other activities				
	<b>SHOPPING</b>				
32	Purchase of sporting and camping equipment (skis, tennis rackets, etc.)	32	RADIO-TV EQUIPMENT AND OTHER RECREATIONAL GOODS	510	Other manufacturing industries
35	Jewellery, trinkets, watches, etc.				
36	Expenses for souvenirs, toys, etc.				
42	Purchase of photographic films, video and music cassettes, compact discs, and of hi-fi, cameras and video equipment				
	<b>CLOTHING AND FOOTWEAR</b>				
34	Clothing, footwear and leather goods (including sporting items)	14	CLOTHING AND FOOTWEAR	413	Textiles
				415	Wearing apparels
				433	Leathers, leather and skin goods
				435	Footwear

Code	CISSET ITEMS	Code	CONSUMPTION FUNCTIONS	Code	PRODUCTIVE SECTORS
37	Amount spent in cigarettes and postcards, etc.	13	TOBACCO	390	Tobacco products
25	Beauty and personal hygiene products (cosmetics, tanning oil, perfumes, etc.)	36	PERSONAL HYGIENE GOODS AND SERVICES	173	Industrial chemicals
41	Personal hygiene and beauty costs in specialist centres (hairdresser, massages, sauna, etc.), with the exception of services supplied by the thermal centres (if spa resorts)			790	Recreational and cultural services, personal services, other market serv., n.e.c.
24	Household cleaning products (detergents, etc.)	17	FURNITURE, FURNISHING AND HOUSEHOLD EQUIPMENT AND OPERATION	173	Industrial chemicals
38	Amount spent in newspapers and magazines	24	BOOKS, NEWSPAPERS AND MAGAZINES	477	Printing and publishing
39	Expenses for books, maps, guide books, etc.				
40	Health costs (medicines, doctors' fees, etc.)	18	HEALTH GOODS AND SERVICES	770	Market services of health
20	Percentage of expenses for thermal treatments on total accommodation cost			790	Recreational and cultural services, personal services, other market serv., n.e.c.
21	Expenses in seaside and lake resorts (deck chair, beach umbrella and bathing-hut hire)				
22	Expenses for ski lifts, chair lifts, etc.				
44	Telephone expenses from public phone boxes (excluding phone bills)	22	COMMUNICATIONS	670	Communication
9	Other non food expenses in your hotel (phone calls, air conditioning and other services not included in the room price)	28	OTHER GOODS AND SERVICES	790	Recreational and cultural services, personal services, other market serv., n.e.c.
45	Laundry and dry cleaning expenses				
46	Other expenses				

**Chart 5.: SURVEY PLAN**

**1. DISTRIBUTION OF THE QUESTIONNAIRES PER TOURIST DISTRICT, RESORT AND MONTH**

**ART CITIES:** 2000 questionnaires in total

Selected resorts	Period of the survey
Venezia	May - October 1994 April 1995
Padova	
Treviso	
Verona	
Vicenza	

**LAKE:** 1400 questionnaires in total

Selected resorts	Period of the survey
Bardolino-Garda	June - September 1994
Malcesine	
Peschiera del Garda	

**SEA:** 4000 questionnaires in total

Selected resorts	Period of the survey
Bibione	June - September 1994
Caorle	
Cavallino	
Chioggia-Sottomarina	
Jesolo	

**MOUNTAINS:** 1100 questionnaires in total

Selected areas	Period of the survey
Alpago	July - September 1994 December 1994-February 1995
Cortina d'Ampezzo	
Cadore	
Dolomiti agordine	
Sappada	
Val Boite-Cadore	
Val Zoldana	

**SPA RESORTS:** 800 questionnaires in total

Selected resorts	Period of the survey
Abano Terme	May - October 1994
Montegrotto Terme	April 1995

**2. ORGANISATION STRUCTURE**

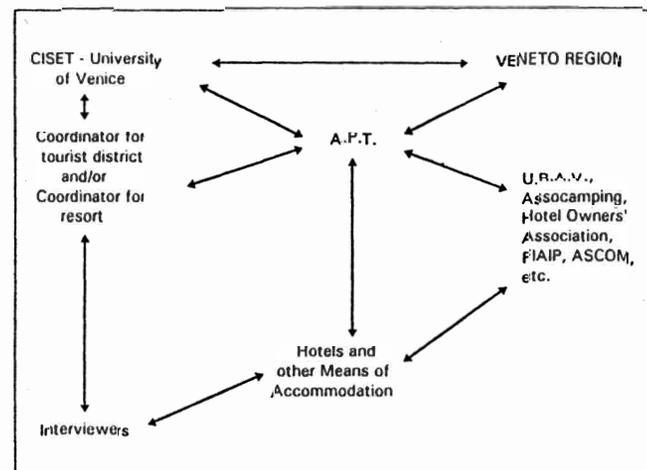
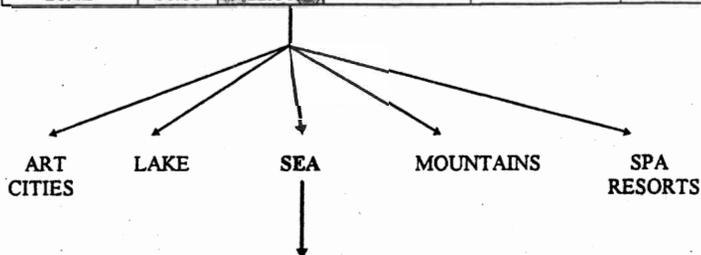


Chart 6.: *SAMPLING PLAN (night quotas)***A. TOURIST DISTRICT**

ART CITIES	LAKE	SEA	MOUNTAINS	SPA RESORTS	TOTAL
20.82	16.11	52.64	1.79	8.64	100

**B. RESORT / TYPE AND CATEGORY OF ACCOMMODATION ESTABLISHMENT**

	HOTELS			OTHER MEANS OF ACCOMMODATION		TOTAL
	4 Stars	3 Stars	1 and 2 Stars	Rented rooms, villas, flats	Campsites, Holiday villages	
Bibione	0.71	1.92	1.46	23.26	4.24	31.57
Caorle	0.18	1.86	3.99	3.85	5.51	15.39
Cavallino	0.00	0.53	0.21	0.88	25.15	26.77
Chioggia	0.25	0.49	0.16	0.50	1.49	2.89
Jesolo	3.29	9.09	5.39	2.58	3.03	23.38
TOTAL	4.42	13.89	11.20	31.07	39.42	100.00

**C. MONTH / HOTEL CATEGORY  
CAVALLINO**

	HOTELS			OTHER MEANS OF ACCOMMODATION	
	4 Stars	3 Stars	1 and 2 Stars	Rented Rooms, Villas and Flats	Campsites, Holiday Villages
June	0	29.03	30.21	14.68	22.33
July	0	27.33	29.89	39.00	36.98
August	0	25.91	26.17	28.43	30.58
September	0	19.73	13.73	17.89	10.10
TOTAL	0	100.00	100.00	100.00	100.00



UNIVERSITA  
DI VENEZIA  
CA' POSEARE

CISET

Centro Internazionale di Studi sull'Economia Turistica  
International Center of Studies on the Tourist Economy

**SURVEY ON ITALIAN AND FOREIGN TOURIST EXPENSES IN THE FIVE TOURIST DISTRICTS  
OF THE VENETO REGION**

**QUESTIONNAIRE**

Holiday resort .....

District (code) .....

Art cities	1
Lake	2
Sea	3
Mountains	4
Spa resorts	5

Date of your arrival in the holiday resort .....

**ONLY FOR THE INTERVIEWER**

Cognome e Nome del rilevatore .....

Data di compilazione del questionario .....

Osservazioni .....

.....  
.....

Fornito con la Regione del Veneto e con il Touring Club Italiano

Via Mocenigo, Riviera S. Pietro, 83 - 30030 Orlego di Mira (VI) - tel. 041/5630524-5630942 - telefax 041/5630510



## 9) Why did you choose this holiday resort?

Seaside holiday	1
Mountain holiday	2
Lake holiday	3
Thermal and fitness holiday	4
Cultural and art tourism (art cities)	5
Congress and fair attendance	6
Business trip	7
Religious tourism	8
School trip	9
Other (specify) .....	10

## 10) What means of transport did you use to reach the Veneto region ?

Private car	1
Coach	2
Train	3
Plane	4
Other (specify) .....	5

## 11) What means of transport did you use to reach the holiday resort ?

Private car	1
Coach	2
Train	3
Public transport (bus, water transport, etc.)	4
Taxi	5
Other (specify) .....	6

12) Number of days spent in the Veneto region: | | days

13) Number of days spent in this holiday resort: | | days

14) Total expenses (in national currency) budgeted by the tourist interviewed (if travelling alone or with a group of friends) or by the head of the family (if travelling with the family) for:

travel (return fares) ..... accommodation .....

stay .....

15) Members of the tourist nucleus (family, friends, etc.) who benefit from the expenses of the tourist interviewed and listed in Form 2 : N. ....

For tourists staying in hotel accommodation :

## 16) Kind of hotel accommodation chosen:

- room only	1
- room and breakfast	2
- half board	3
- full board	4

## 17) Hotel category:

- 4 or 5 stars	1
- 3 stars	2
- 2 or 1 stars	3

18) Number of rooms occupied by the tourist nucleus (friends, family, etc) | |

For tourists staying in rented accommodation :

19) Number of beds available: | |

For tourists staying in camping grounds/tourist villages :

20) Number of camping places or bungalows occupied by the tourist nucleus (friends, family, etc.):

Camping places		
Bungalows		

## Form 2. EXPENSES IN THE HOLIDAY RESORT

## PLEASE NOTE:

- a. Enter your expenses from your arrival in the holiday resort to the day of compilation of the questionnaire or, for specified items, the expenses concerning the whole holiday period
- b. For each item please indicate the whole amount spent, even if in different shops (e.g. for the item "Food and drinks" sum the amounts spent at the butcher's shop, baker's shop, supermarket, etc.)

TYPE OF EXPENSES	AMOUNT	NUMBER OF PEOPLE THAT BENEFIT FROM THIS EXPENSE
<b>EXPENSES FOR PACKAGE HOLIDAYS (concerning the whole holiday period)</b>		
1 Cost of organized travel only .....		N. ....
2 Cost of organized accommodation only .....		N. ....
3 Cost of package holiday (travel and accommodation) .....		N. ....
<b>ACCOMMODATION EXPENSES (concerning your stay in this holiday resort)</b>		
<b>HOTEL</b>		
4 - room only .....		N. ....
5 - room and breakfast .....		N. ....
6 - half board .....		N. ....
7 - full board .....		N. ....
8 Other food expenses in your hotel (wine at meals, drinks at the bar, room service, etc.) .....		N. ....
9 Other non food expenses in your hotel (phone calls, air conditioning and other services not included in the room price) .....		N. ....
<b>CAMPING GROUND/TOURIST VILLAGE</b>		
10 - Rent of camping place (including electricity, parking-place, etc.) .....		N. ....
11 - Rent of bungalow (including electricity, water, gas, etc.) .....		N. ....

TYPE OF EXPENSES	AMOUNT	NUMBER OF PEOPLE THAT BENEFIT FROM THIS EXPENSE
RENTED APARTMENT		
12 - Rent (including furnishings, electricity, water, gas, heating, etc.)	.....	N. ....
TRANSPORT EXPENSES RELATIVE TO YOUR STAY IN THE HOLIDAY RESORT		
13 Expenses for travel by plane	.....	N. ....
14 Expenses for travel by coach and train	.....	N. ....
15 Expenses for petrol, oil, lpg	.....	N. ....
16 Motorway tolls and parking fees	.....	N. ....
17 Expenses for travel by bus, taxi and water transports	.....	N. ....
18 Rent of a car	.....	N. ....
19 Rent of other means of transport (bicycles, scooters, boats, etc.)	.....	N. ....
SPECIFIC EXPENSES IN EACH TOURIST DISTRICT		
20 Percentage of expenses for thermal treatments on total accommodation cost	..... %	N. ....
21 Expenses in seaside and lake resorts (deck chair, beach umbrella and bathing-hut hire)	.....	N. ....
22 Ski lifts, chair lifts, etc.	.....	N. ....
ADDITIONAL HOLIDAY EXPENSES		
AMOUNT SPENT IN SHOPS, SUPERMARKETS, ETC. concerning:		
23 Food and drinks	.....	N. ....
24 Household cleaning products (detergents, etc.)	.....	N. ....
25 Beauty and personal hygiene products (cosmetics, tanning oil, perfumes, etc.)	.....	N. ....
26 Tot. (23 + 24 + 25)	.....	N. ....

TYPE OF EXPENSES	AMOUNT	NUMBER OF PEOPLE THAT BENEFIT FROM THIS EXPENSE
<b>AMOUNT SPENT IN RESTAURANTS, BARS, ETC. (outside your hotel)</b>		
27 Meals eaten in restaurants, pizzeria, fastfood restaurants, etc. ....	.....	N. ....
28 Food and drinks consumed in bars, pastry-shops, ice-cream shops, etc. ....	.....	N. ....
29 Tot. (27 + 28) .....	.....	N. ....
<b>EXPENSES FOR VARIOUS ACTIVITIES</b>		
30 Sporting activities (equipment hire, lessons, etc.) excluding the cost of buying equipment and clothing .....	.....	N. ....
31 Recreational activities (cinema, theatre, concerts, discotheque, fun parks, etc.) .....	.....	N. ....
32 Purchase of sporting and camping equipment (skis, tennis rackets, mountaineering equipment, etc.) .....	.....	N. ....
33 Other activities .....	.....	N. ....
<b>CLOTHING EXPENSES</b>		
34 Clothing, footwear and leathergoods (including sporting items) .....	.....	N. ....
35 Jewellery, trinkets, watches, etc. ....	.....	N. ....
<b>EXPENSES FOR SOUVENIRS, TOYS, ETC.</b>		
36 EXPENSES FOR SOUVENIRS, TOYS, ETC. ....	.....	N. ....
<b>AMOUNT SPENT IN CIGARETTES AND POSTCARDS</b>		
37 AMOUNT SPENT IN CIGARETTES AND POSTCARDS .....	.....	N. ....
<b>AMOUNT SPENT IN NEWSPAPERS AND MAGAZINES</b>		
38 AMOUNT SPENT IN NEWSPAPERS AND MAGAZINES .....	.....	N. ....
<b>EXPENSES FOR BOOKS, MAPS, GUIDE BOOKS, ETC.</b>		
39 EXPENSES FOR BOOKS, MAPS, GUIDE BOOKS, ETC. ....	.....	N. ....
<b>PERSONAL EXPENSES</b>		
40 Health costs (medicines, doctors' fees, etc.) .....	.....	N. ....

TYPE OF EXPENSES	AMOUNT	NUMBER OF PEOPLE THAT BENEFIT FROM THIS EXPENSE
41 Personal hygiene and beauty costs in specialist centres (hairdresser, massages, sauna, etc.), with the exception of services supplied by thermal centres (if spa resorts)	.....	N. ....
OTHER EXPENSES		
42 Purchase of photographic films, video and music cassettes, compact discs, and of hi-fi, cameras and video equipment	.....	N. ....
43 Car and motorcycle accessories, etc.	.....	N. ....
44 Telephone expenses from public phone boxes (excluding phone bills)	.....	N. ....
45 Laundry and dry cleaning expenses	.....	N. ....
46 Other expenses	.....	N. ....

**Form 3. USE OF SOME SERVICES OFFERED IN THE HOLIDAY RESORT****PLEASE NOTE:**

- a. Indicate only how many times you have used these services from your arrival in the holiday resort to the day of the compilation of the questionnaire

	<b>KIND OF SERVICE</b>	<b>FREQUENCY</b>
1	Bank and exchange office	.....
2	Post office	.....
3	Libraries	.....
4	Tourism Bureau, etc.	.....

**Form 4. EXPENSES OF HOLIDAY HOME OWNERS****PLEASE NOTE:****a. Indicate the total amount spent during 1993**

<b>TYPE OF EXPENSES</b>		<b>TOTAL AMOUNT</b>
<b>1</b>	<b>Total expenses :</b>	<b>L. ....</b>
	<b>for</b>	
<b>2</b>	<b>- electricity, water, gas</b>	<b>L. ....</b>
<b>3</b>	<b>- rubbish</b>	<b>L. ....</b>
<b>4</b>	<b>- telephone bills</b>	<b>L. ....</b>
<b>5</b>	<b>- heating</b>	<b>L. ....</b>
<b>6</b>	<b>Purchase of furniture</b>	<b>L. ....</b>
<b>7</b>	<b>Purchase of crockery and household appliance</b>	<b>L. ....</b>
<b>8</b>	<b>Purchase of kitchen and bed linen</b>	<b>L. ....</b>
<b>9</b>	<b>Expenses for upkeep and repair</b>	<b>L. ....</b>



# CREATION OF AN ALTERNATIVE METHODOLOGY FOR COUNTING FRONTIER MOVEMENTS

by E.LEMOS

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## **1. Why create a new methodology for counting frontier movements?**

As far as tourist statistics are concerned, there are three distinct sectors which make it possible to assess the international evolution of this phenomenon over the years, in spite of the methodological differences to be found in each country. We are referring in this case to frontier movements, movements recorded in tourist accommodation (in which hotels represent an important subgroup) and to foreign exchange revenue which can be attributed to tourism.

Frontier statistics have become particularly important in the case of countries which are traditionally receivers of tourists, such as Portugal and Spain. Indeed, in addition to the natural propensity which these countries have for compiling the fullest possible statistics about tourism (as proof of the importance of this sector in their respective economies), there is also an urgent need to have universal data on tourist movements. In most cases, it is impossible to arrive at this overall assessment on the basis of the data relating to the movements recorded in accommodation. There are some studies and estimates which clearly show that most of the different forms of accommodation used by tourists visiting Portugal are not included in the so-called means of accommodation that are traditionally registered.

Under the old system, direct counts taken by police officers stationed at border posts allowed us to obtain universal data (inflows and outflows through all frontiers). This made it possible to develop complementary studies carried out on a representative and duly stratified sample.

However, with the Schengen agreement, which did away with the control of documents by customs officers at the frontiers between Community countries, a new situation has been brought about, one which requires us to study alternative mechanisms that will enable us to maintain these essential statistical data, by adapting the basic methodologies used.

The problems involved in creating a new system for frontier statistics is based on the difficulties inherent in using a methodology which is almost the complete reverse of the one that was used in the past.

In Portugal, the various bodies that are responsible for collecting tourist statistics considered it of extreme importance to introduce a new methodology for counting frontier movements. The Work Group, which included representatives from the Directorate-General of Tourism, the National Sta-

tistical Institute and ICEP - Investments, Trade and Tourism in Portugal, drew up the methodological support document required for the necessary renewal of the system associated with this statistical operation.

Thus, an application was made for a Community support for this project, with the evident aim of creating a formal framework for the technical activities already in progress in Spain and Portugal. Such a framework would help make these activities more compatible and create the conditions for carrying out an effective control of the quality of the results obtained.

The two countries suggested carrying out a joint study, using analogous procedures and mutually validating the results obtained.

## 2. New system in Portugal

We shall now present the methodology of the new system, which is based on a series of actions undertaken at three levels:

2.1) *Indirect universal counts*

2.2) *Regular surveys*

2.3) *Extrapolation of universal data*

If we consider the 4 means of access which dictate frontier movements - road, rail, sea and air - we can see that the process for calculating results will involve similar phases that are based on the same criteria, and only the sources used will be different:

### 2.1 *Indirect universal counts*

#### **By road**

By using the automatic traffic counters of the Junta Autónoma de Estradas (JAE) as a source of information, we obtain monthly tables containing the following information:

Number of vehicles *entering and leaving the country each month*, with a breakdown of these figures for the frontiers of *Caia, Monte Francisco, Valença, Quintanilha, Vila Verde da Raia and Vilar Formoso* (altogether these six frontiers represent approximately 95% of the volume of movements by road, according to past data)

Division of the total number of vehicles entering and leaving the country into accepted categories.

#### **By rail**

In this case, the universal data are provided by CP - Caminhos de Ferro Portugueses, and include the following information:

Total number of passengers *entering and leaving the country each month*, with a separate breakdown for the frontiers of *Valença do Minho, Vilar Formoso, Marvão and Elvas*.

#### **By sea**

The Customs and Brigada Fiscal of the Guarda Nacional Republicana (GNR) provides the following monthly data:

Total number of *passengers disembarking or embarking at Portuguese ports*, with a separate breakdown for the frontiers of *Alcântara and Funchal*;

Total number of *passengers in transit by sea*, with a separate breakdown for *Alcântara and Funchal*.

**By air**

The universal data are provided by Aeroportos e Navegação Aérea, EP (ANA-EP) and the Lajes Airport Authority, who give us the following information:

Total number of *passengers boarding planes or disembarking at Portuguese airports per month*, with a separate breakdown for the frontiers of *Lisbon, Porto, Faro, Funchal, Ponta Delgada and Lajes*;

Breakdown of the total number of passengers disembarking from scheduled and unscheduled flights.

**2.2 Regular surveys**

In keeping with the programme previously established for the conducting of interviews, which was drawn up on the basis of past data, information is gathered in the field at least once a month, at the most important road, rail, sea and air frontiers.

In any statistical project, the collection of data, which in this case is carried out by the National Statistical Institute, is considered to be one of the most crucial phases for the success of the operation, and its most important aspects are:

- *preparation and testing of the questionnaire*
- *understanding of the concepts*
- *respect in the field for the rules of sampling*
- *and the way in which the survey is conducted*

We are thinking here, for example, about the impossibility of having a back-up survey, by conducting a second series of interviews, or some other procedure for measuring possible error, and therefore we are conscious of the difficulty in controlling the quality of the data collected.

It is factors such as:

- *the geographical spread of the field-workers;*
- *the conducting of interviews in foreign languages;*
- *the need to conduct the interview as quickly as possible, without the possibility of providing a long introduction to it;*
- *and the impossibility of validating information in the field or in the course of the interview;*

which make it necessary for the supervisors of the National Statistical Institute to take extra care in selecting and training interviewers and later monitoring them.

In order to facilitate fieldwork, we chose a closed questionnaire, which is short (5 minutes maximum) and has been translated into 3 foreign languages (Appendix 1).

**2.2.1 When selecting interviews, a representative sample is taken from all the visitors arriving in Portugal, on the basis of:**

- 1 - Time series built with ancient system (before 1993);
- 2 - the results of surveys carried out by the National Statistical Institute into different means of accommodation.

The sample is spread over all the months of the year, taking into account the seasonal nature of tourist demand. During the high season (July, August and September) fieldwork is undertaken over a period of three days (per month). For the other months, this period is only two days.

Interviews are carried out in 4 different settings:

- *at the roadside* (**most problematical and complex operation**)
- *on trains*
- *at airports*
- *at harbour stations*

Collecting data at the roadside is the

Interviews are always conducted with people who are leaving the country.

Several different bodies have contributed to the success of this project, by collaborating in one way or another with INE and the DGT through an agreement which has produced good results for each of the parties concerned. Besides affording logistical support for the operation, these bodies are simultaneously providers of basic information about the movements of people (CP, ANA and JAE) and users of the more detailed information gathered.

The field work is carried out at 5 road frontiers, 3 rail frontiers, 6 air frontiers and 2 sea frontiers, including Mainland Portugal and the islands of Madeira and the Azores.

A short questionnaire was chosen that would make it possible to provide quick, easy answers. It is also very important to analyse the "COUNT FORM" (Appendix II). This FORM has the aims of:

1. Controlling the counts made by the automatic counters, during the days on which fieldwork is undertaken, and in particular controlling the division of vehicles into separate categories;
2. Classifying vehicles according to their categories and the nationality of matriculation. Such division is extremely important for the later interpretation of data;
3. Selecting the vehicles whose passengers are to be interviewed and ensuring that the previously established rules of sampling are being respected.

