ITALY

ISTAT - National Institute of Statistics

Pilot survey of the HORECA and T.A. sector
The Italian case.

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HORECA and T.A. sector businesses
Hotels in Italy

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1 - Introduction

The plan of activities carried out by the National Institute of Statistics in the area of tourism has recently included many more initiatives. Among these, an important project has been the sample survey of tourist accommodation aimed at gathering information on the structure and the economic activioty of the hotels and travel agencies in 1992.

The survey, developed in the E.C. context, came about as a result of the Council Decision of the European Community 92/306/EEC of 18th June 1992 which provided for a series of actions to be undertaken for the improvement and broadening of services statistics. The fulfillment of this goal was subordinated to the carrying out of pilot surveys aimed at gathering statistical data on businesses in the sector and veryfing the Methodological Manual on Service Enterprices containing definitions, classifications and variables to be observed. and frames of reference as a back up for field research. In the wide and complex services the main subsectors, within which statistical knowleedgesholud be the veloped according to agreed upon standards, were identified. Among these, the **HORECA** and **T.A.** subsector assumes a particular importance as it constitutes a cognitive starting point for quantitative analysis on tourism industry. Infact, it includes the following economic activities: the **HO**tels, which, in their various forms, play a fondamental role in the accommodation or boarding for tourists; the **RE**staurants and **CA**feterias which, partly basing their activity on tourist demand, see to distribution of meals, drinks and other kinds of refreshment; theTravel Agencies and tour operators and other tourist agencies whose function is the retail brokerage for the tourist demand.

2 - The E.U. pilot survey

The principal aim of the pilot survey is to provide preliminary information on the hotel and travel agency sector and to prepare the back ground for regular data gathering on the basis of concepts and definitions contained in the Methodological Manual of Statistics on Service Enterprises. Furthermore, it is foreseen that we will be able to estimate the feasibility of certain information requests (particularly from small businesses) and to give some suggestions about the use of international classifications. E.U. and Efta countries, except Iceland, Switzerland and Lichtenstein, approved of the survey.

Generally speaking, the pilot surveys represent an operative step towards the cognitive goal of the two years program of activities, proposed by the Concil Decision, which is that of observing several variables able to measure the structure and to quantify the main economic components typical of the activity of enterprises operating in the services field.

In particular, following main variables are part of such information:
- identification of the enterprise
- age of the enterprise

- legal form of enterprise
- number of local units belonging to the enterprise
- turnover
- breakdown of turnover by the specific type of the activity in question
- purchases of goods and services
- stocks at the beginning and at the end of the financial year
- labour cost, of which:
  gross wages and salaries
  social security contributions
- value of tangible and intangible investments
- number of employees at the end of each three-month period, divided into:
  non wage and salary earners
  employees (permanent and temporary)
  full-time and part-time
- high-season and low-season medium prices
- capacity (in terms of number of rooms and bed places)
- ownership of premises
- period of activity (in days)
- secondary activity.
- cooperation with other enterprises

In order to harmonize the analysis of survey results among the different observed countries Eurostat arranged a uniform set of tables to be filled in the sphere of hotel businesses, distinguishing between hotels with and without restaurant, and in the sphere of travel agencies, between travel agencies and tour operators.

The survey turned out to be completely new for many countries, expecially for the Travel Agencies observation. At the end of 1993 every country taking part to the pilot project started the data gathering phase, with the exception of Belgium, Finland and Norway which didn't send any information on survey. Some difficulties were encountered in determining the specific universe, above all in Great Britain, Greece, and Denmark. The sources from which the universe was extracted were rather heterogeneous among the various Countries, insofar as they include company files, annual reports of Chambers of Commerce and Business Registers; furthermore, the variety of the classifications and of the information which may be gathered in these archives is considerable and they are not always compatible with the NACE/Rev.1.

The Methodological Manual on Services Enterprises emphsises the enterprises as the chief unit of survey; still the different territorial features which characterise tourist activity in Europe drived to model a particular questionnaire for local units too, with the aim to analyse their productivity processes and to supply regional data. In practice, the avalability of updated and complete universe data strongly affects the choose betwen enterprises and local units.

Generally speaking, the survey was carried out in sample form for Hotels and T.A. with certain exceptions: it surveys only hotels in Spain and only T.A.'s in Sweden, Germany and Luxembourg; Germany and Luxembourg provide exaustuive surveys. By contrast, in Ireland, all the T.A. were interviewed while a sample was used for hotels. Answering questionnaires is statutory in all States except Great Britain, Denmark and Germany, where - it goes without saying - a rather low rate of response is expected.