### *2.3 Extrapolation of universal data*

At this level, it is essential to collate the data collected through regular surveys, conducted by the National Statistical Institute, and indirect universal counts. In this way we hope to arrive at an understanding of overall movements, broken down into countries and main frontiers on the basis of the structure provided by a particular sample. In spite of the fact that the representative nature of this sample can be proved scientifically, it must be accepted that there are nonetheless a number of gaps, especially in the approximations made for individual frontiers and for (small) countries. It is therefore important to consider the average monthly composition of the figures for past movements recorded for each separate country at each frontier and use this as a factor for the correction and control of the results. This "*table of averages*" will be updated through the new series of data, although this is not information of a statistical nature.

### **3. Methodological developments in Portugal**

The abandonment of the system previously used for recording the statistics of frontier movements was never regarded as a desirable choice, in view of:

- the need for universal data on the movements of foreign visitors;
- the importance of complementary means of accommodation in the context of the national tourist supply (in 1992, only 25% of the overnight stays of foreign visitors could be classified under the different means of accommodation surveyed);
- the importance of excursionists in most frontier movements. The large proportion of excursionists found amongst the recorded inflows of foreign visitors also suggests that we would be better advised to reformulate the methodology used for measuring frontier movements, rather than transfer the overall monitoring of such movements to another indicator;
- the use that is made of the data about these movements by the main users of statistical information in this sector.

At the international level:

- As a result of the recommendations approved at the Ottawa Conference, the World Tourism Organisation continues to define frontier movements as an essential part of the statistical system of each country, maintaining the indicator "*inflows of foreign visitors*" as the basis for estimating universal movements;

- frontier movements make it possible to compare results internationally.

With the new system, there will be a methodological inversion in the recording of the statistics of frontier movements, which will essentially result in the modification of the structure that was in existence until June 1993 and its replacement by a completely opposite alternative. Previously the means used for obtaining universal data about movements at all frontiers, i.e. exhaustive counts carried out by the customs services, made it possible to carry out sample surveys with the aim of obtaining more detailed information - about the actual composition of tourist inflows, characterisation of foreign visitors, average lengths of stay, reasons for travelling, etc.

Now we can use the results of surveys and indirect counts to obtain the statistical universe represented by the overall movements of foreign visitors through border posts.

#### **4. Comparison between the new system and the old system**

In the initial phases of this new methodology, it has been possible to standardise and compare results with those obtained by means of the earlier procedure (direct counts made by the customs services at border posts), which represents an essential factor of control for ensuring greater reliability in the new system.

As far as we have been able to ascertain, the interval of monthly variation between the data originating from the two different systems has not shown there to be any significant discrepancy. In fact, even during the high season, there was a very high level of approximation (a gap of only 2%).

#### **5. Comparison between Portugal and Spain**

We compared the indicator of all outflows from Portugal with the indicator of all inflows to Spain at the frontiers of Vila Verde da Raia/Feces, Caia/Badajoz.

In the counting of vehicles, there is a very favourable deviation between the totals for the two frontiers of only -1.9%.

It must be stressed that the basis used for comparison was the final da-

ta obtained and that no adjustments were made at the level of intermediate calculations. As there are still some differences which are not fully understood, this joint study with Spain will be continued, so that we can bring the data closer together and explain the more important differences.

## **6 - Conclusion**

In the Portuguese case, frontier statistics remain one of the main sources of information in the overall system of tourist statistics. It is the only source which measures the physical movements of people.

The existence of a vast and diversified supply of unregistered accommodation (which cannot be counted in the short term) and large-scale movements of non-residents who have relatives living in Portugal and therefore stay at their own homes or those of their relatives (which implies a high number of unrecorded overnight stays) on the one hand, and the importance of in the national economy, on the other hand, are factors that need to be taken into consideration in the organisation and management of the counts taken of movements at national frontiers;

The methodology that has been tried out has not shown there to be any great deviations in the counting of movements at frontiers, whenever it has been possible to keep the two systems running in parallel. It has made it possible to provide a better characterisation of those who visit our country, a situation which, in the past, was impossible in view of the other duties performed by the police when stationed at border posts;

The costs of the project are, however, very high. Only the agreement of the various parties interested in using the information that is gathered and possible agreements between countries with a common border (as is the case with Portugal and Spain) will provide solutions for the sharing of costs.

Recourse to models that can be used for estimating movements at frontiers, thus avoiding the need to carry out annual data collection operations, is, however, the path that should now be followed. By drawing up such a model, we will have reliable information from a stable base, the most important of which is:

Accommodation (2nd part of the questionnaire)

The plan (3rd part of the questionnaire)



CONTAGEM DE TRAFEGO

Posto: VCT D 002 Sentido: Portugal-Espanha Via: 3

Mês : Novembro / 95

	ABC	D	E	F	G	H	I	JK	L	Tot.
1	0	2615	140	11	1	9	16	0	5	2797
2	0	551	64	8	3	35	1	0	0	662
3	0	561	73	4	0	21	2	0	0	661
4	0	1137	99	5	0	14	4	0	1	1260
5	0	712	35	4	0	3	1	0	1	756
6	1	449	48	5	0	25	1	0	0	529
7	1	461	43	6	1	22	1	0	0	535
8	0	794	74	11	0	31	3	0	0	913
9	0	526	71	10	1	22	0	0	0	630
10	0	572	79	15	1	27	2	0	1	697
11	0	958	68	5	0	10	4	0	0	1045
12	0	583	36	2	1	3	0	0	0	625
13	0	413	46	8	1	33	3	0	0	504
14	0	425	69	13	1	31	3	0	1	543
15	0	582	76	16	3	43	2	0	2	724
16	0	511	81	12	0	30	1	0	0	635
17	0	570	65	6	1	24	3	0	1	670
18	0	973	88	2	0	9	2	0	0	1074
19	0	642	32	1	0	0	1	0	0	676
20	0	470	51	14	1	26	1	0	1	564
21	0	512	61	12	4	33	3	0	1	626
22	0	729	73	7	1	27	1	0	0	838
23	0	491	62	8	0	30	2	0	0	593
24	0	602	85	10	0	34	1	0	0	732
25	0	1001	81	8	0	6	1	0	2	1099
26	0	568	36	4	1	1	0	0	0	610
27	0	479	64	19	3	81	2	0	4	652
28	0	448	62	38	4	69	3	0	2	628
29	0	605	77	7	3	28	2	0	0	722
30	0	584	67	14	0	30	1	0	0	696
Tot	2	20524	2006	285	31	757	69	0	22	23696
TMD	0	684	67	10	1	25	2	0	1	790

ABC ----- Velocipedes e Motociclo  
 D+E ----- Ligeiros  
 F+G+H+I - Pesados  
 I ----- Autocarros e Trolleybus  
 JK ----- Tractores agrícolas  
 L ----- Não classificado

DATA: 11.12.95



Produtos para Análise  
 Contagem de Tráfego, Lda.

**INQUÉRITO AO MOVIMENTO  
NAS FRONTEIRAS - 1994**

Instrumento de notação do Sistema Estatístico Nacional  
(Lei 6/89 de 15 de Abril), de resposta obrigatória.  
Registado no I.N.E., sob o n.º 1828, válido até 94/12/31.

DIRECCÃO GERAL DO TURISMO

INSTITUTO NACIONAL DE ESTATÍSTICA

**1. Sea frontier**

1.1. Frontier

Alcântara (Lisbon)

1

Funchal

2

Serial number

Date of Interview

Year Month Day

1.2. Type of vessel:

Cargo  1

Cruise

2

Yacht  3

1.3. Nationality of vessel

1.4. Size of the group that is travelling

1

Of whom: Male

2

Female

3

**2. Characterization of the person representing the family**

2.1. Nationality

2.2. Country of residence

2.3. Work situation

2.3.1. Profession

2.4. Age   (years)

**3. Journey**

3.1. Reason for journey:

- |              |                            |                            |                |                       |                             |
|--------------|----------------------------|----------------------------|----------------|-----------------------|-----------------------------|
| Recreation < | Holidays                   | <input type="checkbox"/> 1 | Professional < | Meetings              | <input type="checkbox"/> -  |
|              | Cultural visits            | <input type="checkbox"/> 2 |                | Business              | <input type="checkbox"/> 8  |
|              | Sport                      | <input type="checkbox"/> 3 |                | Congresses/Incentives | <input type="checkbox"/> 9  |
|              | Visit to relatives/friends | <input type="checkbox"/> 4 |                | Work (short period)   | <input type="checkbox"/> 16 |
|              | Shopping                   | <input type="checkbox"/> 5 |                | Others                | <input type="checkbox"/> 11 |
|              | Others                     | <input type="checkbox"/> 6 |                |                       |                             |

- |                 |         |                             |           |                             |               |
|-----------------|---------|-----------------------------|-----------|-----------------------------|---------------|
| Other Reasons < | Studies | <input type="checkbox"/> 12 | Religious | <input type="checkbox"/> 14 | Miscellaneous |
|                 | Health  | <input type="checkbox"/> 13 | Transit   | <input type="checkbox"/> 15 |               |

If the country of residence is **PORTUGAL** --- > End of interview

3.2. Stay in Portugal (nº of nights) . . . . .

3.2.1. Date of Entry . . . . .

3.2.2. Frontier post \_\_\_\_\_

3.2.3. Date of Exit . . . . .

Interviewer \_\_\_\_\_

ESTADISTICA - Instituto Nacional de Estatística - 1994

<p><b>INQUÉRITO AO MOVIMENTO NAS FRONTEIRAS - 1994</b></p> <p><small>Instrumento de notação do Sistema Estatístico Nacional (Lei 6/89 de 15 de Abril), de resposta obrigatória. Registado no I.N.E. sob o nº 1827, válido até 94/12/31</small></p>	<p><b>DIRECÇÃO GERAL DO TURISMO</b></p> <p><b>INSTITUTO NACIONAL DE ESTATÍSTICA</b></p>																
<p><b>1. Railway frontier post</b></p> <p>1.1. Frontier post                  Marvão      Valença      Vilar Formoso  <input type="checkbox"/> 2      <input type="checkbox"/> 3      <input type="checkbox"/> 4</p> <p>1.2. Class in which travelling :                  1st Class      <input type="checkbox"/> 1      Couchette      <input type="checkbox"/> 3                  2nd Class      <input type="checkbox"/> 2      Bed              <input type="checkbox"/> 4</p> <p>1.3. Size of the group that is travelling      <input type="text"/> <input type="text"/> 1                  Of whom : Male      <input type="text"/> <input type="text"/> 2      Female      <input type="text"/> <input type="text"/> 3</p>																	
<p><b>2. Characterization of the person representing the family</b></p> <p>2.1. Nationality _____ <input type="text"/> <input type="text"/> <input type="text"/></p> <p>2.2. Country of residence _____ <input type="text"/> <input type="text"/> <input type="text"/></p> <p>2.3. Work situation _____ <input type="text"/> <input type="text"/> <input type="text"/></p> <p>2.3.1. Profession _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>2.4. Age <input type="text"/> <input type="text"/> (years)</p>																	
<p><b>3. Journey</b></p> <p>3.1. Reason for journey:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 20%; border: none;">Recreation</td> <td style="width: 5%; border: none;">{</td> <td style="width: 40%; border: none;">                 Holidays <input type="checkbox"/> 1                  Cultural visits <input type="checkbox"/> 2                  Sport <input type="checkbox"/> 3                  Visit to relatives/ friends <input type="checkbox"/> 4                  Shopping <input type="checkbox"/> 5                  Others _____ <input type="checkbox"/> 6             </td> <td style="width: 5%; border: none;">}</td> <td style="width: 10%; border: none;">Professional</td> <td style="width: 5%; border: none;">{</td> <td style="width: 40%; border: none;">                 Meetings <input type="checkbox"/> 7                  Business <input type="checkbox"/> 8                  Congresses/Incentives <input type="checkbox"/> 9                  Work (short period) <input type="checkbox"/> 10                  Others _____ <input type="checkbox"/> 11             </td> <td style="width: 5%; border: none;">}</td> </tr> <tr> <td style="border: none;">Other Reasons</td> <td style="border: none;">{</td> <td style="border: none;">                 Studies <input type="checkbox"/> 12                  Health <input type="checkbox"/> 13             </td> <td style="border: none;">}</td> <td style="border: none;">Religious</td> <td style="border: none;">{</td> <td style="border: none;">                 Religious <input type="checkbox"/> 14                  Transit <input type="checkbox"/> 15                  Miscellaneous _____ <input type="checkbox"/> 16             </td> <td style="border: none;">}</td> </tr> </table>		Recreation	{	Holidays <input type="checkbox"/> 1 Cultural visits <input type="checkbox"/> 2 Sport <input type="checkbox"/> 3 Visit to relatives/ friends <input type="checkbox"/> 4 Shopping <input type="checkbox"/> 5 Others _____ <input type="checkbox"/> 6	}	Professional	{	Meetings <input type="checkbox"/> 7 Business <input type="checkbox"/> 8 Congresses/Incentives <input type="checkbox"/> 9 Work (short period) <input type="checkbox"/> 10 Others _____ <input type="checkbox"/> 11	}	Other Reasons	{	Studies <input type="checkbox"/> 12 Health <input type="checkbox"/> 13	}	Religious	{	Religious <input type="checkbox"/> 14 Transit <input type="checkbox"/> 15 Miscellaneous _____ <input type="checkbox"/> 16	}
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<p style="text-align: center; border: 1px solid black; padding: 2px;">If the country of residence is PORTUGAL ---&gt; End of interview</p> <p>3.2. Stay in Portugal ( nº of nights) . . . . . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>3.2.1. Date of Entry . . . . . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>3.2.2. Frontier post _____ <input type="text"/> <input type="text"/> <input type="text"/></p> <p>3.2.3. Date of Exit . . . . . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>																	
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto;"> <p style="text-align: center;">If 3.2.1 = 3.2.3                  Questionaire is over                  If " ≠ 3.2.3                  Pls continue to                  answer questionnaire</p> </div>																	



<b>INQUÉRITO AO MOVIMENTO NAS FRONTEIRAS – 1994</b> <small>Instrumento de notação do Sistema Estatístico Nacional                  ( Lei 689 de 15 de Abril ), de resposta obrigatória                  Registado no I.N.E. sob o nº 1826, válido até 94/12/31</small>	<b>DIRECÇÃO GERAL DO TURISMO</b>  <b>INSTITUTO NACIONAL DE ESTATÍSTICA</b>																																				
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<b>1. PASSENGER VEHICLE</b>																																					
1.1. Type of vehicle:	Date of Interview _____ <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																																				
<table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">Without Trailer</td> <td style="width: 15%; text-align: center;">With Caravan</td> <td style="width: 15%; text-align: center;">With other Trailer</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">Year Month Day</td> </tr> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Car</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 2</td> <td style="text-align: center;"><input type="checkbox"/> 3</td> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Bus</td> <td style="text-align: center;"><input type="checkbox"/> 10</td> </tr> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Light &lt; Auto-caravan</td> <td style="text-align: center;"><input type="checkbox"/> 4</td> <td style="text-align: center;"><input type="checkbox"/> 5</td> <td style="text-align: center;"><input type="checkbox"/> 6</td> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Motorcycle (&gt; 50 cc)</td> <td style="text-align: center;"><input type="checkbox"/> 11</td> </tr> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Commercial</td> <td style="text-align: center;"><input type="checkbox"/> 7</td> <td style="text-align: center;"><input type="checkbox"/> 8</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Other</td> <td style="text-align: center;"><input type="checkbox"/> 12</td> </tr> </table>		Without Trailer	With Caravan	With other Trailer		Year Month Day	Car	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	Bus	<input type="checkbox"/> 10	Light < Auto-caravan	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	Motorcycle (> 50 cc)	<input type="checkbox"/> 11	Commercial	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	Other	<input type="checkbox"/> 12	1.2. Nationality of the vehicle _____ <input type="text"/> <input type="text"/>												
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3.3. On the map of Portugal recognise the regions where you have been and indicate the number of nights spent in any type of accommodation :

1 Type of accommodation N° nights

Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		

2 Type of accommodation N° nights

Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		

3 Type of accommodation N° nights

Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		

4 Type of accommodation N° nights

Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		

5 Type of accommodation N° nights

Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		

6 Type of accommodation N° nights

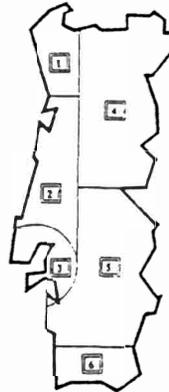
Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		

7 Type of accommodation N° nights

Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		

8 Type of accommodation N° nights

Hotels and similar units		
Apartments		
Tourist villages		
Camping		
Own house		
Relatives / friends		
Other		



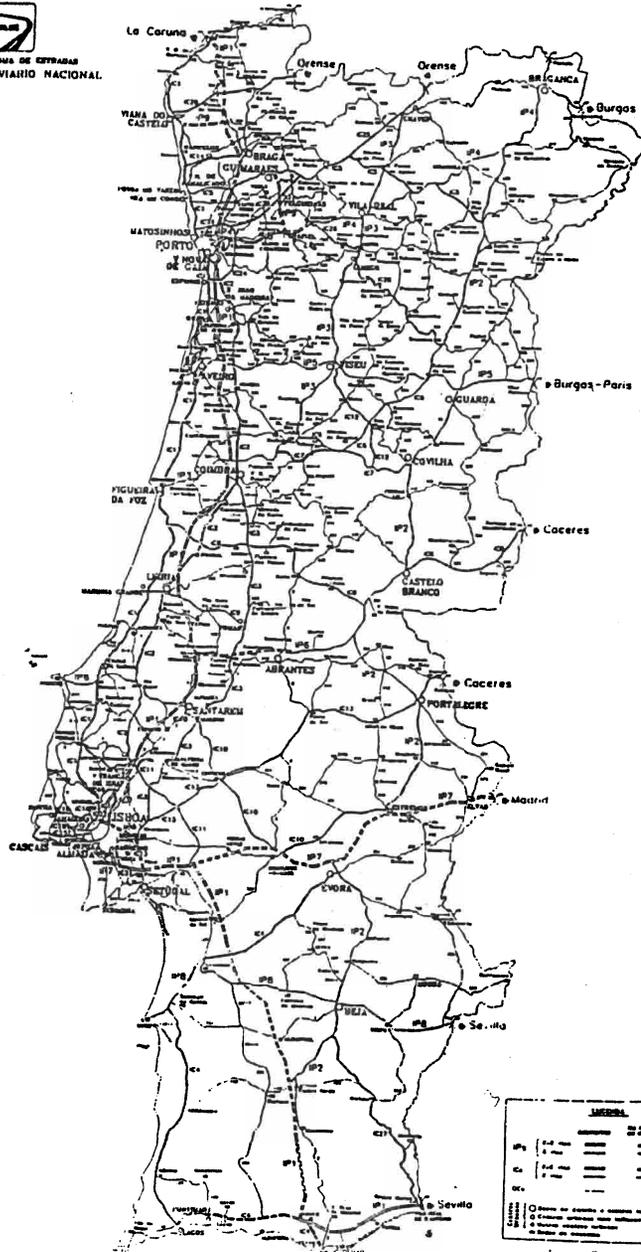
Interviewer \_\_\_\_\_

Serial number 

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**JAE - JUNTA AUTÓNOMA DE ESTRADAS**

- 1 - On the map of Portugal mark the place from where you started before reaching this frontier post:
- 2 - Mark the itinerary you took that day :



LÍNEAS		LÍNEAS	
SP	Dist. (km)	SP	Dist. (km)
SP 1	0-100	SP 1	0-100
SP 2	100-200	SP 2	100-200
SP 3	200-300	SP 3	200-300
SP 4	300-400	SP 4	300-400
SP 5	400-500	SP 5	400-500
SP 6	500-600	SP 6	500-600
SP 7	600-700	SP 7	600-700
SP 8	700-800	SP 8	700-800
SP 9	800-900	SP 9	800-900
SP 10	900-1000	SP 10	900-1000

O Símbolo SP indica o ponto de partida de cada itinerário.  
 O Símbolo SP indica o ponto de chegada de cada itinerário.  
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 O Símbolo SP indica o ponto de chegada de cada itinerário.



# PLEASURE TRAVEL MARKETS TO NORTH AMERICA REDESIGN OF THE MULTI-COUNTRY STUDIES

S. MEIS, D. SHAIENKS, D. MEREDITH, C. FLANNERY

## Introduction

Between 1986 and 1991, the Canadian Tourism Commission (formerly Tourism Canada) and the United States Travel and Tourism Administration (USTTA) as a part of a joint research program entitled the North American Pleasure Travel Market Studies jointly undertook seventeen market segmentation studies in thirteen countries. Although these studies provided valuable market information, an independent review identified a number of areas for improvement. Among the considerations was the overall need to improve usage of the studies. In addition, it was believed that the research could provide a better link to practical marketing and communications strategies.

Given the evolution of market segmentation over the years, the partners decided to review and update the design of the methodology, while at the same time maintaining comparability to previous studies.

In addition, both organizations wanted to more fully understand the role of the travel trade in the target country. Generally, very little is known about the role of the trade in the travel decision making process of the travellers in the target countries. In some countries resistance has been encountered from this group of intermediaries in bringing new research-based ideas and products to the market.

This article describes the approach used to develop this survey. It starts by outlining the objectives and research approach used in these market segmentation studies between 1986 and 1991. It then describes the design issues and approach used in redesigning the consumer survey. This is followed with a description of the addition of a complementary trade and product survey also administered when appropriate in each country of study. Finally, the paper demonstrates a sample of the results and information benefits obtained from a subsequent application of the new research design to a core study of the Netherlands Pleasure Travel Market.

## Pleasure travel market study 1: first generation methodology

The objectives of the first phase of the long-haul pleasure travel market studies (PTMS) were to identify the basic long-haul pleasure travel motivations, the size, travel characteristics, expenditures, attitudinal and awareness characteristics of the potential long-haul pleasure travel market, the awareness and perceptions of the various Canadian and American travel products as well as the demographic, life cycle and vacation style characteristics of the various long-haul pleasure travel markets.

To achieve these objectives, data were collected in each of the countries studied. In each case, approximately 1,200 in-home, personal interviews averaging 50 minutes in length were conducted. Respondents were people 18 years of age or older who had taken a long-haul vacation trip of four nights or longer by plane in the past three years, or who intended to take such a trip in the next two years. The concept of a long-haul destination was defined in each case, for example, outside of Europe and the Mediterranean for European travellers or outside Japan and South Korea for Japanese travellers. Respondents were identified using a random probability cluster sampling procedure.

Respondents were asked to describe their most recent long-haul pleasure trip, in terms of travel characteristics, activities undertaken, as well as their awareness and interest in Canadian and US destinations. Travellers were then asked about their general travel motivations, travel philosophy and products/benefits sought when travelling and about their rating of Canada or the US in comparison with other overseas destinations.

Analysis of the resulting data employed a cluster analysis technique to generate a three-part segmentation model that separately addressed the travel philosophy, motivations and product interests of these potential long-haul pleasure travellers.

As mentioned in the introduction, even though the studies provided valuable market information, an independent program evaluation review conducted by an academic expert identified a number of areas of potential improvement. As a result a methodological redesign project was initiated to increase the utility of the studies, redress identified methodological weaknesses and make the study results more accessible to industry users.

## **Creating ptms 2: the consumer component**

### *Redesign Approach*

Overall, redesigning the consumer survey combined both qualitative and quantitative techniques including analysis of previous data, literature review, interviews with end-users and extensive pre-tests including focus groups and a pilot study. These techniques aimed to identify new requirements with respect to data, analysis, etc., items no longer relevant, areas for improvement in general and to increase usage in particular.

Key problems identified in the preliminary work included the following:

- the frame of reference for the philosophy, motivation and benefit questions was not clear; the motivational, philosophical and beneficial reasons for taking a trip varied from trip to trip. A trip to relax on the beaches of Portugal was totally different, and taken for different reasons from a city trip to New York.

- Can actual trip expenditures be estimated reasonably well in order to qualify the revenue potential of a segment of interest?

- Awareness of the US was very high, while awareness of Canada was very low. Those who had actually been to Canada were much more positive about the country and emphasized some unique differences relative to the US (culture, safety, scenery). Those who were not aware of either Canada or the US, or who had no interest in visiting either country, were not motivated to rate the countries and felt it was a redundant exercise.

- The frame of reference for the questions dealing with the Canadian and the US travel experience caused a number of problems. Some did not

feel familiar enough with them to make some meaningful comparisons with other destinations. Others were familiar with both Canada and the US, but didn't really know which other country to use as a comparison point. Others compared Canada with the US. Most, however, said that they go to different countries for different reasons. As a result, they could not easily compare countries. The reasons they would go to the UK were totally different from the reasons they would go to the US. For example, they could say if they would go to the US to see museums, but they could not say whether the US was better than other countries for museums.

The development of the new questionnaire involved a three-step process: broad changes as a result of the analysis and feedback; changes emerging from the focus groups; and final changes as a result of the pilot test of a proposed redesign survey instrument.

Generally, the significant changes in the design approach taken in the new instrument permitted occasion-based segmentation analysis allowing each trip to be analysed for motivations, etc. while making the respondent's frame of reference for the motivational and philosophy components of the three-part model more robust. To correct the identified problems with the frame of reference for the ratings of Canada and the US, the scales were changed to individual performance ratings rather than comparative ratings relative to other countries.

In the redesigned instruments, detailed information is now obtained on two trips. By looking at the characteristics of trips as opposed to characteristics of respondents, the new instrument avoids some of the basic design problems identified in the previous work. For example, respondents in the focus groups said that providing importance ratings was very difficult because their answers would vary from trip to trip depending on the type of vacation or the destination. The new instrument uses trip-specific questions to avoid this problem. This new information also helps address the requirements of a ski resort operator, for example, by looking at a sample of skiing trips taken by vacationers in terms of the services used, the travel package obtained, the additional activities engaged in, etc.

The new trip-specific questions are also primarily binary, in that they measure whether or not the respondent engaged in activity. This reduces the complexity and respondent burden of the rating process which called for a four-point scale of importance. While segmentation can still be conducted on the data from the new instrument, it is now a more activity-based segmentation permitting one to identify an "outdoors adventure" segment in terms of clusters of outdoor activities actually engaged in.

In summary, the following changes were made in arriving at the preliminary revised questionnaire tested in the focus groups:

- expanding the travel profile of the traveller to include past and future trips;
- getting details about two actual past trips taken;
- changing the frame of reference to actual trips taken for these two trips;
- changing to a more logical sequence of questions;
- streamlining bulky questions, especially those pertaining to travel philosophy, and motivation;
- solidifying the frame of reference for travel intentions;
- new inclusions i.e., expenditures, accommodations used, importance ratings for products, budget for future trips, etc.;

- changing the ratings of Canada and the US to evaluative performance ratings rather than comparative ratings; and
- a modular questionnaire.

A final design improvement is related to the cross cultural testing and fine tuning process before applying the new standard PTMS questionnaire to any new country of study. The new questionnaire must be further pre-tested with a sample group from each country of study and modified accordingly to ensure that it is understood, relevant, complete and culturally appropriate to that market of interest.

Another improvement relates to the sampling. The target group for the consumer survey had been defined as persons more than 18 years of age who have travelled or plan to travel on a long haul vacation. For the Netherlands this was defined as a trip for pleasure by air outside Europe and the Mediterranean countries, Morocco, Tunisia or the Canary Islands within the last three years AND/OR were planning to make such a trip within the coming two years.

The sample size was generally set at between 1,200 and 1,500 long-haul pleasure travellers. However for Canada, the proportion of the samples who had actually visited the country was usually quite small. As a result, quotas were established for past visitation to Canada and the US; the quotas allow specific analysis comparing the perceptions of past visitors to non-visitors and are an effective tool for identifying market opportunities.

With regard to the necessary data analyses a net sample size of  $n=1500$  is needed with the following stratification:

- $n=350$  visitors to Canada;
- $n=350$  visitors to the US;
- $n=500$  or more visitors to other long-haul destinations;
- at most  $n=300$  persons who plan a long-haul holiday within two years from the time of study.

Given the low incidence of travellers to Canada from most countries, alternative means may be required to obtain the necessary quotas. These could include accessing existing data bases, recruiting non random at airports, etc. However, if alternative approaches such as these are used, it is necessary to have data regarding the representativeness of the samples which are drawn to be able to apply a weighting scheme.

With regard to the fieldwork itself, certain flexibility is envisaged depending on the research infrastructure of the country of study. In general, when considering the most appropriate data collection method for each country of study, certain criteria must be considered such as the culture, the timing, the costs, the response rates, the representativeness, the availability of phone and/or dependability of mail.

With respect to analysis capabilities, the redesigned structure of the consumer survey questionnaire now supports a variety of analytical techniques including both those used in the prior studies and a variety of new supplementary techniques.

It is important to note that the philosophy/motivation items required to support the three-part market segmentation model used previously still exist in the revised questionnaire.

As discussed previously, different activities may be important to the same person, depending upon the kind of trip taken or the objective for travel. The nature of the segmentation will be somewhat affected by the choice to ask respondents if they "took part" in an activity, where responses we-

re captured in binary (yes/no) form, rather than as scaled values (e.g., four point scale of importance). This format was easier to administer, and more appropriate once the questions were made specific to a particular trip. Previously, items were rated in terms of generalized importance of perceptions and respondents were unclear about the frame of reference.

Benefits provide another basis for segmentation, based upon a battery of items that deal with motivations, lifestyles, and/or benefits from the specific trip. These items continue to be scaled for importance using a four-point scale.

Values, or travel philosophy, are the most abstract component of the three-part model. Eleven items are scored using a four point scale based on agreement that will make it possible to carry out factor analysis as part of the three-part model. The number of items involved was reduced to eliminate some of the more clearly redundant items in this set.

Prior kinds of analysis can still be carried out, using factor and cluster analysis techniques. The nature (general versus now trip-specific reference) and level of measurement of some items has been altered, however; this may affect some previously used analytic patterns. These changes to the questionnaire were nevertheless implemented to preserve that essential information required to support comparability to past analyses. The major changes were intended to support analysis that will be more focused on trip-specific behavioural and motivational analysis.

The new questionnaire also supports new kinds of analysis. The most important addition in this respect centres upon the way in which data are captured for two recent trips. The new trip-specific format creates a new layer of micro-level data, which in effect, makes it possible to link data on information sources, booking arrangements, travel expenditures, motivations, activity-based items, levels of satisfaction, value-for-money, and mode of transportation.

In the previous version of the questionnaire, the lack of reference to a specific trip made it mandatory to conduct analysis with the individual as the basic unit of analysis. While this was adequate for some kinds of analysis, it made other kinds of analysis difficult. In effect, with the individual as the basic analytic unit, an assumption was built into the data structure that characteristics of a person (i.e., motivations) that operate at one point in time or trip are constant in their influence at all points in time for all their travel behaviour. The previous data collection format forced kinds of analysis that were unable to distinguish statistically between motivations that may be active and associated with behaviour on one particular trip from those which referred to the respondents general travel experience.

The new research design also supports a new form of exploratory analysis involving the use of automatic interaction detection techniques, most popularly known as CHAID analysis. In part, this is a result of the new questionnaire design, and partly a matter of advances in commercially available software. What has become possible is the selection of a key variable as the dependent variable in a new kind of analysis that builds clusters or groups in terms of combinations of explanatory variables. Nonlinear combinations can now be found that would not otherwise be obvious, and large numbers of different combinations of independent or explanatory variables can be evaluated by efficient automated search routines.

The result of such an analysis is a new way of viewing data which uncovers hierarchical or nested combinations of explanatory variables that de-

fine distinct groups within a survey population. These groups will be constructed in such a manner that they possess statistically different levels of a quality measured by the chosen dependent variable.

Using these techniques, it is now possible to use a key variable such as "likelihood of coming to Canada (or the US)" as the dependent variable, and permit the automated procedure to develop causal models by assessing combinations of attitudes, motivations, and behaviours that distinguish high probability from lower probability user groups. Similarly, other key variables could be selected, such as the level of expenditure. In this case, combinations of explanatory variables can identify and provide insight into understanding the "high yield" or heavy spending travellers.

The redesigned survey instrument also supports other new analyses that were not possible previously. The additional micro level information that builds upon the trip specific data enables tabular analysis, analysis of variance, factor and discriminant analysis, and structural equation models (SEM) which permits, for the first time, a full examination of the linkages among values, benefits and activities of the three-part model with trip type, specific travel arrangements, satisfaction, value-for-money, and level of expenditures.

In addition, for the first time, it is now possible to study what connection, if any, there may be between "trip 1" variables, and "trip 2" measures for the same variables. This opens up an entire new field of inquiry in terms of finding out if travellers seek diversity or consistency in their travel experiences, and/or whether this consistency across trips varies for different groups of travellers.

The addition of a quota sample of past travellers to Canada and the US creates other new analytical opportunities. It is now possible to compare the perceptions of past visitors with the perceptions of non visitors and determine how visitation affects the perception of different attributes. This also allows the identification of marketing opportunities by comparing what travellers to Canada do on their trip with what they do on trips to other destinations. Any gaps in participation rates of these activities point to opportunities to develop a product or to better market an existing one in terms of packaging, pricing, advertising, etc.

### **Expanding the research design to include a travel trade survey**

A key component of the redesign project was the need to develop an industry component to the studies. Previously, the research only looked at the needs of the consumers. However, effective international marketing efforts must be designed to work with the local travel industry in the target country. Their structure, operations, values and beliefs also need to be assessed as part of any market strategy.

For the purpose of this study, the travel trade industry was defined as travel agents, wholesalers, tour operators, airlines and banks who book travel packages. Generally, very little is known about their roles in the travel decision making process in the target countries. Understanding the role of the travel trade influences the nature of marketing activities in Canada and in the US.

The design of the Travel Trade Survey was undertaken to provide a survey instrument to collect data on the structure of the travel trade industry, the travel trade's awareness and perceptions of the North American travel

products and their perceptions of the market's level of interest in Canada and the US.

Identification of opportunities should take into account four products which are currently on the market. Products refer to the inventory of North American package tours being offered in the country of study. An analysis of products sold in the foreign market was therefore included in the trade survey component although the two need not be conducted simultaneously.

The questionnaire for the trade survey was based on previous surveys conducted by the Pacific Asia Travel Association and in Mexico by the UST-TA. Content requirements were identified from these past surveys that would help address the primary objectives of this study component: to get a description of the travel trade and to evaluate their perceptions of Canada and the US and their respective international marketing efforts.

An initial draft of the questionnaire was developed, based on the following issues:

- the countries where travel had been booked;
- the percentage of company sales volume derived from travel to North America;
- the percentages of travel for leisure compared to business, and the percentage of sales for corporate accounts;
- the percentage of individual trips compared to package tours;
- the types of trips taken;
- the types of package tours that were most popular;
- the destinations in North America that are most popular;
- what are the strengths and weaknesses that travellers perceive about North America?
- possible changes in travel patterns to North America, and reasons for change;
- information sources used in selling trips to North America;
- the use of the federal tourism agencies office from Canada or US in the market that help promote travel to North America, and their usefulness;
- ratings of National Tourism Offices from various countries;
- previous personal experience with travel in Canada and the US.

The instrument was tested in focus groups and a number of changes were made to improve the quality of the questionnaire. A pilot test was then completed by 25 respondents and it was recommended that the survey be conducted in two parts: a qualitative component which consisted of in-depth interviews with senior employees of larger companies and a quantitative component which consisted of a self-administered questionnaire with a random sample of smaller but key, influential companies.

One key component of the travel trade survey was a preliminary review of the market structure in the target country. This involved a review of any relevant literature from Tourism Canada and the US Travel and Tourism Administration. Local offices were used in order to gather information. This was necessary to identify key players who dominated the market and who were included in the qualitative in-depth interviews. Understanding the structure was also essential to develop an appropriate sampling strategy for the quantitative component.

The in-depth personal interview was conducted with an identified key executive. Participants were contacted by telephone to arrange an appointment for an interview. The questionnaire was delivered to the partici-

part in advance, so that they will be prepared to discuss the questionnaire and related issues. These interviews were useful in gaining a full in-depth insight into the local travel trade.

Issues included in the in-depth interviews include:

- expected trends in long-haul travel;
  - key sources of information and sales instruments;
  - perceptions of Canada and the US as holiday destinations;
  - barriers to travel to North America and reasons for trips cancellations;
- and
- suggestions for improved marketing on the part of Canada and the US.

The quantitative survey is administered to a sample of the remaining trade in the country studied. For these companies, there is an initial telephone contact, in-person delivery of the self-administered questionnaire, and an in-person contact to review, complete and retrieve the questionnaire.

Sampling is determined based on the structure of the industry in the target country. The in-depth personal interviews with senior employees, such as the marketing directors, are usually conducted in the ten largest companies. For the quantitative survey, a statistically valid sample size is determined, based on the actual number of companies in the target population.

As mentioned earlier, one part of the trade survey involved a tour product inventory and analysis. The objective of the study is to gather data on tour products available for travel to Canada and the US that are currently offered in the target country. These data provide information about the supply and destination representation of tour products available to travellers in the target country. The survey instrument used here is designed to gather information about each package tour offered to Canada and the US. To qualify, a tour must include transportation and at least one night's accommodation in Canada or the US. A sample of companies is drawn from a list of tour operators or travel agencies that have sold at least 100 package tours to North America in the past year. All of the ten key players in the industry are included in the sample. In addition a supplementary sample is drawn of medium and small companies who sell tours to Canada and the US.

Each selected company is requested to provide brochures of package tours currently offered to North America. These brochures are used as the source of data for this component of the study. Information is then coded from the brochures regarding the type of tour, the accommodations, the meals, the activities or types of entertainment, the type of transportation being offered, etc.

### **Application of ptms ii to the Netherlands**

In 1992, the new design methodology was applied to a study of the Dutch pleasure travel market - the first in the new series of North American Pleasure Travel Market Studies.

With respect to the most recent trip (MRT), the following characteristics summarize the long haul pleasure travel behaviour of the Dutch market:

- They travelled primarily to the US on their MRT, followed by the Far East/Asia and Canada.
- The stated purpose of their MRT trip was primarily to visit friends

and relatives (VFR), followed by touring type vacations.

- Most travelled with their spouse/partner.
- They stayed in the homes of their friends and relatives.
- They were motivated by a number of different factors, the most important of which were outstanding scenery, nice weather and exotic atmosphere.
- While a significant number spent a considerable amount of money on their trips, many visited and stayed with friends and relatives and did not spend much beyond their airfare.

### **Size of the potential dutch long-haul pleasure travel market to Canada**

The total incidence of long-haul pleasure travellers (i.e., those travelling outside of Europe, Morocco, Tunisia and the Canary Islands) in the Netherlands was 14%. This includes adults who had taken a long-haul holiday by air in the three years prior to the survey or who were planning such a trip in the next two years. The overall size and incidence of these population breaks down as follows:

Approximate Adult Population in the Netherlands (18 years or over)	11,800,000
Incidence of Outbound Long-Haul Pleasure Travellers	14%
Estimated Potential Outbound Long-Haul Pleasure Travellers	1,652,000
Visitors to Canada (past 3 years) (All purposes, including children)	118,000
Potential Visitors to Canada (40% interested) (Over next five years)	660,800

The size of Canada's potential market here indicates that a substantial opportunity exists for increasing Dutch long-haul travel to Canada.

### **Dutch travel to Canada**

When compared to other long-haul destinations, trips to Canada have the following characteristics:

- a substantially higher proportion of visits to friends and relatives (VFR);
- longer trips, on average;
- more travel from June to September;
- more travellers stay with friends and relatives (88%); and
- Dutch travellers generally spend less in Canada than they do in other destinations.

The Dutch long-haul pleasure traveller participated in different types of activities compared to those who travelled to all other destinations. These

differing interests and motivations may be explained by differences in demographics between visitors to Canada and visitors to other destinations. Visitors to Canada are generally older, less educated, and spend less than Dutch travellers to other long-haul destinations. VFR may account for lower spending since most costs are covered (lodging, meals, transportation).

These differences represent marketing challenges and opportunities particularly in the area of better promotion. The challenge for Canada is to try and attract other clientele than the traditional VFR market by focussing on other Dutch travel segments. In these new segments Canada basically has to be reintroduced as a unique and distinct travel destination.

### **Future dutch travellers**

In addition to looking at past travel, the study also looked at the travel intentions of those who had not taken a long-haul holiday in the past three years but who are planning one in the next two years.

Characteristics of those planning a long-haul vacation include the following:

- almost 20% plan to take two trips;
- the preferred type of trip for almost 40% will be to visit friends and relatives (VFR), followed by combination business/pleasure trips, touring trips and city trips;
- planned expenditures for this long-haul pleasure trip will be approximately 7,300 dfl (\$5,000 CDN), which is less than spent on trips to US and other destinations but more than was spent on trips to Canada;
- planners tend to be young and well educated; and
- planners are more likely to be single.

These planners represent a challenge for Canada, because they do not fit the traditional visiting friends and relatives (VFR) market. Canada does, however, have many of the products that appeal to them.

### **Opportunities for Canada in the dutch market**

Many Dutch long-haul pleasure travellers expressed interest in and favourably rated many of the products and activities that are present in Canada, such as national parks and forests. Relative to what the Dutch long-haul pleasure travellers rated as important in selecting a destination, the following represent opportunities for Canada:

- visiting resort areas;
- casinos and gambling;
- visiting the seaside;
- short excursions;
- skiing (downhill and cross country);
- camping;
- water sports; and
- tennis.

In all cases, these activities were done by Dutch travellers on vacation in other destinations at higher rates than in Canada.

## Activity segments of dutch long-haul pleasure travellers

Four distinctive groups of activities were identified. Within these groups, 14 unique "driving variable factors" were further identified and profiled according to the following variables:

- motivations for the recent trip;
- general travel motivations;
- average age;
- expenditures (past and future);
- other activities participated in;
- destinations visited in Canada and the US; and
- perception of Canada and the US.

The motivating items, in terms of what is "often" or "usually" important in the selection of a destination, that were common almost without exception across all groups were:

- outstanding scenery;
- nice weather;
- exotic atmosphere;
- environmental quality of air, water and soil; and
- having fun and being entertained.

The resultant activity segments were classified as follows:

### 1. Active

- Golf;
- Tennis;
- Fishing;
- Downhill skiing;
- Visiting theme parks; and
- Hunting.

### 2. City Sightseeing

#### A. City Sightseeing and Small Town

- Big cities; and
- Small towns.

#### B. City Sightseeing and Gambling

- Resorts;
- Casinos and gambling; and
- Visiting nightclubs.

«advance \U 5.5»

### 3. Beach

- Beaches.

«advance \U 5.5»

### 4. Natural History

- National parks; and
- Archaeological sites.

The study results indicate that Dutch long-haul pleasure travellers rate Canada as an excellent destination for all of these activities. The challenge is to take advantage of these opportunities. For example, Canada has

numerous products to offer those interested in an "active" vacation. The new casino in Montreal could be used to extend business travel into a pleasure travel component for those interested in City Sightseeing and Gambling.

With respect to communications, the study results indicate that Canada has a significant communications challenge. First, Canada must enhance its overall level of awareness with the Dutch long-haul pleasure travellers. Second, Canada needs to break out of its traditional VFR identity if it wishes to maximize its potential within the Dutch market. Canada has many of the products desired by Dutch long-haul pleasure travellers, so the key is to promote these strengths.

In terms of package travel, the consumer survey revealed that about one third of the travellers took a package vacation, but significantly more than that expressed interest in taking one. This presents opportunities for Canada to promote package travel to the Dutch market.

### **Conclusion**

This article shows how the successful Pleasure Travel Market to North America studies have been redesigned to strengthen the quality of the information being collected, increase the flexibility of analytical opportunities and expand the content coverage.

Results shown from application of the new research model to study the long haul pleasure travel market of the Netherlands in 1992, give a sample of the information benefits and marketing insights emerging from the new design. Subsequent studies conducted since have successfully applied the design to the target markets of Australia (1993), Taiwan (1994) and Japan in 1995.

## THE ITALIAN TOURISM BALANCE OF PAYMENTS. TOWARDS A NEW DATA COLLECTION SYSTEM

by B. De SIMONE - P. MASCELLONI

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*Ufficio Italiano dei Cambi*

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Foreign Exchange Office (Ufficio Italiano dei Cambi - UIC) co-operates with the Bank of Italy in the production of official balance of payments statistics. International tourism transactions represent a key item in the Italian balance of payments.

At present, the need to improve the methodology used by the UIC to compile the *Travel* item of the Italian balance of payments is increasing. This is primarily due to the impact of the lifting of foreign exchange controls which Italy gave up completely in 1990.

The main features of the Italian context are related to this last aspect. Until 1988, when the foreign exchange liberalization process started, the tourism data collection was relatively simple and accurate owing to the strict regulations deriving from the foreign exchange controls. At that time all the settlements from and to abroad, including the national and foreign banknotes purchases/sales, had to be performed through authorized banks. Furthermore, there was a ceiling per year in the amount of foreign currencies residents were allowed to get for travelling abroad.

Even imports and exports of banknotes and other means of payment were rigorously restricted. Illegal exports of Italian banknotes became an important phenomenon. Such transactions were taken into account when the bills re-entered Italy, through non resident travellers or through the Italian banks to which they were delivered to be converted into foreign currencies.

The foreign exchange regulations and the implied penalties for residents, constituted an effective deterrent to the currency reporting evasion. In that context, the data collection system was exhaustive for the measurement of the tourism-related currency flows.

The outcoming statistics breakdown was very poor. It was essentially based on the reason of the travel (leisure, business, study, medical treatment, etc.) and on the currency used. The counterpart country was not detected. A few statistical adjustments were carried out, reflecting mainly the need to allocate more appropriately to the capital movements some specific transactions, non-tourism-related.

Therefore, until the end of 1988, the global figures (receipts and expenditures) of the *Travel* item were highly reliable. On the other hand, it was not possible to satisfy disaggregated knowledge needs because of the lack of the necessary additional information in the data sources.

As the exchange liberalization was completed, on June 1990, the need to widely revise the data collection strategies and the information processing methodologies arose. Since 1990 residents are free to operate "outside" the domestic banking system, they can freely transfer banknotes and cheques, using foreign banks accounts, perform clearing settlements. Along with the reporting rules revision, a threshold (20 million lire) has been introduced for simplified reporting. This has led, in certain cases, to some information leakages.

The UIC statistical data base shows the effects of the above-mentioned aspects. As far as the tourism data are concerned, that negative impact, in terms of accuracy, is particularly relevant. The global tourism figures appear to be underestimated since the "statistical evasion" by those subjects who, making settlements outside the domestic banks, are requested to provide statistical reporting is particularly high. At the same time, the use of settlement techniques other than bank transfers is becoming more and more frequent.