The mean quota of the theoretical sample with regard to the universe is ca. 20% : we have a range from the 100% of T.A. surveyed in Germany and Luxembourg, to the 8% of Hotels surveyed in Spain. The majority of European Countries sampled quotas of businesses ranging from 14% to 21% of the universe, while Denmark sampled 42% of enterprises.

The percentages of responses are not always forecasted and the estimates are in any case rather varied: the most reliable, as things stand, appear to be those supplied by Greece and Ireland (56% for hotels and 65% for T.A.).

3 - The survey on hotels in Italy

3.1 - Survey units

The survey unit adopted is the hotel which provides lodging to guests exclusively or principally, perhaps connected with a secondary activity such as, for example, a bar or restaurant for the provision of meals and drinks, a retail outlet for the sale of various goods, or an agency for the organization of tours, excursions, visits and various bookings for shows or other events for the hotel's clients.

The decision to concentrate the survey on single hotels and thus to structure the sample on the basis of local units operating within the national territory instead of on the basis of the universe of enterprises, was arrived for two reasons: the first, of methodological nature, concerns the need to design a sample capable of giving estimates at regional level, given the considerable interest of public and private organizations working locally (the coincidence between the site of the entrprise and the site of the local unit is not always ensured at regional level in the case of multi-site businesses); the second, of practical nature, concerns the opportunity of using an updated list of hotels containing basic data for stratification of the reference universe according to size factors which better characterized the structure of phenomenon.

The recourse to the local unit or single establishment as survey unit caused some problems during the data collection phase. In fact, if the content of the information requested from each hotel facilitated filling out the questionnaire with regard to typology, accommodation capacity and, generally speaking, to all data relative to the sctrucural characteristics of the single establishement, on the other hand, created difficulties with regard to all economic data (turnover, income, investments, costs, etc.) requested from the local units belonging to a multi-site enterprise because they have not independent accounting. Furthermore, the same company, depositary of balance sheet data, sometimes is not able to separate the economic aggrgate any category for the single local unit wich belongs to it.

3.2 - The universe of reference and business archives

The hotel supply in Italy is fragmented and concentrated in those geographical areas in which tourist attraction is higher. The system of accommodation facilities is prevalently composed of a good number of small concerns, comprising few rooms and essential accessory services, under family management and generally open on a seasonal basis. Nevertheless the current trend in the sector reflects a process of structural change with marginal and less competitive businesses leaving the market, being unable to sustain competition with larger and better organized companies. The approach of the survey oriented towards single functioning units, and not towards the enterprise, was not significantly disadvantageous in terms of results obtained. In fact, the existence of a high number of single site businesses greatly reduced the disadvantages of the approach for the single establishment and not for the enterprices, and has confirmed the plan created to carry out the survey.

The list of businesses to be interviewed was taken from the ENIT (Italian Tourist Board) Yearbook on hotels, considered proper for the provision of initial data for this survey. In fact, this source provides both the private data (name and address) necessary to identify the hotels to be interviewed and indicative data (number of bed places, category and municipality) considered essential to quantify the field being considered. Moreover, with the aim of highlighting the typology of the municipality where the businesses are located and varying degrees of attractiveness in terms of tourism of the locality in question, some site categories were selected (chief town of province or region, seaside municipality, highland municipality and other municipalities of tourist interest). Such analisis, in fact, has been considered an important factor in the evaluation of different performances of tourist industry.

This archive, not drawn up to respond to statistical needs but rather to respond to the information needs of tourists, has given more detailed information on the individual establishement for correct planning of sampling but it has excluded the possibility of satisfyng one of the primary goals of the E.U. survey, which was to test the applicability of the NACE rev.1 classification for survey on enterprises. In fact, for the hotel sector, the classification of economic activities foresees two separate classes: hotels with restaurant (code. 55.11) and hotels without restaurant (code 55.12).

For such purpose Istat could have used the results of the last seventh Census of Economic Activities organized definitions and classifications compatible with international standards and ensuring comparison with other statistical systems in the E.U. area. Unfortunately, when the survey was planned , the census files were not available. Furthermore this register source could have provided an updated list of existing units - subdivided by economic activity, primary and secondary - as well as useful details on the number of employees or the class of turnover which indeed might have been considered during the planning of the sampling activities.

3.3 - The sample.

This survey involved 5,026 hotels (14.2% of the total). The size of the sample has been augmented in order to solve the problem of non-respondents, estimated as 30-50% of theoretical sample, due to foreseeable circunmstances (unit not found , refusal to collaborate, seasonal closing, etc.).