At present, the international tourism statistics are processed on the basis of the following data sources:

• settlements by means of bank pay-orders ("channelled" settlements); the most important information relates to the currency used, the country of origin/destination, the transaction reason, the province of the Italian bank involved;

• settlements with means of payments ("not channelled" settlements); they are reported by the banks when the means of payments are negotiated or the client's accounts are credited or debited. In these cases the information is provided on the currency of denomination, the province of the Italian bank, but not the reason of the underlying transaction. For these settlements and for transactions directly settled through resident's accounts held abroad, a specific "Statistical Foreign Exchange Form" (Comunicazione Valutaria Statistica - CVS) must be reported by the residents when the amount is over 20 million lire.

The collected information is verified and, if necessary, corrected. It is finally aggregated, after conversion into lire, in order to determine the tourism currency flows for the monthly balance of payments. Further processing is performed to produce detail information to be published in the UIC monthly *Statistical Bulletin* containing a wide set of data on the Italian foreign transactions. Two tables on receipts and expenditures report a breakdown by country and by Italian province. The considered country is the counterpart of the settlement (for the bank transfer) or the country issuing the banknotes used (for "not channelled" transactions). The Italian province is that of the Italian bank performing the transaction. Therefore, the geographical allocation is partially misleading because of the lack of information, respectively, on the real foreign counterpart country and on the Italian province of residence of the resident subject.

The decreasing reliability of the tourist balance of payments data, with all the above-mentioned shortcomings, implies a negative impact on the linked statistical series (e.g. the national accounts) and serious difficulties in comparing data of different countries.

It is important to notice that it is impossible, in a short time, to improve statistics on incoming and outgoing tourist flows via banks' settlements of foreign means of payment. Furthermore, the data quality might deteriorate with the full implementation of the European Union. With the introduction of

the single European currency inside the European Union, statistical information connected to the national currencies used in the transactions will obviously disappear.

At present, there are already some working groups in different countries of the European Union which are involved in the solution of the problems regarding the need to find homogeneous methodologies for tourism statistics. Recently, a task force has been established by Eurostat to evaluate already existing problems and suggest alternative methodologies to solve them. Representatives of the UIC contribute to some of these groups.

Surveys of tourism business are becoming more and more relevant. The UIC has planned, like other countries, a sample survey to improve the quality of the international tourism statistics.

The main purpose of this survey is to improve the methodology at present used to compile the *Travel* item of the balance of payments and make it more consistent with the international standards, like those supplied by the International Monetary Fund (IMF). At the same time, other international institutions which are involved in tourism statistics, such as the World Tourism Organization (WTO), the OECD and the Eurostat, have been considered. Another aim is supplying the actual and potential users of statistics with information about some features of the international tourist services market in addition to that necessary to strictly satisfy the IMF requirements.

By the next July, a pilot three-month survey will start to verify empirically both the techniques and the instruments that are going to be used in the survey and its methodological aspects (an estimate of the sample error and the sample size): this information will be used in the final survey. Furthermore, the pilot survey will take place in a period (next summer) which is the most relevant to study the tourist flows to Italy.

The final sample survey should probably begin in January 1996 and be permanent. It will be the result of a series of individual interviews to be carried out in the main Italian road, rail, air and sea borders. Besides expenditure, other important variables linked to tourism are to be surveyed:

- main reason of the travel
- country of residence and destination
- Italian province of residence and destination
- amount of expenditure by main items
- currency
- length of the stay
- means of transport
- type of accommodation
- means of payment
- social and demographic variables

The survey will supply monthly data on expenditure by non-residents during their stay in Italy and by residents during their stay abroad. The individuals of the sample will be interviewed at the end of their stay to obtain reliable information; the foreign tourists will be interviewed when they are leaving from Italy, while the Italian tourists will be interviewed when they are coming back to Italy.

The survey will take place in all the main road and rail borders, airports and seaports. The less important border crossings will be selected randomly. The interviewers, at least two for each point of survey, should, on one hand,

count the number of people crossing the borders to estimate the size of inward and outward flows and, on the other, with a systematic drawing, interview the individuals face to face.

The sample size for the period July-September 1995 has been fixed at about 40.000 interviews, according to the necessity to limit the sample error in the estimates.

Some additional surveys will be run in order to collect information from a small number of operators of the tourist services supply (travel agencies, tour operators, etc.). The aim is to estimate the international transport costs to be deducted from the total cost of organized package tours.

The first results of the pilot survey will be introduced on the occasion of the 3rd forum on tourism statistics which will take place in Lisbon in 1996.

**SESSION 6  
CASE STUDY ITALY.  
PROPOSALS AND CONTRIBUTIONS FOR  
A NATIONAL TOURISM INFORMATION SYSTEM**



# THE TRIP AND STREP FORECASTING MODELS FOR ITALY

by Carlo CARRARO, Mara MANENTE

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## 1. Introduction

This paper presents a new set of tools for the analysis and forecasting of international tourism flows. Two groups of models are proposed by Ciset—the International Centre of Studies on the Tourist Economy of the University of Venice—and GRETA-Econometrics. The first group, the **TRIP** forecasting models, is designed to capture tourism flows from the main 21 world regions to a specific destination country. The second group, the **STREP** models, produces forecasts of tourism flows from the same 21 origins to a specific region within a country.

The innovative feature of these models is that they treat several origins and destinations simultaneously in order to quantify the relative attractiveness of different destinations and the impact of cross price and supply effects on tourism demand.

This basic theoretical choice has implications on the methodology to be used. As the most important destination countries have to be considered simultaneously, the information on their economic variables can be collected in order to exploit existing similarities and correlations across countries. Data of different countries can thus be pooled, and panel data estimation techniques can be used. This constitutes a relevant methodological improvement because it enables us to overcome the extremely serious problems arising from insufficient data which commonly affect quantitative studies of tourism demand.

This paper presents the results of applications of the above models to Italy and to the Veneto region within Italy.

The next Section will describe the basic theoretical choices and the estimation technique, the panel data analysis. A brief description of the estimated models, and the variables that characterise them is provided in Sections 3 and 4. Finally, Section 5 contains some concluding remarks.

## 2. The Theoretical Approach and the Estimation Method

The individual's willingness to devote part of his or her income and leisure time to the consumption of tourist services belongs to the general process of income allocation through which the consumer distributes his/her

purchasing power amongst various goods and services, including tourism. Once this decision has been made, the individual chooses which specific tourism product to buy (in terms both of holiday type and destination) amongst those available on the market. It is therefore important to identify the economic, sociological, and demographic variables that explain the individual decision to "consume" tourism, and the type of tourism which is chosen (Carraro, Manente, 1994).

So, the approach here presented distinguishes itself by its attempt to model two factors: a) the decision to holiday abroad competes both with other forms of consumption and with the attractiveness of tourism at home; b) the choice of a specific foreign country depends on the relative attractiveness of potential destination countries and of potential destination regions.

Figure 1 presents the structure of the **TRIP** and **STREP** models and describes the variables used at each step of the economic/econometric analysis.

The need to consider the joint decision of consumers in different countries about the destination of their holiday leads naturally to pool the available data. Therefore, in estimating the **TRIP** and **STREP** models, a panel data technique has been used (Hsiao, 1986; Carraro-Peracchi-Weber, 1993).

There are two main advantages deriving from estimating the models on the pooled data, rather than estimating separate equations, one for each country. First, when the coefficients of the same variables can be considered statistically equal for two or more of the countries/regions included in the panel, i.e. the countries/regions share the same behavioural model, those coefficients can be estimated with a greater amount of data, and therefore with greater accuracy. Secondly, differences in the economic structure across countries can be tested econometrically, whereas they are assumed in the standard procedure. Testing for parametric differences gives us the possibility to identify in which country and which variables have a different impact on the phenomenon to be analysed.

In the analysis of country-specific effects a two-stage procedure has been used. In the first stage, a set of dummy variables was designed to identify specific effects concerning the following macro-regions:

REGION 1: Austria, Belgium-Luxembourg, France, FRG, Ireland, the Netherlands, the U.K., Switzerland;

REGION 2: Denmark, Norway, Finland, Sweden;

REGION 3: Spain, Portugal, Greece;

REGION 4: USA, Canada, Japan, Australia;

REGION 5: Latin America, Africa.

The presence of region-specific effects was tested for all explanatory variables.

In the second stage, dummies were also introduced for individual countries in order to identify any other discrepancies that might exist within each macro-region.

The selection procedure was based on the information provided by the estimated t-statistics, and was aimed at the maximisation of information criteria such as the Schwarz-index.

Finally, according to an established tradition in the analysis of tourism demand, log-linear forms were imposed on the equations of the models. In this way, the coefficients are easily explained in terms of elasticity. The func-

tional specifications for all equations have been tested by means of suitable statistics, which led us not to reject the assumption of log-linear equations.<sup>1</sup>

### 3. The TRIP Forecasting Models of International Departures abroad and of Tourist Flows to Italy

The stages of the decision process of international tourist flows to Italy were represented by deriving two reduced-form equations.

In the first equation the number of tourists leaving each country of origin is explained by variables such as per capita income (PCGDP)<sup>2</sup>, the relative price of tourist services with respect to the price of the other consumption goods (TP/CP), the relative price of travel costs (by air and surface) with respect to the price of the other consumption goods (AIR/CP and OIL/CP),<sup>3</sup> the relative costs of tourism abroad and tourism at home (TP/WTP), demographic variables representing both the size and the composition of the population, variables representing the level and the distribution of free-time, variables representing consumers' cultural and social habits, preferences, climatic conditions, exceptional events.

In the second equation, the number of tourists coming to Italy from different countries is a function of the number of tourists who decide to holiday abroad (DEPARTURES) and of variables such as the relative price of tourist services in Italy with respect to their price in competitor countries (ITP/CCTP), the cost of reaching Italy from each origin, by air and by surface (AIRJ/AIRMED and FUELRATIO), the sticky adaptation to changing economic conditions (this is done by introducing the lagged dependent variable (ARRIVALS(-1)), life-cycle variables, habits, culture, preferences, Italian tourism supply (cultural heritage, natural resources, available facilities).

The formulation of the two equations is:

$$\text{DEPARTURES} = f[\text{PCGDP}, (\text{TP/CP}), (\text{TP/WTP}), (\text{OIL/CP}), (\text{AIR/CP}), \text{V.A.SER}, \text{TREND}, \text{DOLLAR}]$$

$$\text{ARRIVALS} = g[\text{DEPARTURES}, (\text{ITP/CCTP}), (\text{AIRJ/AIRMED}), \text{ARRIVALS}(-1), \text{TREND}, \text{TERRORISM}, \text{WALL}, \text{GULF}]$$

A detailed description of the explanatory variables is given in Carra-ro-Manente (1994). Let us stress here the role of non-economic variables (V.A.SER, TREND) and of dummy variables (DOLLAR; TERRORISM; WALL; GULF) in the two equations. As understandably, the decision about if and where to holiday is only partly an economic decision.

In the first place, it also depends on the evolution of cultural habits and social institutions. In particular, mature economies like those of western countries are characterised by a number of working days per year which is lower than in other countries, and which enables individuals to holiday for longer periods and more frequently. This latter aspect is very important. The possibility of holidaying in different periods of the year is a fairly recent opportunity which has increased the number of holiday trips per year. This has also changed tourism habits and preferences by providing incentives for shorter holidays devoted to cultural activities. These effects have been proxied by the variable V.A.SER, which measures the value added in the service sector, thus capturing the degree of qualitative economic development of a given origin country.

A second relevant phenomenon is the demographic change in the population, both in size and composition. Consider again, as an example, ma-

ture economies, which can be considered the most important source of tourism demand even in the coming years. These economies are characterised by small changes in the size of the population, but their composition has been subject to remarkable modifications. Older people with a large amount of leisure time and substantial income are an increasing share of the population. These people have a higher propensity to spend income and time for tourism than other social groups; moreover, tour operators offer this particular social group specific opportunities to travel in periods of the year in which other groups do not holiday. Hence, the demand for tourism is likely to be affected by the increasing share of older people over the total population.

Finally, tourism in Italy is quite different from tourism in other countries because of the particular geographical location and historical/cultural tradition of Italy. Tourists in Italy can combine different types of tourism activities, such as visits to cultural cities and beach holidays. On the other hand, some forms of tourism in Italy are mature products whose life-cycle is likely to be on the down-swing, whereas tourism to exotic destinations is more likely to follow an upward trend. The attempt to capture these contrasting phenomena is one of the goals of our modelling effort.

Such variables can be separated into those describing long-run phenomena (demographic changes, life-cycle variables) and those for which a very low time variability can be assumed (psycho-socio-cultural variables, preferences, climatic conditions). In order to avoid multicollinearity, all long-run variables were aggregated into a deterministic trend (TREND). As far as the second set of variables, their influence is captured by the fixed effects, which vary across countries.

Finally, some dummies have been used to capture the effects on tourism demand, particularly from North-America, of specific unpredictable events such as the dollar boost in 1984-1985 (DOLLAR), the terrorism threat in 1986 (TERRORISM), the fall of the Berlin wall in 1989-1990 (WALL), and the Gulf war in 1991 (GULF).

### *3.1 Econometric Estimates*

The tables presented in this sub-section contain the main results of the panel estimation of the 42 equations describing departures of tourists from each country of origin and the number of tourist arrivals in Italy. Tables 1 and 2 show all estimated coefficients (for all countries and for the variables tested to be statistically significant), corrected with the values of all dummies introduced to capture country-specific effects.

As can be seen, the performance of both sets of equations is good. The adjusted  $R^2$  is .996 for the model describing the departures of tourists from their country of origin, and .993 for the model capturing the number of arrivals of foreign tourists in Italy. Even the adjusted  $R^2$  computed using the fitted and historical observations for each country are quite good (see the last column of Tables 1 and 2).

All coefficients have the expected sign, showing the crucial role of prices in inducing substitution effects between tourism and other consumption goods, and between tourism in Italy and other competing destinations. Besides prices, non-economic variables, as far as their approximation with fixed effects and long-run trends is acceptable, are proved to be quite important in explaining the dynamics of tourism demand.

Two phenomena deserve particular attention: first, in the model describing the decision to holiday abroad, long-run effects seem to be negative for countries such as the U.S., Canada, Japan, and Australia (Table 1); second, in the model describing the decision to go to Italy rather than to another foreign country, two groups of countries can be identified. In the first group (the U.S., Canada, Japan, Scandinavia, Africa, Spain and Portugal) the fixed effect is positive (recall the log-linear functional form), but small. In the remaining countries the fixed effect is much larger. This implies that in the second group of countries (mainly Central European countries) the decision to holiday in Italy is less dependent on the economic cycle and price conditions than in the first group of countries. As a consequence, tourism flows to Italy from the U.S. and Japan have the highest elasticity in terms of the number of tourists leaving these two countries (i.e. depending on the economic conditions prevailing in the country of origin; see Table 2).

As far as the other variables explaining the departures from each country of origin are concerned (Table 1), notice the low elasticity of GDP (i.e. per capita GDP and population) in Africa and Latin America (the point estimate is .04). In most of the other countries, the estimated elasticity of tourism abroad with respect to per-capita GDP is equal or very close to one. A significant positive effect on tourism demand is also played by the degree of maturity of the economy (V.A.SER), whereas travel costs have the expected negative sign and are statistically significant in all countries (either air costs alone or both air and surface costs). Finally, only a dummy capturing the sharp increase of the dollar in 1984-1985 (DOLLAR) has been shown to be statistically significant.

Consider now the model of arrivals in Italy (Table 2). The most relevant variable is the number of tourists leaving each country of origin. If we transform the dependent variable into the share of tourists reaching Italy from country  $i$  over the total number of tourists who depart from country  $i$ , the elasticity of this share with respect to the total number of departures from country  $i$  becomes negative for all countries but the U.S. and Japan, for which it is statistically zero. This seems to indicate a general relative loss of attractiveness of Italy as a destination country, which is only partly offset by the positive influence of long-run effects in some countries (mainly Central Europe). Moreover, stickiness seems to be a relevant phenomenon mainly in some European countries, whereas air costs play a crucial role only for those countries where the aeroplane is practically the only mode of transport to reach Italy.

The exceptional events with a statistically significant effect are a dummy variable which reflects the threat of terrorist attacks on the American and Canadian travellers during 1986 (TERRORISM); a dummy capturing the Gulf War effects in early 1991 (GULF); a dummy describing the negative effect on the Finnish economy produced by the fall of the communist regimes in Eastern Europe (WALL).

#### **4. The STREP Forecasting Models of International Arrivals to the Italian Regions. The case of the Veneto.**

As stated in Section 2, capturing the dynamics of international tourists towards the Italian regions implies the analysis of the economic and structural characteristics of each region compared to each other and in particular to those which offer a substitute tourist product. Hence a choice was ma-

de to model the Veneto region jointly with three other regions—Friuli Venezia Giulia, Trentino Alto Adige and Emilia Romagna—: the fact of being territorially close to each other and the typology of the tourist product they offer can constitute an alternative choice for international tourism. The reason for limiting the subset of competitive regions implies that each region must be analysed in a specific way, referring to the regions which offer similar “tourist products” and/or are neighbouring. In this way, if, for example, instead of the Veneto, the flow of foreign tourists in Trentino Alto Adige had been chosen to be analysed, it would have been necessary to apply a new model referring to a different subset of regions.

Furthermore, the decision to model more than one region simultaneously is coherent with the theoretical framework of the **TRIP** models. For the Veneto region two models have been set up:

- the first, **W-STREP** (**W**orld to Veneto), to monitor the total number of arrivals of foreign tourists in the Veneto, composed of 4 equations, one equation for each region, based on a sample from 1980 to 1992;

- the second, **M-STREP** (**M**ulti-origin to Veneto), to monitor the segmentation of the market through an analysis of the flows from 21 main countries of origin, composed of 21 x 4 equations and based on samples covering the same period of time as above.

The proportion of the total number of foreign tourists in the Veneto to the total number of foreign tourists in Italy (ARRVEN/ARRITA) was chosen as dependent variable in the model **W-STREP**, with the aim of obtaining more efficient estimates, also taking into consideration the limited amount of data available. Formally, given the selected logarithmic functional structure, the implicit hypothesis is that the elasticity of the arrivals in the Veneto compared to the total of the arrivals of foreign tourists in Italy should be equal to one.

This hypothesis was instead dismissed by the model **M-STREP** which estimates the international arrivals in the Veneto from 21 countries in absolute values (ARRVEN). The construction of such a model needs, furthermore, a methodological system more complex that is expressed in a set of equations with varying parameters. In fact, to be able to estimate a model in which tourist flows are determined simultaneously from 21 countries to the four regions (the Veneto and its three main competitors), it is necessary to differentiate the behaviour of the tourist consumer from one country to another and towards one region and another. In other words, the panel must contain sufficient inter-regional and inter-national variability.

A model with constant parameters in which, for example, the quota of arrivals in region *j* of foreign tourists from country *i* depends on the relative prices of tourist services in the region, will not be representative because the Veneto attracts more tourists from country *h* than from country *k*. The relative price is in fact the same for all tourists whether they come from *h* or whether they come from *k*. To solve the economic and econometric problem at the same time, it is necessary to hypothesise that, for example, the reaction of the tourist coming from country *h* to a variation of the relative price is different to that of the tourist from country *k*. In more concrete terms, in the model the crucial hypothesis is that the reaction to price variation could be greater for those countries which have a lower income per capita, while countries with a higher income per capita would probably remain untouched by variations in prices.

In the same way it has been hypothesised that a variation in the qua-

lity and quantity of the kind of tourist services offered (basically the number of beds available in hotels and other accommodations) could be considered in a different way by tourists whose average length of stay is fairly high compared to those tourists staying for only a limited period in the region.

To express these hypotheses on the behaviour of tourists coming from diverse origins in formal terms, the model has had to be written in the following way:

$$\log(\text{ARRVEN}) = \beta_0 + \beta_1 \log(\text{ARRITA}) + \beta_{2t} \log(\text{PTVEN/PTITA}_{-1}) + \beta_{3t} \log(\text{PTFVG - EMR/PTITA}_{-1}) + \beta_{4t} \log(\text{PLAV/PLAI}_{-1}) + \beta_{5t} \log(\text{PLXV/PLXI}_{-1}) + \beta_6 \text{TREND} + \beta_7 \text{MUCIL} + \beta_8 \text{UNSOC} + \beta_9 \text{RECES}$$

where:

$$\beta_{2t} = t_1 / \log(\text{PILPC}_{-1})_t$$

$$\beta_{3t} = t_2 / \log(\text{PILPC}_{-1})_t$$

$$\beta_{4t} = t_3 / \log(\text{PERMAL}_{-1})_t$$

$$\beta_{5t} = t_4 / \log(\text{PERMEX}_{-1})_t$$

with:

PILPC = gross domestic product per-capita for each country of origin

PERMAL = average length of stay in the hotels of the Veneto for the countries of origin of tourist flows

PERMEX = average length of stay in other types of accommodation in the Veneto for the countries of origin of tourist flows.

and furthermore:

$i$  = Veneto, Friuli V.G., Trentino A.A. and Emilia Romagna indicated as the regions of arrival,

$h = 1, 2, \dots, 21$ , indicates the countries of origin.

From the estimates obtained from the model it is seen that once having chosen a holiday in Italy, the choice of the Veneto as a holiday destination (and therefore the volume of international arrivals in the region, ARRVEN) depends on the volume of the arrivals in Italy (ARRITA); on the relative prices of tourist services in the Veneto (PTVEN/PTITA) one year lagged, in other words the direct effect of substitution; on the relative prices of tourist services in other competing regions (PTFVG-EMR/PTITA), that is the indirect effect of substitution, one year lagged; on the relative supply of beds in hotels and other accommodations in the Veneto (PLAV/PLAI e PLXV/PLXI), also one year lagged; on two dummies that summarise the effects produced by the mucillagine in the Adriatic in 1989 (MUCIL), and by the restrictive policy adopted in Great Britain at the beginning of the 80s which reduced the propensity to international tourism for British and Irish tourists (RECES). The dummy UNSOC, finally, corrects the estimate of the tourist flows from Ireland to the Veneto, over-estimated in 1990 as a result of two events, the World Cup Championship and the celebrations for Holy Year which although involved Italy, only marginally effected the Veneto.

The same variables, with the obvious exception of ARRITA, were introduced into the formulation of the model **W-STREP**, which was however estimated as a constant parameter model.<sup>4</sup>

#### 4.1 The estimates of the model *W-STREP-Veneto (World to Veneto)*

Table 3 summarises the results obtained with the model **W-STREP**. From the point of view of coherence of the theoretical model, the estimates

represent the expected economic phenomena; the direct effect of substitution (a reduction in the number of foreign tourists in the Veneto due to an increase in the relative prices in the region) is equal to -0.88%, while the indirect effect of substitution (an increase in the number of foreign tourists in the Veneto due to an increase in the relative prices in Friuli Venezia Giulia and Emilia Romagna) is equal to 2.15%. Hence signifying that, if relative prices in the Veneto increase by 1%, the quota of foreign tourists in the Veneto falls by 0.88%; while, if relative prices in the two competing regions increase by 1%, the quota of foreign tourists in the Veneto rises by 2.15%. Note how the second result is even greater than the first, emphasising a strong possibility of substituting the tourist product of the Veneto with one of the other two regions. Also note that the impact of a variation in the relative prices only becomes significant after a delay of one year. However, there seems to be no significant effect of price substitution in Trentino A.A.<sup>5</sup>.

The number of beds also have a meaningful significance. An increase of 1% in accommodation capacity in the Veneto, instigates a 0.21% increase in the number of foreign tourists who decide to holiday in the Veneto. This variable, as with the relative prices, has a significant impact on the number of foreign tourists after a delay of one year.

Finally, the least positive aspect for the tourist economy in the Veneto must be pointed out. The trend is negative, in that the quota of foreign tourists who choose the Veneto out of the total number of tourists who come to Italy is on a downhill trend. In other words, the long-term effects underlined above (the level of "maturity" of the product, environmental pollution, congestion) tend to have negative repercussions on the number of foreign tourists arriving in the Veneto. Consequently, in spite of the fact that arrivals in the Veneto are growing and that the model **W-STREP** forecasts improved strength for the tourist economy in the Veneto with respect to other regions during the downswing of the economic cycle, in the medium-long term a relative demand contraction has to be expected.

The parameter which measures the effect of variables with a temporal low dynamics (the distance from the main countries of origin, the characteristics of the artistic-cultural heritage of the region, the multi-faceted tourist supply in the Veneto) on the number of tourists arriving in the Veneto, or rather, the fixed effect on the econometric model, takes on a negative value only because the functional form of the model is logarithmic. Once transformed, the value of this parameter, which represents the quota of the average tourist, independent from variations in economic and non-economic factors as considered above, is 0.366 in the Veneto, 0.066 in Friuli Venezia Giulia, 0.123 in Emilia Romagna and 0.258 in Trentino Alto Adige. This therefore confirms the hypothesis that, *ceteris paribus*, the variety on tourist supply in the Veneto tends to attract a greater number of tourists to the region compared to other regions.

#### *4.2 The estimates of the model M-STREP-Veneto (Multi-origin to Veneto)*

Table 4 summarises the results of the estimates of the model **M-STREP**, presenting the estimated parameters for each country of origin and each variable tested to be statistically significant, and corrected with the values of the dummies introduced to capture the peculiarities of each region and of the countries of origin.<sup>6</sup>

The parameters which define the elasticity of each of the 21 markets of

demand with reference to every variable considered assume values fairly close to the estimated average elasticity in the model **W-STREP**. The estimate of the elasticity of arrivals in the Veneto compared to the arrivals in Italy was shown to be fairly similar and very close to the unit for all the countries considered. In particular, the value of this parameter is higher for the Veneto compared to the competing regions, a further confirmation of the ability of the region to attract foreign tourists who choose Italy for their holiday destination.

Relative prices (PTVEN/PTITA) became significant for most of the countries after a delay of one year. It is obviously reasonable to suppose that gathering information in order to programme a holiday would take place before the holiday itself. However, tourists from countries further away (USA, Canada, Australia, Japan) who also have to sustain considerable travel expenses are revealed as being more sensitive to the current variation in prices, as are tourists from not so well-off countries (Spain, Portugal, Greece, Ireland). In particular, a 1% increase in relative prices in the Veneto would reduce the tourist movement from Ireland by 5.81%.

Finally, less sensitivity to variations in prices as shown by the countries of Central Europe could be interpreted as a manifestation of a greater affection and sense of loyalty towards holidaying in the Veneto. The number of arrivals from these countries would only fall by about 1.4% if faced by 1% increase in regional relative prices.

The model **M-STREP** also underlines a strong indirect effect of substitution (PTFRG-EMR/PTITA): the value of elasticity for all countries is around 2%. If relative prices in Friuli Venezia Giulia and Emilia Romagna rose by 1%, arrivals in the Veneto would increase by more than double that amount. This increase is even greater for those countries who have a lower income per capita (Greece, Ireland, Spain, Portugal), demonstrating a stronger reaction to price variations.

Neither relative prices of tourist services in the Veneto, nor the relative prices of tourist services in the competing regions, were significant for countries in Latin America and Africa, probably because of the particular composition of tourist flows from these areas to the Veneto (very rich segments, ethnic tourism, immigration phenomena).

As has already been seen from the estimates obtained with the model **W-STREP**, an increase in accommodation capacity increases the number of tourists who decide to holiday in the Veneto. In more detail, the model **M-STREP** demonstrates how tourists coming from countries belonging to the macro-region made up of the USA, Canada, Australia, and Japan are the very ones who show a greater appreciation for the quality of hotel facilities. In fact, tourists from these countries choose the Veneto above all as a destination for cultural tourism and as part of package tours which also visit other Italian and European cities and can only but include hotel stays. Instead, tourism in the Veneto from Central European countries which choose mainly seaside resorts, lakes and mountains, is effected positively by an increase in other types of accommodation.

As far as the other variables of the model are concerned, a downward trend in tourism from Austria, the United Kingdom and Holland should be pointed out. While a positive trend has been indicated in arrivals in the Veneto of tourists from Australia.

The model **M-STREP** also pinpointed the effects of environmental pollution in the Adriatic Sea, which came to a head in 1989. Those countries

which react in a significantly negative way to this phenomenon are those which generally choose a seaside holiday in the Veneto: Austria, France, Germany and Switzerland.

Finally, the value of the fixed effect, measuring the different types of impact of all the variables with a temporal low dynamic on the demand for tourism as expressed by each of the countries involved, reveals that the Veneto wields a strong power of attraction on flows from the USA, Canada, Japan, Australia, Latin America and Africa.

## 5. Conclusions

This paper presented the theoretical framework and the econometric models used to forecast the magnitude of tourist flows to Italy and to the Veneto region in the short-to-medium-run.

The econometric analysis performed by the Ciset-GRETA group has produced a large body of consistently estimated models. As far as the **TRIP** models are concerned, 21 two-equation reduced-form models (one for each country of origin) have been estimated and simulated. As far as the **STREP** model, we presented here its implementation for the Veneto region which is analysed simultaneously with a group of other three competing regions (Trentino Alto Adige, Emilia Romagna and Friuli Venezia Giulia). Good estimation results have been achieved both using the **W-STREP** (World to Region) model of the total international flows to the Veneto (4 equations, one for each competing region), and using the **M-STREP** (Multi-origin to Region) model of the tourist flows to the Region from each of the 21 countries considered (21x4 equations).

The estimates, the tests performed and the robustness of the **TRIP** and **STREP** models with respect to specification changes and sample modifications seem to indicate that the research effort has achieved its main proposed goal: the construction of reliable forecasting tools.

These forecasts can easily be obtained by simulating the econometric models presented in Section 3 and 4, conditionally on the scenarios designed for the explanatory variables of the model. In particular, international tourist flows towards Italy and towards the Veneto, can be predicted given a reliable assessment of future values for per-capita GDP and prices in the countries of origin, the travel costs, the price of tourist services in the countries of origin and in Italy, the price of tourist services in the Veneto and in the competing regions, the supply of means of accommodation in the Veneto and in the competing regions.

Modelling not only tourist flows from the main world countries or regions towards Italy, but also tourist flows from the same countries to all Italian regions is an important task we are accomplishing. The regional information is quite relevant indeed: both regional authorities and firms in the tourist sector would be able to design more effective public policies and business strategies if the information on the number of tourists reaching each Italian region were available. The results just obtained for the Veneto region seem quite promising, and encourage further work in this direction.

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<sup>1</sup> In the case of this Organization, which is responsible for the supervision of the road network, the agreement went much further, and a specific appendix has been added to the questionnaire by this user, asking detailed questions about transport. At the meeting held recently in Lisbon for the presentation of this new methodology, JAE gave examples of the treatment which it wished to give to this information; and by comparing data gathered about travelling itineraries, it is possible to know more about the hinterland of each of the frontiers and each of the different types of movement (excursionists/tourists with their respective reasons for travelling), linking these movements to those of all users of the road network.

<sup>2</sup> The log-linear functional form has been tested using the RESET-type test, as proposed by Pagan and Hall (1983).

<sup>3</sup> Total income, GDP, rather than per-capita income, was chosen for Latin America and Africa because of the choice to impose identical income and population elasticity in these two regions.

<sup>4</sup> In the final specification, these three variables were lagged one year.

<sup>5</sup> For even greater clarity, note that in the case of the model W-STREP the functional form is:

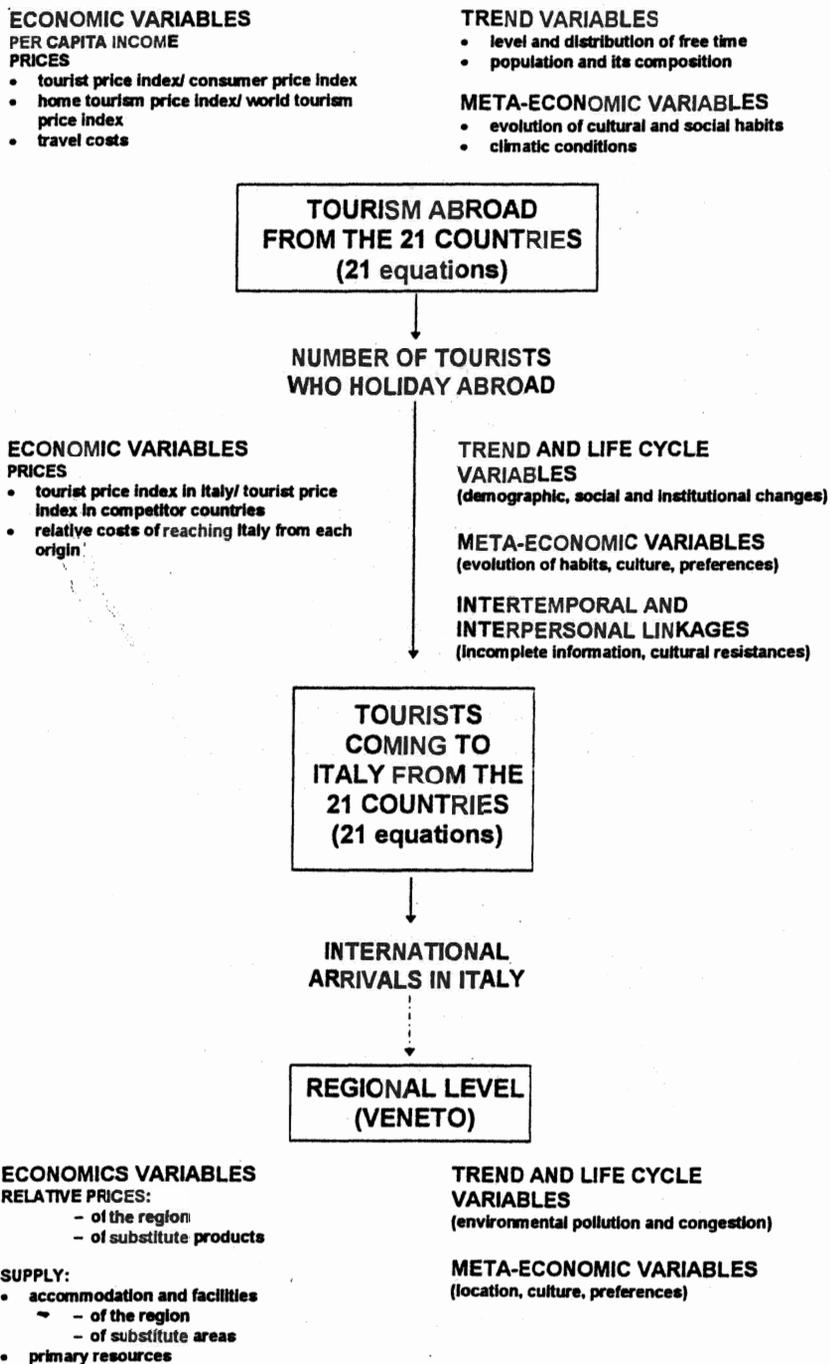
$$y_i = a_i + \beta_{1i}(PTVEN/PTITA_{-1}) + \beta_{2i}(PTFVG-EMR/PTITA_{-1}) + \beta_{3i}(PLVEN/PLITA_{-1}) + \beta_{4i}TRENDS + d_iDUMMIES$$

in which all the parameters are constant and where the null hypotheses  $\beta_{ji} = \beta_{js}$ , with  $j=1,2,3$  and  $i$  different from  $s$ , have been tested.

<sup>6</sup> The low value of test  $t$  related to these two parameters is tied to the reduced dimension of the sample (in spite of the framework of the panel, there are only 48 observations). Therefore, in structuring the model it was preferred to optimise the adjusted  $R^2$  criteria, for which, using the theorem of Pesaran, all the variables with a test  $t$  superior to 1 were considered significative.

In order to make the reading and interpretation of the results easier, the estimates of the elasticity of price and of the elasticity with regards to accommodation capacity have been reported in terms of the average value, taking into account the estimated parameter, and calculated respectively using the average data for the period 1981-1991 of the GDP per capita of each country, and the average length of stay specific for each country for the period 1981-1991.

Fig. 1. TRIP and STREP models: logical structure and variables



Tab.1. Reduced form of departures from countries of origin.

DEPENDENT VARIABLE = LOG(DEPARTURES)

R-SQUARED = 0.996

ADJUSTED R-SQUARED = 0.995

COUNTRIES	VARIABLES										R-SQUARED	
	FIXED EFFECT	PCGDP(-1)	PIL	TP/CP(-1)	TP/WTP	V.A.SER	TREND	OIL/CP	AIR/CP(-1)	DOLLAR		
AUSTRIA	9,51	0,43		-0,15	0,55	0,36	0,45			-0,04		0,95
BELGIUM-LUX.	5,11	1,00		-0,15	0,55	0,36	0,01			-0,04		0,74
DENMARK	8,97	0,43		-0,15	0,55	0,36	0,49	-0,11		-0,04		0,95
FINLAND	2,83	1,00		-0,15	0,55	0,36	0,49	-0,11		-0,04		0,96
FRANCE	5,56	1,00		-0,15	0,55	0,36	0,01			-0,04		0,80
WEST GERMANY	11,74	0,44		-0,15	0,55	0,36	0,45			-0,04		0,96
GREECE	3,56	1,00		-0,15	0,55	0,36	0,73	-0,11		-0,04		0,86
IRELAND	4,19	1,00		-0,15	0,55	0,36	0,45			-0,04		0,96
NORWAY	2,49	1,00		-0,15	0,55	0,36	0,92	-0,11		-0,04		0,88
THE NETHERLANDS	5,42	1,00		-0,15	0,55	0,36	0,45			-0,04		0,93
PORTUGAL	4,21	1,00			0,55	0,36	0,06	-0,11		-0,04		0,84
UNITED KINGDOM	5,95	1,00		-0,15	0,55	0,36	0,65			-0,04		0,96
SPAIN	4,58	1,00		-0,15	0,55	0,36	0,73	-0,11		-0,04		0,96
SWEDEN	3,88	1,00		-0,15	0,55	0,36	0,49	-0,11		-0,04		0,92
SWITZERLAND	9,97	0,43		-0,15	0,55	0,36	0,45			-0,04		0,95
CANADA	5,62	1,00		-0,15	0,07	0,36			-0,08	-0,31		0,81
USA	1,32	1,47		-0,15	0,06	0,36			-0,08	-0,31	0,21	0,78
AUSTRALIA	3,74	1,00		-0,15	0,06	0,36			-0,24	-0,31		0,61
JAPAN	0,20	1,47		-0,15	0,06	0,36			-0,08	-0,31		0,97
LATIN AMERICA	13,12		0,04	-0,15	0,02	0,36	0,64			-0,04		0,87
AFRICA	13,42		0,04	-0,15	0,02	0,36	0,64					0,90

Tab.2. Reduced form of arrivals in Italy: estimated coefficients.

DEPENDENT VARIABLE = LOG(ARRIVALS)

R-SQUARED = 0.994

ADJUSTED R-SQUARED = 0.993

COUNTRIES	VARIABLES							R-SQUARED		
	FIXED EFFECT	DEPARTURES	TREND	AIRJ/AIRMED(-1)	TP/CCTP	TERRORISM	WALL	GULF	ARRIVALS(-1)	R-SQUARED
AUSTRIA	4,38	0,62	0,29			-0,23				0,83
BELGIUM-LUX.	3,46	0,62	0,07			-0,71				0,73
DENMARK	-3,32	0,62	-0,18			-0,23			0,53	0,75
FINLAND	2,84	0,62	0,18			-0,23	-0,18			0,96
FRANCE	4,30	0,62	0,29			-0,71				0,68
WEST GERMANY	4,52	0,62	0,29			-0,23				0,94
GREECE	3,36	0,62	0,26			-0,23				0,84
IRELAND	5,31	0,37	0,29	-0,24	-0,71					0,75
NORWAY	-3,44	0,62	-0,08		-0,23				0,53	0,89
THE NETHERLANDS	3,19	0,62	-0,07		-0,71					0,73
PORTUGAL	-2,77	0,62	0,26		-0,23				0,49	0,82
UNITED KINGDOM	7,52	0,37	0,29	-0,24	-0,71			-0,08		0,90
SPAIN	-2,77	0,62	0,26		-0,23				0,49	0,92
SWEDEN	-3,44	0,62	-0,08		-0,23				0,53	0,82
SWITZERLAND	4,05	0,62	0,07		-0,23					0,89
CANADA	-3,14	0,56		-0,24	-0,23			-0,36	0,51	0,67
USA	-2,75	1,02		-0,24	-0,23	-0,42		-0,39		0,89
AUSTRALIA	4,29	0,56			-0,23			-0,08		0,47
JAPAN	-2,69	1,02		-0,24	-0,23			-0,08		0,79
LATIN AMERICA	3,56	0,62			-0,23					0,52
AFRICA	-2,22	0,62			-2,68				0,36	0,55

**Tab.3. Reduced form of Arrivals in Vento: estimated coefficients of W-STREP Veneto Model**

DEPENDENT VARIABLE: LOG(arrivals in Veneto/arrivals in Italy)

R-Squared = 0.998

Adjusted R-Squared = 0.997

VARIABLES:

	Estimated Coefficient	T-statistic
FIXED EFFECT	-1.00	-3.67
TREND	-0.15	-1.35
PTVEN/PTITA(-1)	-0.88	-1.21
PTFVG-EMR/PTITA(-1)	2.15	1.48
PLVEN/PLITA(-1)	0.21	1.96
MUCIL	-0.09	-6.47

Tab.4. Reduced form of Arrivals in Veneto: estimated coefficients of M-STREP Veneto Model

DEPENDENT VARIABLE = LOG(ARRIVALS IN VENETO)

R-SQUARED = 0.993

COUNTRIES	VARIABLES											
	FIXED EFFECTS	ARRITA	PTVEN/PTITA(-1)	PTVEN/PTITA	PTFVG-EMR/PTITA(-1)	PLAV/PLAI(-1)	PLXV/PLXI(-1)	TREND	MUCIL	UNSOC	RECES	R-SQUARED
AUSTRIA	-1,14	1,06	-1,44		2,21	0,09	0,09	-0,47	-0,26			0,96
BELGIUM-LUX.	-2,25	1,06	-1,45		2,23	0,09	0,09					0,76
DENMARK	-4,05	1,25	-2,66		2,15	0,03						0,92
FINLAND	-4,51	1,25	-2,59		2,15	0,03						0,95
FRANCE	-1,99	1,06	-1,43		2,18	0,13	0,14		-0,30			0,71
WEST GERMANY	-2,22	1,06	-1,42		2,17	0,08	0,09		-0,15			0,96
GREECE	-2,72	1,11		-2,60	2,47	0,07						0,89
IRELAND	-2,00	1,06		-5,81	2,33	0,11	0,15			-0,25	-0,19	0,78
NORWAY	-4,18	1,25	-2,60		2,11	0,04						0,92
THE NETHER.	-1,30	1,06	-1,44		2,21	0,11	0,09	-0,90				0,81
PORTUGAL	-2,72	1,11		-2,74	2,61	0,06						0,89
UNITED KINGD.	-1,91	1,13	-1,45		2,22	0,10	0,11	-1,23			-0,19	0,79
SPAIN	-2,72	1,11		-2,51	2,38	0,07						0,79
SWEDEN	-4,73	1,25	-2,64		2,14	0,04						0,94
SWITZERLAND	-2,21	1,06	-1,37		2,09	0,09	0,09		-0,22			0,88
CANADA	-1,29	1,00		-2,92	2,10	0,12						0,93
USA	-1,25	1,00		-2,86	2,06	0,14						0,97
AUSTRALIA	-1,25	1,00		-3,03	2,18	0,12		0,22				0,96
JAPAN	-1,25	1,00		-2,98	2,14	0,21						0,99
LATIN AMERICA	-0,72	0,94										0,84
AFRICA	-0,72	0,94										0,80



# AN EXPERIMENT TO CALCULATE THE NUMBER OF TOURISTS IN HOLIDAY RESORT FLATS

by Andrea MACCHIAVELLI

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## 1. The object

In many resorts flats are the main type of accommodation facility. This is particularly true for those places located within a short distance of major urban areas, which therefore enjoy a situation rent thanks to their easily accessible position.

A survey previously carried out by Gruppo CLAS<sup>1</sup> pointed out how resorts where tourism supply is basically characterised by a prevalence of accommodation in flats (to let or as second homes), hotel accommodation, too, is negatively affected, leading to a lower standard of quality and organisation.

The phenomenon of holiday flats is therefore a problem affecting the whole local tourist system, not only in terms of urban planning and environmental implications, but also because the scarce use of this type of accommodation and the fact that such use is greatly limited to brief periods during the year (a phenomenon which is typical of most Italian holiday resorts), does not offer the opportunity for complementary tourism activities, and therefore strongly limits the potential of the system itself.

Despite this, the phenomenon still remains largely unresearched, since official statistical sources are not capable of examining it.

In the light of the above considerations and in order to verify the actual use of holiday flats, an experiment was carried out in four mountain resorts in Lombardy (Bormio and Ponte di Legno, in the province of Brescia, and Madesimo and Campodolcino, in the province of Sondrio) in the 1993-1994 winter season, based on the method shown below.

In order to study the phenomenon of holiday flats from a statistical point of view, two major problems, which are not easy to solve, must be tackled.

1. the distinction between flats owned by residents, but that are intended to be let, and flats owned by non-residents (second homes), which potentially could be rented but are mostly used by the owners themselves.

2. the evaluation of the number of tourists using this type of accommodation and how they are distributed over time.

Both problems were taken into account during the experiment with satisfactory results.

What was impossible to survey, since statistical sources do not provi-

de this sort of information, was the use made of each of the two categories of flats.

## **2. The work method**

### *2.1 Number of flats*

As pointed out above, in order to study the phenomenon of holiday flat tourism it is paramount to find out:

- the exact number of flats
- how they are used

The synthetic indicator which was thought to be useful to reach the first objective was the number of connections to Enel (the National Electricity Board) since this body makes use of different contracts (with different tariffs) for:

- a) residents (first home) and
- b) non-residents (second home).

Its validity was verified locally through:

- data provided by ISTAT (National Institute of Statistics) on non-resident homes
- water connections.

Therefore, data referring to non-resident connections show:

- second homes owned by residents (and probably to let)
- second homes owned by non-residents (mostly used by the owners themselves).

The ENEL indicator poses a number of problems regarding its ability to show the actual situation accurately. This is due to the following reasons:

- residents owning second homes might have the supply contract signed by a relative, thus avoiding the surcharge applied to non-resident users;
- certain types of accommodation facilities (e.g. campsites, residences etc.) are considered a single connection, the contract being under one name only, even though the property has in fact multiple connections. The same problem may arise with condominium flats to let when managed by estate agencies.

It was therefore necessary to make corrections to the indicator after cross-checking it locally with other data sources<sup>2</sup>.

The number of water supply connections is another verifying indicator which, unlike the ENEL one, provides further indication, by means of an appropriate method, of:

- the number of second homes owned by residents
- the number of second homes owned by non-residents.