Due to heterogeneity of the phenomenon at territorial level and the institutional assesments, which involve local public agencies in tourism activities, the sample of hotels chosen for the survey was planned to provide estimates concerning hotels activity which would apply on both nationally and regionally. For this reason, the variable "region" - a basic discriminant within the general context in tourism and accommodation supply - constitutes a starting point for stratification of the field of observation (20 regions).

According to the different degree of attraction that the various localites exert in terms of tourist flow, four types of tourist localizations relating to the geographic distrbution of hotels, have been definited:

chief town of province or region
seaside municipality
mountain municipality
other.

A further element of stratification included in the sampling plan was accomodation capacity of hotels (bed spaces), generally related to the variable of category or number of stars, on the basis of which the hotels were divided into two groups (more than or less than a given level determined by number of bedspaces, calculated individually for each region).

For units belonging to the first group (high accommodation capacity hotels), defined as "self-representative", an exaustive survey of all units was carried out. With regard to selection criteria for sample units belonging to the second group (low accommodation capacity hotels), defined "non-self-representative", a stratification procedure was applied according to the class of bed-space numbers.

3.4- The informative content of the survey. The questionnaire

The survey was carried out in order to gather information on the features of the accommodation system and the economic outcome of productive activity, to assess these fields in terms of those aspects which are most typical of it, and to examine the interrelations between the observed variables. The Italian questionnaire although adapted for national reality was top a great extent based on the model put forward by EUROSTAT.

The questionnaire has been divided into two separate parts: the first is of general nature and concerns register status of the enterprise and other informations as, for instance, the number of units belonging to the enterprise and its position with regard to the national and international market.

The second part of the questionnaire regards exclusively the local unit, its main carachteristics and its activity.

The information concerns the following items:

typology of hotel and accommodation capacity. Here the main aspect concerning the physical features and size of the production unit: the classification in terms of quality level or the number and kinds of secondary activities carried out; accommodation capacity, in terms of number of bedrooms (double or single, with or without bathroom) and available bed spaces, and size of premises (built and open-air surface areas).

facilities, form of cooperation and prices. Here certain aspects of type of services offered to guests and organizational system of business management are examined. With regard to these particular aspects, the survey concentrates on gathering data on:

- *equipment and installations*, that consist of all facilities on the hotel premises available to the guest as àn extra service in addition to the lodging service. Here, we are dealing with meeting rooms (with or without interpreting facilities), sporting or leisure facilities (swimming pool, tennis court, open-air playgrounds and spaces), spa or beach facilities;

- *the technical and EDP infrastructures* used by the hotel to improve efficiency of its productive activities (i.e. automatized procedures for in-house management or centralized guest booking procedures). Such information provide indicators of the extent of technological development of the hotel sector on a national level and on international network;

- *the forms of horizontal integration* between hotels which, through economic and functional agreements (e. g. acquisition groups, services syndacate, sales promotion syndacate), promote cooperation between hotels for the management of buying of goods and services or for coordination of public relations and marketing. With regard to organizational status of business concerns we may also note franchising contracts which provide the same logo for individual businesses making up hotel chains in complaince with common quality standards;

- *the prices* applied by hotels for accommodation alone or (full or half) board to guests during the high or low seasons, average discounts applied, and the number of clients who have availed themseles of such discounts over the year.

employment: the survey foresees interesting analyses of the work contract status of staff (self-employed or employees), work hours (full or part time), duration of work contracts (permanent or seasonal). This information is gathered in the manner described above that is, on 31st March, 30th June, 30th September and 31st December (i.e. the last days of the quarterly periods of the year). The criterion adopted reduces seasonal peaks (July-August) of those hotels most affected by seasonal activity and give the possibility to calculate the average number of employees. during the surveyed year. Furthermore, availability of precise data on employment numbers over the year in the hotel trade permits assessment of sector employment trends according to the four significant periods as regards tourism (which are more or less spring, early summer, late summer and winter).

economic and financial data and operating account: there is a special section of the survey questionnaire. The required data are organized according to balance sheet items. The aim is that of obtaining quantitative data for an evaluation of the economic importance of the sector with regard to productive activities as a whole and for calculation of added value created by the hotels sector within the context of the national economic system. Therefore, in compliance with the methodological guidelines adopted by ISTAT for other economic surveys carried out periodically for determination of GDP, the following information was requested:

- *income*, including turnover (not incl. VAT) with analysis according to type of service provided (accomodation, full or half board, restaurant, retail sales, etc.), taxes etc. and various subsidies for activities carried out as well as miscellaneous takings;

- *operating costs*, including a detailed analysis of expenses involved, in purchaising goods and services for the carrying out of business and breakdown of the cost of labour including gross salaries and wages and employers' social security contributions;

- *stock* of goods and services most likely to be found among hotels with secondary activities such as restaurant or catering;

- *investments* made over the year consisting in the value of durables acquired by enterprises concerns to be used over time and in the value of services incorporated in acquired investment goods. "Investments" include the value of bare land building, construction, expenditure for the acquisition of goods and services for special maintenance tasks to improve the productive efficiency and financial investiments.