### *2.2 The use of flats*

To respond to this need, we took into consideration the possibility of setting up a number of indirect indicators on second home occupancy by considering the following consumer goods and services used by tourists:

- bread
- petrol
- electricity
- telephone
- water

- waste disposal
- gas

After analysing the suitability of the different sources, the synthetic indicator which was thought to be useful at a local level is the consumption of bread, which was gathered through a panel of breadmakers. Unlike other indicators, this is a synthetic expression of the phenomenon under analysis since bread is consumed by everyone.

The evaluation of hotel and home occupancy was carried out by gathering, through a panel of local breadmakers and on certain specific days in winter, data on the quantity of bread sold in terms of:

- 1) overall quantities
- 2) quantities sold to hotels
- 3) quantities sold to bars, restaurants, pizza parlours.

### *2.2.1 Choosing the breadmakers.*

Before going into the procedure used in the calculation, it is necessary to explain how the breadmakers were selected. In each town bread vendors may be:

- 1) producers (breadmakers) directly in their point of sale
- 2) vendors (supermarkets, food shops etc).

Buyers can therefore buy from either. Hotels usually buy their bread directly from the breadmakers because of the large quantities involved. The chain is thus the following:

In order to select the panel, we only considered breadmakers since they best represent the statistical universe of the phenomenon under investigation.

In this case, on a methodological level, there are two possibilities if we include, together with the local breadmakers, in the panel:

- 1) the breadmaker and/or breadmakers of other towns who sell bread to local vendors;
- 2) only the vendor and/or vendors of the town who buy bread elsewhere, because for the purposes of this survey they can be considered as local breadmakers, thus enabling us to avoid having to contact more respondents in other towns.

### *3.2.2 The analysis model*

The analysis model requires for each selected day the calculation of the extra quantity of bread sold compared to the average consumption of the local resident population.

This is done by determining the difference with regard to an average working day in low season (November).

The link between the quantity of bread consumed and the calculation of the number of tourists was made on the basis of the average regional per capita consumption of bread (source: ISTAT Lombardy).

Given the following variables:

- 23 November 1993 = average low season working day
- a = quantity of bread sold on that day
- b = quantity of bread sold to hotels
- c = quantity of bread sold to restaurants, bars, pizza parlours etc
- X = quantity of bread consumed on average by the resident population

- Y = quantity of bread sold to hotels on an average low season working day
- PCC = average regional per capita bread consumption
- QHA = quantity of hotel accommodation facilities
- QFA = quantity of flat accommodation facilities
- Ocd = overall consumption differential per day with respect to the average day
- Hcd = hotel consumption differential
- Dcoc = differential in consumption for other categories (restaurants, second homes, bars etc)

For each day surveyed, the bread consumption differential was calculated in the following way:

$$Ocd = a - X$$

$$Hcd = b - Y$$

$$Dcoc = Ocd - Hcd$$

The calculation of the number of tourists was performed in this way:

- for hotel tourism

$$HtTr = \frac{Hcd}{PCC}$$

- for flat tourism

$$FITr = \frac{Dcoc}{PCC}$$

Use of accommodation facilities:

- for hotel tourism

$$HtOCC = \frac{HtTr}{HAF}$$

- for flat facilities

$$FIOCC = \frac{\frac{FITr}{3}}{FAF}$$

In order to determine the numerator (quan. of OPEN ACCOMMODATION) we assumed an average of 3 persons per flat<sup>3</sup>.

On some days a percentage of more than 100% may be calculated. This difference may be the result of different factors:

- 1) the official number of sleeping places declared may be less than those actually available
- 2) the presence of persons who are not clients in the hotel (staff, especially during high season)
- 3) the presence in the hotel restaurant of more clients than those actually sleeping

In relation to the latter point, since our procedure was based on the

gathering of data related to bread consumption, a higher quantity of bread consumed for the needs of the restaurant may lead to an overestimation of the number of hotel guests, whilst the extra guests may be accounted for by those tourists staying in flats who eat in hotel restaurants.

Where such a situation occurred, the number of hotel guests in excess with respect to the official accommodation capacity have consequently been adjusted in the following way:

- 30% were considered hotel guests in any case
- 70% were considered tourists staying in flats.

This seemed to be the most realistic criterion to adopt, also considering the elements determining such a situation.

### 3. Results

The tables show the results obtained in two of the mountain resorts involved in the experiment. In both cases they are renowned ski resorts: Madesimo, in Val Chiavenna, and Ponte di Legno, in Valle Camonica. The former has a longer tradition as a ski resort and was one of the first to see remarkable growth in second homes. The latter has had a long tradition, too, but only recently has it undergone a major development, also thanks to a successful tourist policy.

On the whole, our survey confirmed the assumption made at its beginning on the scarce use of tourist flats. In particular, we found that:

a) during weekends flats were used very little, usually not more than 10% of their capacity;

b) they are also hardly used also for short holiday breaks (7 December, Carnival and Easter holidays) and in the best of cases (Ponte di Legno) the percentage is between 20 and 30%.

c) Also in the peak season (Christmas holidays) the percentage of flats used is still much lower than the full capacity - between 50 and 60%.

It should be pointed out that for all the cases under analysis in this experiment, hotel occupancy was much higher, with a percentage which sometimes exceeded the theoretical accommodation capacity during peak season.

The result of this experiment poses serious questions for local tourism policy-makers in those resorts with a preponderance of accommodation facilities in flats. In brief, such questions concern:

1) decisions on future town planning development, which do not always take into account the need for a balance between the different types of accommodation facilities;

2) the management of flats to let which at present lacks clear rules and entrepreneurial methods of organisation everywhere, strongly limiting their potential use. It is a well-known fact that in most mountain resorts in other Alpine countries flats to let are managed using entrepreneurial criteria (while still retaining family ownership) thereby bringing this type of accommodation facility into line with other, better organised ones. Only in this way can tourist flats become a resource for the whole local tourist system, thus guaranteeing the owner, among other things, a higher income;

3) the types of initiatives that should be devised to promote the use of flats both by owners, who can thus make a more profitable use of them, and for those working in complementary tourist activities, who in this way can promote them and widen the range of local tourist supply in the process.

<sup>1</sup> Gruppo CLAS, The enhancement of mountain tourism in Lombardy, Unioncamere Lombardia, Milan 1993.

<sup>2</sup> A further control at the local level may be made using ICI figures (a municipal property tax), but unfortunately in the towns under analysis they are not yet available to be usefully processed.

<sup>3</sup> This is confirmed by the literature available on the subject

# A LIFE-CYCLE ANALYSIS OF ITALIAN TOURISM DEMAND

by Cristina BERNINI

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## Introduction

In economic literature the idea that individuals show different consumption behaviour corresponding to different social, economic, cultural and demographic characteristics is often suggested. Life-cycle theory can account for different household behaviour at successive ages. Panel data for Italy are not available, however using the average cohort methodology proposed by Deaton (1985) one can reproduce the micro consumption behaviour over time, over age group. Tourism is a consumption good and so it can be analysed in a profitable way by the technique introduced, in order to explain the different tourism consumption microbehaviour. In this work we present a micro analysis of tourist consumption behaviour using data from the sample survey on Italian Family Expenditure performed by ISTAT. The goal of the work is to show how tourist consumption changes in response to variation both in the socio-demographic structure of consumers and in calendar time. In order to value the different tourist micro responses we propose to use a modified version of the Almost Ideal Demand System of Deaton-Muellbauer (1980) applied to cohorts. We analyze the tourist consumption elasticities with respect to price and total expenditure.

The importance of tourism demand on the Italian economy has been growing over the past decades and thus the analysis of the individual decision processes about tourist consumption deserves greater attention. In this context the relevance of tourist expenditure on the household budget is of central importance. The problem is to analyze how individuals allocate their income among groups of goods and service and tourism, and how this allocation changes during individuals' life.

In this work we present an analysis of individual tourist consumption behaviour using the Italian Family Expenditure Survey realized by the Italian National Statistical Institute. The analysis main goal is to explain how the tourist consumption changes correspond to variations in the consumer socio-demographic structure, with respect to household life-cycle.

In order to make a correct analysis of individual consumption behaviour we need panel data. But Italian panel data are not available, and so we propose to use the average cohort technique. This technique can be used to construct a pseudo-panel from time series of cross-section, along

the lines suggested by Deaton (1985). By averaging over individuals that have a common year of birth, it is possible to follow a cohort over time, as it ages.

To evaluate the different tourist responses of different individuals with respect to socio-demographic characteristics, we propose to use a modified version of the Almost Ideal Demand System (AIDS) applied to cohorts. By goods elasticities to price and expenditure, it is possible to analyze the different tourist consumption behaviours with respect to life-cycle.

The work is structured as follows: in section I we introduce some economic concepts about life-cycle and the problem of panel data. Then we describe the pseudo-panel methodology. In section II we present the modified version of the AIDS model for cohort. In section III we present the age profile for total expenditure, commodities expenditure and some demographic variables and we report some preliminary empirical results. Section IV concludes the paper.

## **1. Neoclassical demand, tourist behaviour and statistic methodology**

### *1.1 The life-cycle theory*

In neoclassical theory the consumer distributes his budget amongst the goods and services available at given prices in order to receive maximum utility from the total amount of consumed goods and services. The basic idea of the life-cycle theory is that consumption evolves with age over the life-span of individuals. In particular it is assumed that individuals modify preference and economic decision, during their life, in order to keep the marginal utility of wealth constant over time. The idea that individuals take different consumption decisions in relation to social, demographic and cultural characteristics is the basis of the present work: we suppose that household characteristics, such as age, professional condition, education, family composition influence the consumption behaviour of individuals. For example, the consumption behaviour of a young single at a given time is different in general to the consumption behaviour of an old householder, either for objective needs and economic possibilities and for subjective preferences related to their life experiences. It has to be noted that the individual consumption behaviour can change over time according to evolution in the society where the individual lives and in the market where he acts. It is in fact not reasonable to assume that a young will adopt, when he grows old, the consumption behaviour of the individual who is now old, because they have experienced different events.

From these considerations we derive the necessity to analyze and interpret individual consumption behaviour in a more general context in which socio-demographic factors assume a relevant influence. Therefore the life cycle-theory consists in the analysis of the individual consumption behaviour (in our case the household), followed during his life.

Tourism is a consumption good and so it can be profitably analysed in a life-cycle structure. In the following we assume that individual tourist expenditure is influenced by economic factors and by socio-demographic characteristics. Therefore we study tourism demand, by the methodology presented in the next section, in order to detect the different behaviour models, the different responses and the different preferences that produce tourism flow (evaluated in number of tourists), which is the main subject of most of the current specialized literature.

## 1.2 The pseudo-panel methodology

The analysis of life-cycle consumption requires panel data. Unfortunately Italian panel data on tourism expenditure are not available, but they can be constructed from time series of cross-section, following the technique proposed by Deaton (1985). The procedure consists in dividing the individuals in the sample according to some constant characteristics and in following the average cohort behaviour over time. For example we can define cohorts by the year of birth of individuals. In this way using cross-section surveys repeated in time we can observe the consumption behaviour of each cohort, and overcome the difficulty in studying the life-cycle evolution of economic variables caused by the non-availability of panel data. Even if we can't observe the same individuals at different points in time, we can observe individuals with similar life-cycle experiences.

By averaging the variables under study across individuals of a given cohort observed at successive points in time we can follow the evolution of the average cohort behaviour of individuals that, for example, at a given time are 25 years old, at the next time are 26 years old, and so on. If we repeat this procedure for every cohort, each defined with respect to successive years of birth bands, and we link cohorts we can construct age profiles for the economic variables of interest.

The procedure introduced has some interesting advantages. First of all pseudo-panel data are not subject to attrition problems typical of panel data, as new samples are drawn each year and so representativeness is maintained. Furthermore by the average cohort method we can derive time series of pseudo-panel data so long as the series of cross-section survey. Second it is possible to evaluate the presence of cohort fixed effects, so we can predict different household behaviours, which are characteristic of different ages, at a given time. Individuals born at different times show different preferences and economic decisions during their life that analysis based on cross-section data are not able to describe. This is very important when we analyse dynamic phenomena as consumption. Finally, the cohort structure has the advantage of linking micro and macro relationships, and explicitly recognize the life-cycle of consumption behaviour.

## 2 The individual tourism demand model

### 2.1 Tourist demand specification: the AIDS model

In order to modelize the life-cycle of tourism demand we propose to use the Almost Ideal Demand System (Deaton-Muellbauer, 1980) model adapted to cohorts.

In his original version the AIDS model takes, for an individual household  $h$ , the following form

$$w_{ih} = \alpha_i + \beta_i \ln \left( \frac{y_h}{\lambda_h P} \right) + \sum_{j=1}^I \gamma_{ij} \ln p_j + v_{ih} \quad (1)$$

$$i = 1, \dots, I; \quad h = 1, \dots, H;$$

where  $w_{ih}$  is the budget share of good  $i$  for household  $h$ ,  $y_h$  is the total expenditure for household  $h$ ,  $\lambda_h$  is a sophisticated measure of household size

which could take account of household characteristics and economies of household size,  $P$  is a price index, approximated by  $P^*$ , where  $\log P^* = \sum_k w_k \log p_k$ ,  $P_j$  is the price of good  $j$ ,  $v_{hi}$  is the stochastic component of consumption of good  $i$  in household  $h$ ,  $\alpha_p, \beta_p, \gamma_{ij}$  parameters common to all households.

The AIDS model represents a system of demand functions which add up to total expenditure, are homogeneous of degree zero in price and total expenditure taken together, and which satisfy Slutsky symmetry if the following restrictions on the parameters of (1) hold

$$\begin{aligned} \sum_i \alpha_i &= 1 \quad \sum_i \beta_i = \sum_i \gamma_{ij} = 0 && \text{(adding-up)} \\ \sum_j \gamma_{ij} &= 0 && \text{(homogeneity)} \\ \gamma_{ij} &= \gamma_{ji} && \text{(symmetry)} \end{aligned} \quad (2)$$

Exact aggregation is possible if individual household behaviour is expressed by equation (1), and the aggregate budget share for good  $i$  is

$$\bar{w}_i = \alpha_i + \beta_i \ln\left(\frac{\bar{y}}{\lambda P}\right) + \sum_{j=1}^I \gamma_{ij} \ln p_j + \bar{v}_i \quad (3)$$

$$\bar{w}_i = \frac{\sum_h y_h w_{ih}}{\sum_h y_h} \quad \text{and} \quad \log\left(\frac{\bar{y}}{\lambda}\right) = \frac{\sum_h y_h \log\left(\frac{y_h}{\lambda_h}\right)}{\sum_h y_h}$$

We can see that (3) and (1) have the same form and are derived from the representative rational household utility-maximizing behaviour, but the exact aggregate model is coincidentally identical (Stoker, 1993) to the model derived from a utility-maximizing representative agent behaviour. In this way the operative advantages of the representative agent model and at the same time the microeconomic foundations of the model are maintained. However it is important to note that the aggregate model based on the assumption of household identical preference is unreal. The only element that summarizes individual variability is Theil's entropy measure of expenditure, but it is not enough to account for behaviour heterogeneity. So the original version of AIDS can't express the different household consumption behaviour to variation, for example, in their life-cycle. This inability can be interpreted as misspecification of the original AIDS model and justifies the failure of the homogeneity constraint.

In fact in empirical analysis the homogeneity constraint almost always fails. Some of the plausible reasons are the omission of relevant variable and the hypothesis that the index  $\lambda$ , reflecting the distribution of household

budgets and demographic structure, is independent of the average budget and the price vector. In particular the idea that the failure of the homogeneity constraint reflects the inconsistency of the hypothesis of constant distribution of household characteristics is diffused (Patrizii-Rossi, 1991). So mistakes in the hypothesis of index  $\lambda$  and in the hypothesis of exact aggregation can lead to a misspecification of the model, and therefore to the failure of the homogeneity constraint.

## 2.2 Heterogeneous preferences and model specification with panel data

Recently it has been proposed specifications of AIDS model that take into account the heterogeneity in the consumers' preferences: in particular socio-demographic variables and income distribution has been introduced in the model in order to derive consumption elasticities with respect to price and total expenditure for different households (Rossi, 1988; Patrizii-Rossi, 1991; Blundell-Pashardes-Weber, 1993).

By the way those type of models don't take into account evolution in consumption behaviour during the consumers' life-cycle, and so the specification of the AIDS model on average cohorts may be more correct (Blundell-Browning-Meghir, 1994).

In order to study the different households consumption behaviour, panel data are preferable, because they permit to follow variations in the households' demand related to their life-cycle. However we can derived pseudo-panel data from time series of cross section, as discussed in the previous paragraph. In this case the aggregation problem is solved assuming that individuals, who belong to each cohort, are homogeneous with respect to some characteristic and using the average cohorts variables to represent the individuals behaviour.

In this case the individual AIDS model becomes

$$w_{iht} = \alpha_i + \beta_i \ln \left( \frac{y_{ht}}{P_t} \right) + \sum_{j=1}^I \gamma_{ij} \ln p_{jt} + \sum_{k=1}^K \theta_{ki} a_{kht} + \phi_{ih} + v_{iht} \quad (4)$$

where  $a$  are socio-demographic variables and  $\phi$  is the fixed effect of household  $h$  for good  $i$ .

Let household  $h$  belong to cohort  $c$ , and take simple average over all  $h$  belonging to  $c$  to obtain

$$w^*_{ict} = \alpha_i + \beta_i \left[ \ln \left( \frac{y_{ct}}{P_t} \right) \right]^* + \sum_{j=1}^I \gamma_{ij} \ln p_{jt} + \sum_{k=1}^K \theta_{ki} a^*_{kct} + \phi^*_{ic} + v^*_{ict} \quad (5)$$

where asterisks denote the population means of the variables in the model. As the population means are approximated by sample cohort means and are thus affected by sampling errors, the model is an errors in variables one with all variables subject to error, except for prices and cohort dummies. In this specification the cohort can be treated as an individual observed in time and so the average cohort can be considered as a panel.

In equation (5) the cohort fixed effect is a synthetic measure of unob-

served effects that characterize the typical behaviour of the cohort; it allows us to introduce an element into the model taking into account the dynamic consumption behaviour of different cohorts. If it is true that individuals born at different dates face different economic environments throughout their lives, then in this model these effects show up in the parameter  $\phi$ .

From the new version of the AIDS model it is possible to calculate consumption elasticities with respect to price goods and cohorts total expenditure, taking into account socio-demographic characteristics and fixed effects of each cohort. It is to note that model (5) is an aggregate model, where the heterogeneous individual behaviour is summarized in the synthetic cohort values. In this sense cohorts permit to significantly pass from microeconomic consumption behaviours to an aggregate behaviour.

### 3. Empirical results

#### 3.1 Italian data source for the household tourist consumption

In this work we use the Consumer Expenditure Survey (BF), made by ISTAT. It is a quarter survey based on a sample of about 38.000 household each year. Object of the survey is the goods and services household expenditure. These data are supplemented by a rich set of economic, demographic and sociological variables. In particular in the present analysis we use the following informations about householder: age, professional condition, maintenance, education; informations about household: family composition, monthly expenditure, monthly income, monthly expenditure for goods and services. We use data from the first quarter of 1985 to the last quarter of 1992.

In the following analysis the single commodities are classified in four commodity groups: non durable goods, durable goods, service and tourism. Those groups are constructed by adding household expenditures that belong to each commodity group. All the expenditures are deflated by the corresponding collective consumption price index (base 1990).

#### 3.2 Average cohort analysis

As discussed before, the analysis in this paper utilizes the average cohort technique. The definition of a cohort is based on the year of birth of the household head, and each cohort is defined by a five-year birth interval. We divided all the households in the sample in 12 cohorts, excluding those whose head was born after 1965 and before 1906. The cohorts so defined show at every time a different age (see tab. 1). It can be noted that linking cohorts together it is possible to reproduce the household life-cycle.

Following Deaton (1985), we assume that the representative value of the relevant variable for each individual is the corresponding average value of the cohort. In this way rather than following the same individual over time (panel data), we look at the cohort mean behaviour over time (pseudo-panel data).

We start by presenting some of the principal features that emerge from our data and that are important for understanding consumption behaviour. In particular we look at the movements in commodities expenditures and at some socio-demographic characteristics.

In each of the pictures presented below, each separate line represents the evolution of the relevant variable over time (1985-1992) for each cohort.

In this way it is possible to have same indications about the presence of a cohort fixed effect. Linking cohort lines together we can reproduce the variable mean behaviour over the life-cycle.

In figure 1 we report the total expenditures in the selected 12 cohorts. The pattern of total expenditure is typical: it rises initially, peaks in the middle ages and then falls after mid-fifties. In the same way we can look at the variations in the commodities considered: non durable goods (fig.2), durable goods (fig.3), service (fig.4) and tourism (fig.5). Expenditure for non durable goods over the life-cycle is essentially of the same form as total expenditure. It has to be observed that in young and middle cohorts expenditure grows more than in the older ones: this can be related to different cohort responses and potentially interpreted as a cohort fixed effect. The picture for durable goods is similar with some variation in details. The expenditure for durable goods grows much more, during 1985-92, in the first seven cohorts than in the older ones. The pattern of service expenditure of young and old cohorts is similar. They show a lower level of expenditure than middle cohorts. It is to note that all cohorts increase service expenditure in the period analyzed; this is a novelty when compared with the pattern of others commodities. The pattern of expenditure for tourism is similar to that for durable goods: young and middle cohorts show the same consumption behaviour, different from that of the older ones. It is interesting to observe that, first, during the period considered the level of tourism expenditure grows only for young and middle cohorts and, second, that there is a strong seasonality effect in all of the cohorts considered. The quarter with the highest mean expenditure is summer. In interpreting the results on tourism one must remember that tourism expenditure is the sum of real tourism expenditure and out of home meals.

The next figures look at the path of some important socio-demographic determinants of total and commodities expenditure. In fig. 6/7/8 we report the households composition: adult, child and young. Each observation in the graphs corresponds to the mean number of adult, child, young respectively calculated for each cohort observed at each time. It is to note how the composition of the family changes during the household life. The mean number of children is higher in the young cohorts, corresponding to 30-35 ages, while the mean number of youngs is higher in middle cohorts, corresponding to 40-45 ages. We have also reported the age profile for earned income household (fig. 9), and the graph (fig. 10) of the age profile for the logarithm of the expenditure.

### *3.4 Econometric estimates*

In this section, we present some preliminary estimates of the model. In estimating our demand system we have used the variables described in the previous paragraphs. The variables values are obtained by averaging the variable (or the log of the variable) on the individuals that belong to each cohort. In addition to the variables of the basic model, we introduce cohort dummies, seasonality dummies, trend and mean number of adults, children and young of each cohort and percentage of earned income household, as socio-demographic variables.

The adding-up restrictions are not testable, and are imposed directly by first estimating  $n-1$  of the share equations, and then estimating the parameters of the remaining equations from the adding-up restrictions. In the

share equations estimations the results are invariant to the choice of the  $n-1$  commodities included in the analysis. The good excluded is non durable, so the non durable equation parameters are obtained exploding the adding-up restrictions. As the cohort size is sufficiently large, we suppose that the importance of measurement errors is reduced. So, at first, we used Iterative Seemingly Unrelated Regression to obtain unrestricted consistent estimates for each equation. Tests for homogeneity restrictions were performed leading almost always to the acceptance of the restrictions. Symmetry and homogeneity restrictions were thus imposed on estimates.

The model estimated is

$$\bar{w}_{ict} = \alpha_i + \beta_i \left[ \ln \left( \frac{y_{ict}}{P_t} \right) \right] + \sum_{j=1}^I \gamma_{ij} \ln P_{jt} + \sum_{k=1}^K \theta_{ki} \bar{a}_{kct} + \phi_{ic} + \sum_{r=1}^3 \delta_{ir} s_r + \eta_i T + \bar{v}_{ict} \quad (6)$$

where  $a$  stands for demographic variables,  $s$  for seasonality dummies and  $T$  for deterministic trend.