Lastly, the questionnaire is completed by the requests of data pertaining the utilization of lodgment services by tourists, in terms of: arrivals and overnights, kind of tourism (individuals, groups, persons on business trips etc.), and seasonal closing.

3.5- Data collection

The survey was carried out over the period 20th October - 10th November 1993. It concerned business activities for 1992. The beginning of data gathering in the second half of the year was necessary for those businesses whose accounts not based on the solar year were available not before 30th June 1993. These businesses partially conditioned the beginning of the survey, but the decision of starting data gathering after the full summer season was also made in view of the greater spirit of collaboration which hotel managers would show with regard to the survey during the general lull in the tourist flow.

The framework of the survey is based on a mixed two-stage data gathering procedure: firstly, direct interviews with surveyor for the units of the main sample; and, secondly, questionnaires by mail for the units belonging to the additional sample.

In the first case, help was received from the Statistics Offices of the local Chambers of Commerce since these are stricly involved with businesses for administrative obligations pertaining to inclusion in public registers and due to the fact that these public Offices, which by statute play a role in the National Statistics System, are involved in statistical surveying activites. On the other hand, postal interviews were conducted first-hand by ISTAT itself by sending target units the same questionnaire used for direct interviews.

This different way of planning data gathering, also dictated by the need to reduce the costs of the survey, given the high number of interviews to be done, did not affect the quality of the data in itself, and led to a greater return of forms by direct interview. This can be explained by a greater sensitivity to the initiative on the part of manager contacted directly by interviewers trained particularly for this purpose.

3.6- The answers obtained

In spite of the complexity of the survey which requires a considerable range of information, including economic data, the response rate turned out to be satisfactory: 55.7% at national level that corrsiponds to 2,798 hotels interviewed (8.2% of universe). with degrees of coverage spread out more or less from region to region. Exceptions to the rule are some of the southern regions where the response rate was slightly lower than the national average (Campania, Calabria and Sicily).

In any case if the theoretical sample is reconsidered keeping in mind the real number separated from the presumed quantity of non-responses, the percentages thus calculated increase until, on a national level, nearly full coverage is achieved.

See the following table for analyses of the structure of the survey universe, theoretical sample and reponse rates (effective sample) according to region.

Table 1 - Universe, sample and response rate for hotels - Number of local units by regions

REGIONS	UNIVERSE	THEORETICAL SAMPLE	EFFECTIVE SAMPLE	RATES SAMPLE/UNIVERSE THEORETICAL	RATES SAMPLE/UNIVERSE EFFECTIVE
PIEDMONT	1546	209	123	13,5	8,0
VALLE D'AOSTA	482	59	27	12,2	5,6
LOMBARDY	2991	347	213	11,6	7,1
TRENTINO A.A.	5990	748	490	12,5	6,8
VENETO	3403	516	325	15,2	9,6
FRIULI V.G.	842	112	65	13,3	7,7
LIGURIA	2194	303	172	13,8	7,8
EMILIA R.	5606	860	555	15,3	9,9
TUSCANY	2961	413	234	13,9	7,9
UMBRIA	463	57	37	12,3	8,0
THE MARCHE	1057	185	106	17,5	10,0
LATIUM	1699	262	121	15,4	7,1
ABRUZZI	735	124	57	16,9	7,8
MOLISE	96	15	9	15,6	9,4
CAMPANIA	1281	206	111	16,1	8,7
APULIA	661	105	50	15,9	7,6
BASILICATA	164	27	16	16,5	9,8
CALABRIA	637	122	38	19,2	6,0
SICILY	830	242	71	29,2	8,6
SARDINIA	537	114	59	21,2	11,0
TOTAL ITALY	34175	5026	2798	14,7	8,2

3.7 - Observations on the results

3.7.1 - Data quality

The information gathered through the survey are generally of good quality. The check of the filled questionnaires nonetheless showed the difficulties met by respondents in giving the requested information; the completeness of the sections which make up the survey model and the activation of cross analysis between the different variables which were given represent a test for the validity of the survey and the reliability of the results.