The estimated parameters of the restricted model are presented in table 2. The  $\beta$  estimates reveal that durable and tourism are luxury, while non durable and service are necessity. We can see that, in general, socio-demographic variables and fixed effect dummies contribute to explain the consumption behaviour. For example the presence of children and youngs reduces the tourism budget share, while the presence of adults increases it. Furthermore the presence of seasonality, especially for tourism, and trend in the data has been detected. The variables considered are non stationary and in the following section a solution for it will be devised.

The estimated parameters can be used to determine elasticities with respect to total expenditure (tab.3) and price (tab.4-7). The advantage of the proposed model is the possibility to calculate elasticities for each cohort. In this way differences in individuals tourist responses over their life-cycle can be looked for. In particular we can see that the compensated elasticities of tourism with respect to the price of each good tend to increase as the cohort grows old.

### 3.5 Long-run estimate of tourism demand

In the previous paragraph we have shown the important role played by the presence of non stationary variables in the AIDS model. A solution to this problem is to use a model that takes into account the presence of non stationarity in the specification, as in cointegrated VAR systems. For the AIDS it is possible to suppose that consumers are unlikely to have fully adjusted to equilibrium in every time period (Anderson-Blundell, 1983), and that there are short-run adjustment of consumers' expenditure caused by economic and demographic factors. If it is true it is necessary to model dynamic consumers' behaviour.

Combining an error correction model specification and average cohort techniques, one can hope to take these features into account. The long-run dynamics of the commodities demand could be equal for all of the cohorts, while the short-run could be different for each of the cohorts considered. In this way we are able to model the dynamic of each cohort. This, however, is subject to future research.

#### 4. Conclusions

The aim of the present work is to give a preliminary analysis of individual tourist consumption behaviour, taking into account the household life-cycle. To this goal we have used AIDS model adapted to cohorts. The main conclusion is that both the household socio-demographic characteristics and the cohorts fixed effects are of fundamental importance in explaining the evolution of consumption over the household life-cycle. The household composition and the householder's age influence the allocation of budgets amongst goods in the life-cycle: there is an interaction between household specific characteristics and consumption behaviour that the original aggregate model can't evidenciate. In this sense the AIDS model adapted to cohorts is a useful instrument for analysing tourist consumption behaviour. The presence of non stationarity in the variables and has led us to propose a cointegrated VAR system which, we think, can better describe consumption behaviour.

From our preliminary results tourism emerges as a luxury good.

The elasticities derived for each cohort change during the household life-cycle. This is an important result for policy purposes because it gives the possibility to evaluate the variation in household tourist responses corresponding to modifications of the socio-demographic structure of the population.

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tab.1 Cohort definition

Cohort number	Household head year of birth	Cohort age in 1985	Cohort age in 1992
1	1961-1965	20-24	27-31
2	1956-1960	25-29	32-36
3	1951-1955	30-34	37-41
4	1946-1950	35-39	42-46
5	1941-1945	40-44	47-51
6	1936-1940	45-49	52-56
7	1931-1935	50-54	57-61
8	1926-1930	55-59	62-66
9	1921-1925	60-64	67-71
10	1916-1920	65-69	72-76
11	1911-1915	70-74	77-81
12	1906-1910	75-79	82-86

Tab. 2 Estimated parameters of the model

Parameters	Non durable	Durable	Service	Tourism
$\alpha$	0,980	-0,751 (-11,30)	0,906 (9,83)	-0,135 (-2,22)
$\beta$	-0,038	0,081 (11,38)	-0,066 (-6,73)	0,023 (3,60)
Adult	0,002	0,032 (6,81)	-0,036 (-5,56)	0,001 (0,31)
Child	0,018	0,014 (1,75)	-0,013 (-1,13)	-0,019 (-2,57)
Young	0,020	0,023 (4,74)	-0,041 (-5,93)	-0,002 (-0,61)
Earned income	-0,023	-0,053 (-5,99)	0,088 (7,18)	-0,012 (-1,49)
$\phi_2$	0,016	-0,014 (-6,641)	0,016 (5,33)	-0,003 (-1,65)
$\phi_3$	-0,003	-0,029 (-8,84)	0,036 (7,70)	-0,009 (-2,98)
$\phi_4$	-0,002	-0,046 (-10,23)	0,060 (9,67)	-0,016 (-4,00)
$\phi_5$	0,005	-0,063 (-12,38)	0,081 (11,57)	-0,024 (-5,16)
$\phi_6$	0,011	-0,072 (-13,11)	0,094 (12,29)	-0,033 (-6,56)
$\phi_7$	0,013	-0,075 (-12,88)	0,100 (12,35)	-0,038 (-7,24)
$\phi_8$	0,011	-0,074 (-11,58)	0,106 (12,02)	-0,043 (-7,43)
$\phi_9$	0,004	-0,071 (-10,04)	0,115 (11,78)	-0,048 (-7,47)
$\phi_{10}$	-0,015	-0,064 (-8,81)	0,116 (11,52)	-0,050 (-7,58)
$\phi_{11}$	-0,008	-0,058 (-8,03)	0,117 (11,59)	-0,049 (-7,48)
$\phi_{12}$	-0,021	-0,050 (-6,76)	0,118 (11,61)	-0,047 (-7,06)
$\gamma_{nd}$	0,064	-0,084 (-2,89)	0,095 (2,03)	-0,074 (-2,41)
$\gamma_d$	-0,085	0,161 (4,19)	-0,056 (-1,29)	-0,020 (-0,54)
$\gamma_s$	0,095	-0,056 (-1,29)	-0,143 (-1,72)	0,104 (1,84)
$\gamma_t$	-0,074	-0,020 (-0,53)	0,104 (1,84)	-0,009 (-0,13)
S1	-0,003	0,005 (7,06)	-0,010 (-8,72)	0,007 (9,33)
S2	-0,015	0,006 (7,13)	-0,017 (-13,84)	0,026 (31,64)
S3	0,010	0,001 (1,60)	-0,012 (-9,84)	0,001 (0,98)
Trend	-0,002	0,002 (7,16)	0,001 (2,45)	-0,001 (-2,30)
R <sup>2</sup>	-	0,945	0,942	0,913
DW	-	1,811	1,479	1,971

(t-ratio in parenthesis)

Tab. 3 Total expenditure elasticities

Cohort	Non durable	Durable	Service	Tourism
1	0.9015	1.6655	0.7192	1.2942
2	0.903	1.6531	0.72	1.3218
3	0.9055	1.6688	0.7224	1.3549
4	0.9069	1.7122	0.7323	1.3885
5	0.9066	1.7631	0.7427	1.4141
6	0.9051	1.7806	0.7471	1.4487
7	0.9037	1.8038	0.7483	1.4676
8	0.9037	1.856	0.752	1.5008
9	0.9038	1.9793	0.7609	1.5876
10	0.9041	2.1229	0.7687	1.6832
11	0.904	2.298	0.7763	1.7654
12	0.9031	2.4998	0.7849	1.7892

Tab. 4 Compensated elasticities of non durable whit respect to the price of goods

Cohort	Non durable	Durable	Service	Tourism
1	-0.3187	-0.0348	0.4176	-0.0598
2	-0.3092	-0.0317	0.4145	-0.0623
3	-0.292	-0.0293	0.4108	-0.0629
4	-0.2809	-0.0325	0.4181	-0.0649
5	-0.2826	-0.0395	0.4308	-0.0689
6	-0.2936	-0.0445	0.4398	-0.0754
7	-0.3035	-0.0503	0.4446	-0.0798
8	-0.3045	-0.0569	0.4497	-0.0827
9	-0.3033	-0.067	0.462	-0.0878
10	-0.3016	-0.0759	0.473	-0.092
11	-0.3023	-0.0852	0.486	-0.0949
12	-0.3077	-0.0946	0.5037	-0.0978

Tab. 5 Compensated elasticities of durable whit respect to the price of goods

Cohort	Non durable	Durable	Service	Tourism
1	-0.1905	0.5298	-0.2338	-0.1012
2	-0.1657	0.5051	-0.2247	-0.1035
3	-0.1607	0.5333	-0.2331	-0.1129
4	-0.1927	0.6132	-0.2524	-0.1283
5	-0.2481	0.708	-0.2758	-0.1443
6	-0.2797	0.7409	-0.2826	-0.1523
7	-0.3162	0.7843	-0.2973	-0.1598
8	-0.3719	0.8816	-0.3286	-0.1754
9	-0.4993	1.1162	-0.4016	-0.2114
10	-0.6474	1.3923	-0.4898	-0.2515
11	-0.8313	1.7313	-0.5988	-0.2975
12	-1.049	2.1247	-0.7233	-0.3487

Tab. 6 Compensated elasticities of service whit respect to the price of goods

Cohort	Non durable	Durable	Service	Tourism
1	0.8976	-0.0986	-1.2569	0.4622
2	0.9084	-0.0982	-1.2547	0.4557
3	0.9264	-0.0992	-1.247	0.4465
4	0.9255	-0.0971	-1.2148	0.4262
5	0.9083	-0.0946	-1.1805	0.4065
6	0.8885	-0.0926	-1.1655	0.3959
7	0.8746	-0.0943	-1.1614	0.3923
8	0.8682	-0.0977	-1.1486	0.3838
9	0.8568	-0.1005	-1.1167	0.3643
10	0.8476	-0.1033	-1.0882	0.3475
11	0.8359	-0.106	-1.0592	0.3329
12	0.8166	-0.1062	-1.0248	0.318

Tab.7 Compensated elasticities of tourism whit respect to the price of goods

Cohort	Non durable	Durable	Service	Tourism
1	-0.4905	-0.1623	1.6798	-1.0227
2	-0.5661	-0.1859	1.8019	-1.0387
3	-0.6492	-0.2171	1.9498	-1.0568
4	-0.7419	-0.2519	2.108	-1.0744
5	-0.8251	-0.28	2.2325	-1.0877
6	-0.9477	-0.311	2.3896	-1.1046
7	-1.0197	-0.3298	2.4742	-1.1136
8	-1.1258	-0.3645	2.6251	-1.1291
9	-1.3984	-0.4485	3.0187	-1.1679
10	-1.6987	-0.539	3.4505	-1.2093
11	-1.9592	-0.6178	3.8241	-1.2435
12	-2.0413	-0.6456	3.9446	-1.254

fig.1 Age profile for expenditure

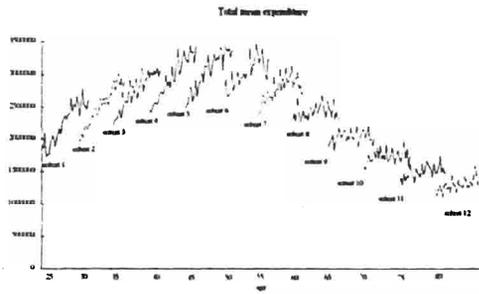


fig.2 Age profile for non durable expenditures

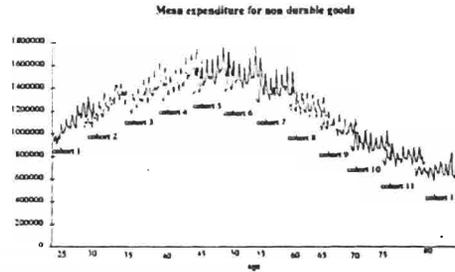


fig.3 Age profile for durable expenditure

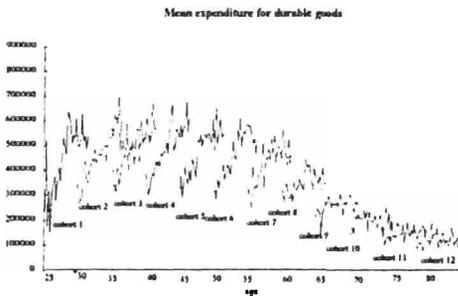


fig.4 Age profile for service expenditure

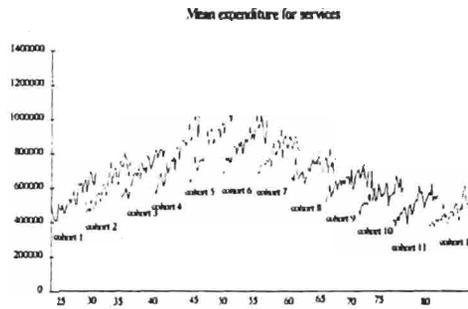


fig.5 Age profile for tourism expenditure

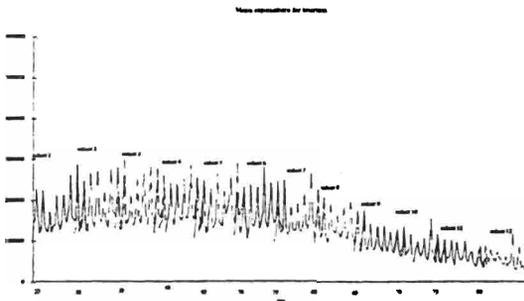


fig.6 Mean number of adults

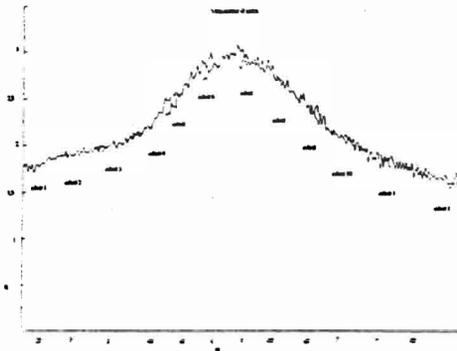


fig.7 Mean number of children

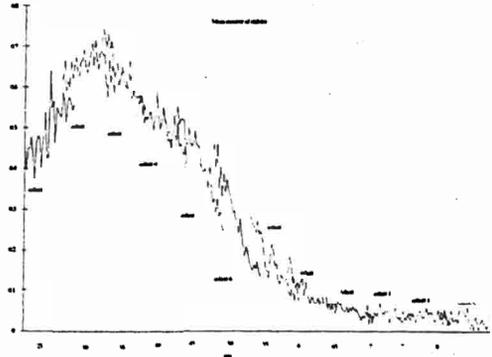


fig. 8 Mean number of young people

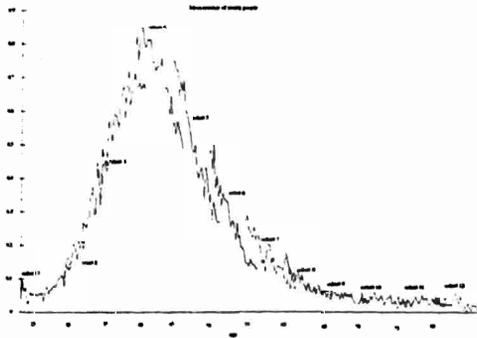


fig 9 Percentage of earned income household

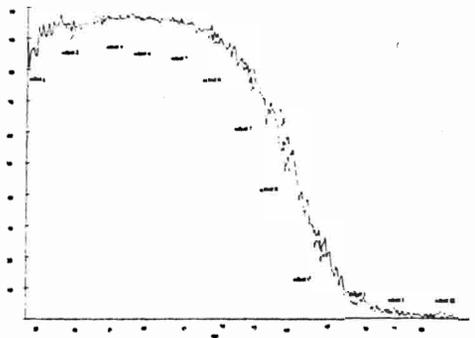
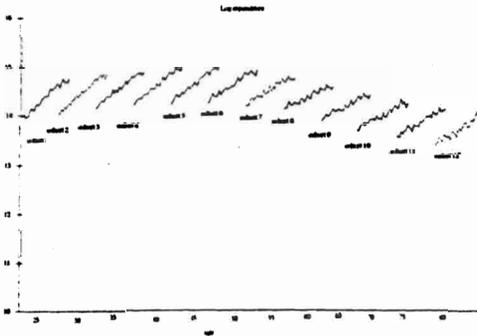


fig.10 Age profile of logarithm of expenditure



# TOURISM IN FLORENCE A MODEL FOR CITIES OF ART

by E. BECHERI

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*Mercury - Firenze*

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Tourism constitutes the most important aspect of the local economy.

Some 10% of the active population is employed in tourism; 9% of employees and about 35% of those employed in the commercial sector. Including those who are partially involved in tourism increases the estimate of the proportion who benefit to a worthwhile extent from tourism to more than 30% (tab. 1 and 2).

The annual overall spending generated by tourism flows is about 2200 million lire, more than double what was thought up until now. Broadly speaking (the two values are not homogeneous) this amounts to about 13% of the local GDP.

The image of a city of art and culture must therefore be seen in the context of *L'impresa Firenze* (Florence, Inc.), which is a tourist sub-system of city-hotels and which must be understood in a broad territorial framework that includes the former surrounding 'county' of city-estates and some nearby towns.

This is one of the principal conclusions of Emilio Becheri's volume which is the result of two years of work in conjunction with Gabriele Cevenini, Gabriella Devoto, Roberto Gambassi, Luciana Lazzeretti, and Lorella Malacarni.

As indicated by Piero Barucci and Piero Roggi in their written introduction to the book, we are dealing with "*a rigorously theoretical model, destined to clarify the reality and to bridge the discontinuity which is determined by the demands of reality on the one hand and cultural debate on the other, as well as to develop aggregational functions in relation to multiple local centers which, albeit to a different extent, are concerned with the problems of tourism.*" The volume begins by putting forward the newly developed, so-called Hesse syndrome, which is not to be contrasted with but to be differentiated from that of Stendhal. In 1901, at the age of twenty-four, the German writer was one of the many young people who visited Florence: he was so fascinated that he tore up his tourist guide as a manifestation of his desire to live the city.

This instance of a great revelation is the pretext for introducing some concepts and for defining some terms by distinguishing, for example, between visitors and tourists, between the tourist élite and mass tourism etc..

In fact, there are many innovative aspects in the model set out in this volume. The first two sections set out on traditional lines<sup>1</sup>. They are significant because, among other things, they demonstrate the difficulty the Flo-

rence of today has in communicating its true self (Chart 2) and are followed by the third part which presents field research. This was conducted in three different periods of the year and permits the categorisation of some characteristic types of tourist visitors to the city.

Italian and foreign tourist bednights in all forms of accommodations (in the city of Florence 1968-1993)

Number of events (classical, music, pop rock, theatre, dance, lyric, exhibitions, cinema) by city upside in the Philip Morris/Corriere della sera; performance and cultural appointments diary.

A distinction is made between the visitor (which includes also day visitors) and the true tourist.

Moreover, some categories are characterized, e.g. the transcontinental tourist, the continental tourist and the Italian tourist and, then, more specifically, the French tourist, a normal tourist with a good disposition, the German tourist, who is a heterogeneous and affectionate client, the English tourist, who is parsimonious and part of an élite, the U.S. tourist, who is a romantic in continual search of tradition and beauty, and the Japanese tourist, who is organised, affectionate, and transient, but always the most attentive client.

The mind of the client-tourist is dominated by a psychological map of the city which is described as a mostly bare-bones concept. It boils down to a square which is more limited than the true historic center. It is characterized by a first side which runs from the Central Station to Piazza Pitti, then crosses over Ponte Vecchio or Ponte Alle Grazie as far as Piazza SS. Annunziata (Galleria dell'Accademia) and then finally finally joins up at Piazza della Stazione.

Inside this there is a particular concentration bounded by P.zza della Stazione, P.zza Signoria, P.zza Duomo and Ponte Vecchio. This is where most movement occurs.

The tourist's level of loyalty is also taken into account with consideration of the different first-time and repeat visitors.

The field research is developed with consideration of length of stay, accommodations and restaurants used, and tourists' motivations and judgments. They highlight the high quality museums, exhibitions, events, shopping, general courtesies, restaurants, and accommodations. The negatives are traffic, car parks, the cleanliness of the city and taxi service.

Part four presents the innovative model which is an attempt to answer the questions outlined previously by making an estimate of the components of Florentine tourism possible. The analysis is based on the GIO.NE. model. This was previously proven in another research project on tourism in the province of Grosseto.

The model takes twenty-five variables into consideration including, in particular, data relating to rubbish collection and the sale of newspapers.

On this basis, an evaluation is made of visitor flows which shows that they are much greater than had been believed up until now, and of tourists' bednights which shows they are significantly higher than official statistics show, but are still only less than a third of all visitors (tab. 3).

To ensure a comprehensive analysis some data items are taken into account which have never been previously analyzed: tourist expenditures and the economic contribution to the city, the importance of day visitors, the various tourism types, i.e. distinguishing between art, business, congress, event, and other forms of tourism, weight of educational tourism, the sea-

sonality of flows, and the maximum and minimum days spent by tourists. Some forecasts are made which indicate prospects for considerable expansion.

It may be of interest to note here that according to the official 1993 figures on tourist flows, the month with the average minimum daily number of bednights was January with 11,565 units; the maximum was September with 21,735 units. But February was the month with the minimum number of bednights (4,537) and the maximum in May (32,135), 7.1 times as much.

Some forecasts are also made in this Part which should be interpreted as indicative of some trends. It is estimated that the above percentage increase (+6,8%) in official bednights in 1994 is slightly above the national figures and it is hypothesized that by 2000 the number of officially recognised bednights may be more than 30% up on 1993, with a compound annual growth rate of about 3,8%. Consequently, a new development phase will get underway which will bring a return to the growth rates of some thirty years ago: the highest growth will be in visits motivated by art as opposed to those for business, events, and congresses.

Part five contains the most policy-oriented stage of this report with an analysis of a historical nature which highlights the passage from the dominance of supply to that of demand and which is fundamental to the relationship between town planning and tourism. This is discussed in the context of the problems posed by the Piano Regolatore Generale (P.R.G.) (the overall City Planning Framework).

An attentive analysis follows of the way in which tourism is organised in the city. The activation of the parties involved is expounded through a schematic plan of the development of tourist activities in the city (Appendix 1) along with analysis of the role of business. Some innovative experiences are identified which are not generally given any consideration, yet are certainly present in the city.

In particular the analysis focuses on the troublesome relationship between economic groups and public entities, noting how their conflicts often result in failure to synchronise activities, a phenomenon which shows up well in the fact that the local Tourist Promotion Agency and the City Councillors responsible for tourism and culture each use completely different trademarks to promote initiatives.

It is suggested that the theoretical hypothesis of the Florence model be verified on the basis of a managerial analysis which assesses the attempts at co-operation, the propensity to fragmentation (with the example of three hotel associations) and a proposal for flexible, multi-locational hotels, in accordance with a strategy of horizontal development which gives precedence to the role of businessperson as a guide (Cicerone) to the enjoyment of the city.

Part six anticipates in detail one of the principal proposals of the concluding section by suggesting a Monitor for City Tourism to be called S.I.TUR.FI., (Florentine Tourism Information System).

The system would go beyond the use and raising to mythical status of the most advanced technologies, which are of course an underlying requirement, and would rather be outward looking as part of a broader framework which aims to capture the images of the city within the sphere of a *Comunicare Firenze* (Communicate Florence) project.

The final section follows. By way of conclusion, the results of the pre-

vious articulated analysis are related to some specific proposals alongside a summary and recall of key points.

The principal proposal highlighted in the conclusions is for a major project named *Comunicare Firenze*, which would link and create a critical mass of the numerous aspects present within the region which are currently not integrated and often contradictory. They are often interpreted on the basis of an exclusive literary, historic, and outdated logic. This casts a distorted light on realities and rightly or wrongly attributes all blame to an imaginary enemy: tourism. To achieve this, it is necessary to break down some myths and, with a bit of courage, to change the behaviour which results. Florence should be considered as a complete project in itself which can be marketed on the basis of its quasi-monopolistic position. For this reason Florence Inc. and its style are discussed. It is proposed that the city should be effectively marketed so as to overcome its paradoxical, externally perceived image which, while marketing the city in the first place and making it one of the world's most loved places, nonetheless makes it very difficult to communicate the true city as viewed from within, by virtue perhaps of the great force which the experiences of the past exercise on those of the present.

A series of general and operational proposals are made which spring from this final summary. They include:

- thinking of the city not only as a place to live but also as a place for tourism and the tourist, based on the logic suggested by sustainable tourism;
- implementing consultation among the great cities of art;
- merging the City Council's culture and tourism departments;
- building and marketing via alternatives: e.g. the Museum of Science, the city walls, etc...;
- setting up a city marketing task force as part of the *Comunicare Firenze* project;
- creating the conditions to allow programmes or partnerships for the management of museums, as a productive source of income;
- activating consortia of tourism business to manage collateral activities as well as those traditionally associated with museums;
- setting up broadly based and widely available computerised informational systems for tourism businesses and tourists;
- establishing a single Florence quality mark, available for use by all operators, public and private;
- making the transport systems flexible and targeted;
- selecting a few from among the various events as a springboard for a refocused international and national promotional campaign;
- evaluating local crafts and using this as a means to restore the "Oltrarno" for effective and balanced tourist use;
- using the city's international strength to develop local, typical and innovative products and, for example, to present Florence also as a worldwide center for studies on historic tourism;
- setting up a modern welcome and hospitality centre, capable of coordinating other external information centres;
- publishing multimodal timetables to facilitate the use of public transport;
- creating an annual Renaissance Prize to be awarded to the best living painters worldwide so as to update tradition and add value to the Museum of Contemporary Art;

- instituting strategic evaluation and presentation of historic monuments even where they incorporate shops, hotels, places where people congregate and so on;
- restoring the quality of the Lungarno Acciaiuoli and transforming it into an arcade of Florentine style;
- enlarging and improving the quality of the Fortezza da Basso, integrating and coordinating management with other congress bodies;
- automating museum and monument access with a machine-read, cumulative, personalized pass (lengthening daily opening hours and staggering the weekly closing day);
- creating the conditions for more efficient management of the Convention and Visitors Bureau and for the Congress tourism Budget (in conjunction with *Comunicare Firenze*);
- establishing of an operational tourist plan as an opportunity for pursuing specified objectives and for coordination with town planning and commercial development.

Finally, in an attempt to synthesize the message to convey to the city's decision makers, a visible chain of reasoning can be followed: tourist activities are a major aspect of the local economy; this is a productive activity which can no longer be thought of as a vocation for the city, but must be regarded as a specific mission able to launch products onto the art and culture markets; within given limits, therefore, commercial utilization of the artistic heritage must be encouraged.

In other words, Florence is also a product to be sold and the tourist a client who wants to acquire it and who may also become a support for the city.

The failure to match demand and supply and the presence of prejudiced behaviour may be the source of many difficulties which could otherwise be easily overcome if there were an overriding communications concept coupled with a corresponding functionality in the organization of tourism.

*Comunicare Firenze* may enable control to be regained of a development which otherwise risks being overtaken by external events.

*Comunicare Firenze* is needed, therefore, in order to integrate culture and tourism and for a committed facing up to a future in which the city's role must ultimately be re-assessed.

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<sup>1</sup> Part one attempts to place the case of Florence in the context of a wider framework which embraces four other big tourist cities, the "sisters" Venice and Rome and the "cousins" Milan and Naples. The relative experience of tourism of various local systems is weighed first at the provincial level and then based on city sizes. Some caution is applied in making these comparisons in order to define the limits of the study. For example, the territorial dimension of the commune of Venice is so much greater than that of the true city of art, while Fiesole can be regarded in some respect as an integrated part of Florence.

There is a summary of the evolution of tourist flows, the art and cultural heritage and the image of these cities and some outstanding problems are identified which are followed up on subsequently. Among these in particular are the difficulties of images which the city of Florence faces because of a great past which, at least apparently, seems to compromise the present.

Part two goes to the heart of local problems from which were derived the choice in title for this volume discussing tourism in Florence.

The descriptive outline which follows is analogous to the one adopted previously. The tourism phenomenon is placed in the context of the city's economy. This is followed by a traditional analysis of trends in tourist flows, seasonality, market snares and the use of the media (Graph 1).

A brief analysis follows of the transport system which focuses on the more specific problems of the city, such as that of the airport, which was long opposed but is now experiencing major growth.

Part two concludes with an evaluation of Florence's hospitality network.

This includes consideration of the accomodation sector, trade fairs, congresses and, in general, city events.

In many instances this demonstrates the limits of an analysis conducted according to traditional canons. These do not permit an answer to some questions about the weight of individual tourism types, on crowd size and on the role of tourist activities.

TAB. 1  
ACTIVE LABOR FORCE EMPLOYED IN TOURISM

	<i>No. of Entities</i>	<i>Employees</i>
Hotels	362	3620
Camp sites	2	29
Apartments	236	110
Other Accomodations	39	93
Rented Rooms	1200	510
Agritourism	16	24
Other non-communal ent.	165	200
Guides	145	145
Tour Managers	120	120
Travel Agents	115	255
Congress Facilities	2	32
Congress Organisers	7	53
Translators and Interpreters	180	45
Horse-drawn Carriages	12	12
Car Rental Agencies	5	25
Airline Company Reps.	16	51
Consortia	8	32
Professioanl Associations	12	55
Museums and Monuments	121	890
City Parades and Display	16	66
<i>Organizations</i>		
Local Tourism Promotion Agencies	3	30
Coomune of Florence	1	32
Province (q)	1	9
Region (q)	1	3
Banks and Foreign	36	91
<i>Exchange Outlets</i>		
Other	58	450
Total	2881	6982

TAB. 2  
EMPLOYMENT IN ACTIVITIES RELATED TO OR DERIVING BENEFITS FROM TOURISM

	<i>No. of Entities</i>	<i>Employees</i>
Shops	1100	930
Stall Holders	481	571
Arts and Crafts	1670	1235
Art Galleries	66	89
Restaurants	449	1650
Bars	994	885
Cinemas	28	10
Taxi Garages	532	402
Commune of Florence	210	
Province	(quota)	61
Region (quota)	14	
Transport	26	854
Consultants	190	
Banks and Foreign	410	
<i>Exchange Outlets</i>		
Parcel Service and Porters	26	26
Shows	64	90
Recreational Services	83	85
<i>Car Parks</i>		28
Translators and Interpreters	120	65
Other	3200	
<b>Total</b>	<b>11004</b>	

TAB. 3  
VISITOR SPENDING IN FLORENCE; TOURISTS, DAY VISITORS, OTHER VISITORS (X1,000)

<i>Clients</i>	<i>Bednights Shares (%)</i>	<i>Relative Spend</i>	<i>Avg. daily Spend</i>	<i>Total Relative Shares(%)</i>	<i>Tot. Spend:</i>
Total tourists	7,250,061	29.64	275.0252	,993,949,477	74.88
Art Day	2,256,300	9.22	91	205,323,300	7.71
<i>Visitors</i>					
Total Tourist	9,503,631	38.86	231.3475	2,199,272,851	82.59
<i>Visitors</i>					
Other Visitors	14,954,226	61.14	31	463,581,006	17.41
<b>Total Visitors</b>	<b>24,460,597</b>	<b>100.00</b>	<b>108.8630399</b>	<b>2,662,853,857</b>	<b>100.0</b>

CHART 1  
 ITALIAN AND FOREIGN TOURIST BEDNIGHTS IN ALL FORMS OF ACCOMODATIONS (IN THE CITY OF FLORENCE 1968-1993)

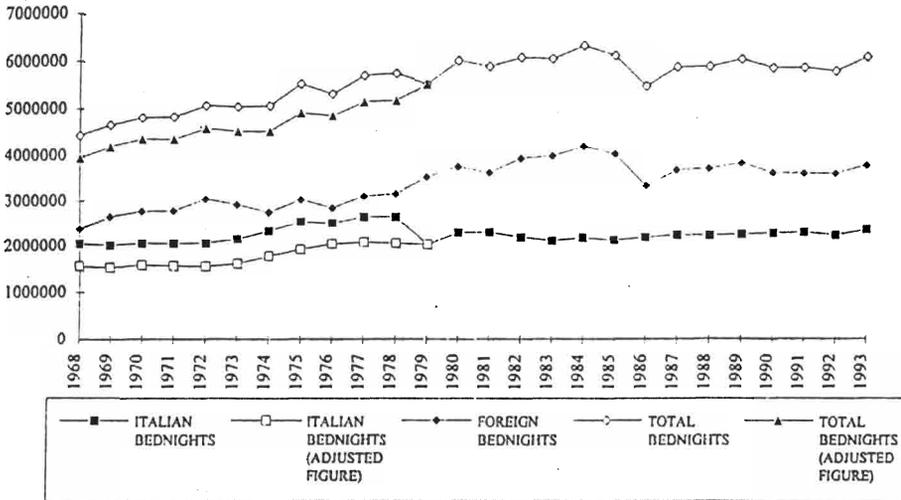
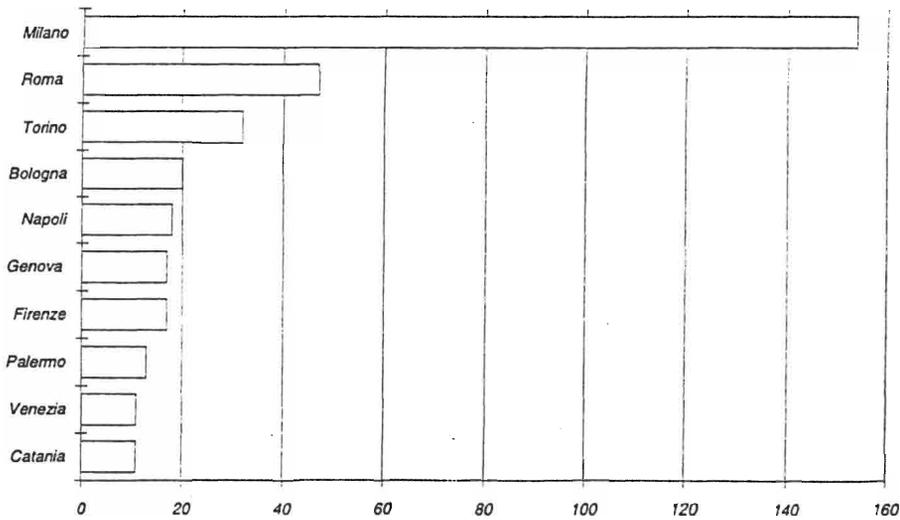


CHART 2 *grad. p. 2. Doe*  
 NUMBER OF EVENTS (CLASSICAL, MUSIC, POP ROCK, THEATRE, DANCE, LYRIC, EXHIBITIONS, CINEMA) BY CITY UPSIDE IN THE PHILIP MORRIS/CORRIERE DELLA SERA: PERFORMANCE AND CULTURAL APPOINTMENTS DIARY



## Appendix 1 Phases of tourism in Florence

PERIOD	TOURISTS	ORGANIZATIONAL FORM	CATEGORIES	BUSINESS TYPE	TYPICAL PRODUCTS	RECEPTION	CHARACTERIZATION	RESIDENT BEHAVIOR	TRENDS	PROMOTION
1950's	-almost exclusively foreigners -predominance of US tourists, long stay	-simplified -tourist business	-art	-individual and local -passive	-fashion -crafts	-hotel	-Florence European fashion capital	-positive	-elite clientele -dominance of supply	-passive -public
1960's	-differentiation of origins also among Italians -first place: USA -long stays	-tourist business -business center -activation of course in economy of tourism	-art -conferences	-individual and local -pursuit of client satisfaction	-crafts -fashion	-hotel -hostel	-Florence capital of craftsmanship -season from Easter to September -prevalence of individual tourism	-positive	-broader clientele -dominance of supply	-passive -co-operation with public
1970's	-differentiation of origins increasingly marked -reduction in average stay	-more active role of local bodies and of trade & professional associations	-art -business -events	-individual -from abroad -some consortia	-crafts -fashion -souvenirs -antiques	-hotel -rental accommodations -camp sites	-lengthening of tourist season from March to October - development of inclusive tours and organized tours	-beginning of feelings of mistrust	-great development in bus tourism -clientele differentiation	-public promotion -individual firms
1980's	-backpacking tourism -permanent reduction of average stay	-restructuring of tourist entities (creation of "pro loco" local agencies) -most dependence on foreign Tour Operators.	-art -strong development of business -tour of Europe	-development of some groups -small and medium size hotel rooms -consortia (consolidation)	-crafts -fashion -conferences -souvenirs	-hotel and first rate accommodation -agritourism in outskirts -development of reception not registered (accommodation in apartments) -development of accommodation outside the city	-growth of mass tourism -prevalence of organized tourism	-episodes which accentuate the tourist/resident contrast	-further concentration of groups and the individual -dominating role of international tour operators (dominance of demand)	-promotion by groups or consortia of firms -public promotion and events -more public entities
1990's	-slight recovery in length of stay -development of weekend breaks -arrival of tourists from laung-haul away origins	-highest role of enterprise -the Comune -problems with definition of role of provincial tourism promotion entities	-art -business -tour of Europe	-entrance of foreign groups -small and medium sized hotel rooms	-crafts -antiques -fashion -souvenirs	-hotel -agritourism -residences -accommodation in neighboring localities	-cultural de-concentration -tourism with organized trips -subjective re-discovery	-alleviation of conflicts and identification of negative components	-subjective re-discovery and individual trips -short breaks	- public promotion often un-coordinated -enterprise groups -consortia

# CONCLUSIONS OF THE INTERNATIONAL FORUM ON TOURISM STATISTICS

by Paolo Garonna

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Summing up this International Tourism Forum I want to express, also in the name of Ciset, Eurostat and OCSE, which have organised this event together, my full satisfaction for the results obtained and my great thanks to all those who contributed to the success of our initiative.

A lot was said during this meeting about tourism and tourism statistics. It is a question of a sector which always an increasingly important rolling PIL (Italian gross product), employment, productivity and the competitiveness of productive systems. There are two particular aspects of particular importance which I would like to underline because of the implications they have for statistics.

a) First of all the growing integration of tourism with a series of other aspects such as the environment, culture, entertainment, sports, leisure time, etc., and as well as its transversality compared to many productive sectors.

b) Second, in relation to demand, the integration of tourism activity with the other activities in demand: individuals change place traveling for vacation, business, work and study; but there is a strong interrelationship between all these reasons. The tourism represents in reality a signal, the most visible signal of changes taking place in society. Society becomes in fact more free, different and competitive, more educated and more open for international relations; but also less coherent, more heterogeneous, more unequal and more conflictual.

Such a description of an industrial structure and a changing society, emerging from an analysis of tourism, has some strong implications for statistics.

The first is in front of our eyes! Statistics always appear insufficient to gather, on a timely basis and with precision, the dynamics of social transformation and changes in production. The usefulness of statistics as a tool of economic analysis is also insufficient; resulting in a series of new analytic demands and an integrated reading of data, such as the satellite accounts. International comparability, and even interregional comparability, of data and indicators in relation to phenomenon which are becoming more frequent on the national and international levels is also insufficient. It is difficult to gather some links, some sequences and some interdependencies from these phenomena, both in relation to demand and supply.

The second consequence is in relation to the liberalization and internationalization which fully impact statistics and the tourism statistics in dif-

ferent ways. In producing tourism statistics one can no longer rely on the extensive network of linkages and administrative rules, such as recording duties, border crossings and exchange rates.

The sources of tourism statistics's credibility are also changing: the credibility of public or administrative authorities has been minimized and as such it is necessary to develop different forms of credibility linked with the scientific reputation of those producing statistics; this authoritativeness especially appears when sample surveys are made.

It is very difficult to hit a target which changes and moves frequently: let's think about excursionists, targets which are more heterogeneous and more free because they are less subject to barriers and controls.

The conclusion which we have drawn from this description is that it is necessary and urgent to establish the objective of constructing and making operative an effective informative system appropriate to and integrated on tourism. This derives from - and it was amply underlined during the Forum - the necessity for developing and standardizing at the international level ideas, classifications and reference descriptions, so as enable a deep understanding, comparative analysis and interconnected controls.

A necessary presupposition of this information system is to place on the network the different subjects which can and must have a role in the construction of information: the purpose is to obtain a comprehensive and multidimensional system, susceptible to comparison at the national and international level. The subjects which must assume this task are first and foremost the Statistical National Institutes, but also other public entities: policy makers at different levels, national, regional and local. The role of international organisations, Universities, Research Institutes, the business organisations and associations by category is also fundamental.

In this construction process different data sources: administrative sources must be integrated, archives, with surveys by sector and especially the set of sample surveys, which become more and more important for capturing the phenomena's complexity.

The Forum has produced a series of relevant and specific indications to start a serious and ambitious, programme of work on both the national and international level. In this regard, I would like to recall four of the most important points.

1. First of all the interest and active participation which has characterized these past few days confirms the reasons which reserved as an impetus to this initiative: the objective to create, via the seminar format model, the possibility of an exchange between statisticians, economists and those with sectoral expertise, representatives of the national and international institutions with regard to tourism, was without doubt obtained.

The numerous reports presented in the Forum have made illustrated the efforts of countries to research the survey procedures necessary for gathering data on the principle components of the tourism market while offering an interesting overview of different national realities. As such, there is a consensus to proceed and to continue in this way. Indeed, it is the premise for the third Forum in Portugal in 1996.

2. Second, the need to strengthen the harmonization of concepts, definitions and classifications, necessary prerequisites for improving information quality and increasing the level of data comparability has been demonstrated. In this context the stimulus, coming from the International Or-

ganization such as OMT, OCSE and EUROSTAT is very strong.

In recent years the organizations have encouraged the process of standardization by providing a significant inputs to statistics on this sector on a national and international scale. In relation to tourism policy the integration process is witnessed, in the European context, by the Green Book of the Commission on the role of the European Union in promoting tourism, and the offer of an community directive in this field.

3. Third, the presentations which we were given have investigated actual issues, such as those relevant to the impact of tourism on the labour market, the argument on which is centered the difficulties in individualizing in an unequivocal way the limits of the "tourism" industry for the heterogeneity and the encompassing nature of the sector. The necessity of refining measurement techniques of explicit and implicit employment, as well as the unresolved issue of measuring hidden employment and seasonal workers, the productive contribution of whom may be more substantial than that of permanent and regular employment.

4. Finally, a particularly interesting proposal was made during the Forum to start, in the tourism sector, the construction of a statistical system integrated at the macroeconomic level, which allows an understanding and interpretation of the statistical information in a global economic and social perspective. To obtain such an objective for a rationalization of the productive processes for tourism information is apparent, and the opportunity, given the characteristics of a local phenomenon, of a microeconomic approach is apparent. The realisation of an integrated statistical system is the necessary prerequisite for improving knowledge of the sector from the macroeconomic perspective. With this orientation ISTAT intends to promote an initiative at the national level, which will be strongly linked to the those at the European and international levels thereby proposing itself as a model and prototype for similar initiatives in other contexts.

Friends and colleagues, at the end of this century, which is also the end of the millennium, official statistics must deal with some challenges of great importance. These challenges also fully involve tourism statistics. I would like to conclude by pointing out some important issues which obviously do not only pertain to tourism but are issues in which tourism statistics have an important role.

First of all are the processes of liberalization and internationalization. These processes are seeing statistics play an essential role: think about the Maastricht indicators and about their role in the European Unification Programme. These events deeply affect the way statistics are made, the technologies and data quality.

Statisticians and statistics cannot remain passive or simply limit themselves to reacting, sometimes with delay, with regard to these changes. Nor can statistics hinder or halt these processes, even if they put under discussion the current way in which we produce statistics, affecting our organisations and our methods of working. We statisticians must be able to anticipate these processes, to initiate them and to support them actively. We cannot only limit ourselves to plugging holes and patching over the tourism statistics of this century; but we must however ambitiously and with foresight seek to construct tourism statistics for 2000 and beyond.

The second important challenge regards relationship with Public Authorities and the Government. Tourism statistics are still - frequently too much- made conditional by the demands of policy makers, public Administrations and Governments.

This must change. We must meet the challenge of placing citizen, enterprises and families at the center of statistical programming and production. So that tour-operators and tourists become the focus of our activity. Their information needs, which are frequently detailed and diffuse, their attention to quality aspects and tourism demand composition, to characteristics of motivation and the local focus of supply, which must each guide our activity.

The third and the last challenge is immediately and particularly evident in this city and in this context. Everything in Venice - the history, the art, the culture - cause us to look towards the East, towards the transition Countries, towards the Countries of the Central and Eastern Europe, towards the Far East; towards the South, towards the Adriatic and towards the Mediterranean. Venice has always been - and is- the crossroads between the North and the South, the East and the West. The strength and the wealth of Venice has always been based on its ability to develop trade and commerce; on travel and on the ability of discover new worlds. Everything here reminds us of the great travellers of the XIIIth and XVth century, the Marco Polos, the Cabotos, the Zenos; the ability of Venice to establish friendships and reciprocally advantageous relations among different peoples and far off nations.

This aspect of tourism and travel is too frequently and unjustifiably wrongly neglected: the ethical cultural value of tourism, the ability to establish relationships of peaceful collaboration and the mutual awareness which is a necessary prerequisite to developing economic and political relations.

This also explains why tourism is so sensitive and reactive to peace and security conditions. Where there is no peace and where there is no security, there may be commerce, but there cannot be tourism; let's look at what has happened in the ex-Yugoslavia, let's look at Algeria and some of Egypt's difficulties. That's why tourism and the tourism statistics can and must carry out a fundamental role in developing and consolidating relations with the East and Southern regions of the World.

Venice's sea, this tranquil Adriatic where the venetian lion stands out everywhere - from Spalato to Cyprus, from Dubrovnik, to Constantinopoli (Istanbul) - this sea today sees new threats, it sees fleets and armies, it sees the nations torn and tormented. We statisticians, cannot withdraw or standby passively. We statisticians can and must do our duty to the contribute to development of peaceful and collaborative relations among the North and the South and the East and the West.

Tourism statistics offer great potential from this point of view. ISTAT, already in the end of 1992, assumed the initiative in the context of Conference European Statisticians of convening a meeting of the Director Generals of the Mediterranean Countries Statistical Institutes.

The meeting took place in Palermo in October 1992; it was a success because almost all of the countries were present. One of the subjects receiving attention and on which the Director Generals of the Statistics Institutes of the Mediterranean countries gathered were particularly interested in

was the great potential for developing tourism statistics. Tourism statistics can become a cooperation priority in the Mediterranean area. However, the Mediterranean, as has already been confirmed by the meeting of the European Union at Cannes, is an area of privileged cooperation for the European countries.

Also from here arises the importance of this Forum, in particular of this Forum in Venice. So I am particularly grateful to all of you, who have organized this Congress, to Ciset, to Eurostat, to OECD, and to the all technical support staff, which have given of themselves in a truly admirable way to ensure the efficiency and efficacy of our meeting, to the interpreters and to all of the participants who have contributed to the success of this event.

The message and task coming out of the Venice Forum can and in my opinion must go far beyond the important technical contributions which have been made for the development of ambitious common work programmes. This task and this message must establish the role of tourism statistics in international statistical cooperation as supporting development initiatives, knowledge and peaceful collaboration among nations and peoples and not only between institutions so as to guarantee peace and progress.

Thank you very much. I look forward to seeing you again at the 3rd International Forum in Portugal.



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