From an analysis of the answers obtained the following situations can be noted:

- answers not given
- answers given but certainly incorrect
- correct answers given individually but probably not reliable in relation to other variables in the questionnaire
- correct answers.

The overall weakest section of the questionnaire concerns economic data. In fact, the structure of costs and of incomes of the business requires a detailed analysis, in several cases not available, and in others not easily evaluable. In this case the data of the turnover by kind of provided services to the guests was very difficult to quantify causing a high percentage of missing answers, or in any case of clearly unreliable data. Many units, in particular, noted the impossibility of distinguishing between income from guests that had used only lodging from that from the complete service and in any case more generally from all the other activities and accessory services offered to the tourists of the hotel and purchased during the period of stay. Also the data on costs were in many cases missing, due to the difficulty in providing analyses of the division of expenses; in several cases cross checks among different variables verified the presence of data on labour cost and an absence of employees. This is explainable by the way in which the model analyse employement for every quarter of the year, not necessarily coinciding with the peaks of maximum hotel activity, and consequently reducing the possibility of identifying seasonal workers. The variables on investiments turned out to be difficult to evaluate as the cases of missing answers caused by both imperfections in the model or situations actually present in the single hotel business interviewed.

The other sections of the questionnaire were found to have fewer gaps in the answers. The quality of the answers on the physical characteristics of the hotel were generally good, that is,the reception capacity, the equipment and installations for the customers, the technological endowment and organizational systems used by the units in carrying out their activity. Data on rates and prices used , where sometimes a logical check between the information given and the level of quality of hotel was possible, revealed to be reliable even if during the year, prices wave a lot because of changes in demand depending on several external factors (special events, competition, etc.).

More attention must be given, finally, to the variable relating to the main and secondary activities of the business. There is, in fact a problem of identifying refreshment activities carried out by the hotel, connected to the main one of lodging, and of defining the kind of service offered more precisely in order to better connote the hotel with a restaurant that carries on a service primarily for its internal clientel and the hotel with restaurant, viceversa, aimed at a largely external clientel. This lack of initial clarification made the answers given in the questionnaires on secondary activity heterogenous, and produced effects especially on the relations between the hotel typology established on the basis of services given to clients and the activities pursued and the economic results obtained by the business for the productive activitiy carried out.

3.7.2 - Some considerations on the sampling design

The sampling technique is at one stage of stratification: the hotels were stratified preliminarily on the basis of the region of location (20 regions) and by 4 typologies of tourism locality in every region. Next, another subdivision was made in every strata, the first composed of hotels with the whole number of bed places above a certain threshold, variable on the basis of region and kind of locality, the second containing the rest of the hotels.

The hotels of the first stratum, defined self-representative and all inserted in the theoretical sample, must have an overall 20% of the total bed places of the strata they belong to. The hotels of the second stratum were then further subdivided into classes of bed places (variable in number and composition) and were selected with a simple design random sampling within each stratum. To avoid the risk of an high non-response rate and to insure an adequate coverage during the random extraction (hotels not self-representative) also a supplemental sample was selected in each stratum, with the same size of the original one. On the whole the three variables region, kind of locality and number of bed places interacted in the stratification frame: while the first two variables took on relevance both due to the need to provide territorial data and to isolate, at least in part, the effect of the heterogeneous composition of the Italian regions by kind of locality, the number of bed places was supposed strongly correlated with the main occupational and economic variables. In the phase of sampling the number of stars was not considered, as it strongly varies from year to year, and in any case is not always indicative of the real quality level of the tourist structure.

Considering the empirical results, it should be noted that the inclusion of the kind of locality in the planning of the theoretical sample could have affected the actual results of the real sample, given that in the case of high heterogeneity of the typology of locality, the period chosen for the interview would take on a determining role, due to the strong seasonality of the tourist activity supported by hotels. This difficulty could be at least in part avoided by interviewing the companies instead of the the local units.

The number of self-representative units could then be too small in certain strata, with the consequent risk of a total fall in numbers of answers in the category. This risk, however, is present in every scheme with a very detailed stratification.

From an operative point of view, the use of identification codes that associate every unit with a univocal stratum is advised. This aspect takes on relevance in the cases in which it is necessary to proceed to a poststratification due to the rapid change in the structure of the universe.

The choice of the criteria of stratification is directly connected with the surveying technique, in the Italian case based on interviews by mail and direct interviewer.

The forecast of direct, ad hoc interviews, following the stage of interviews by mail, on the one hand guarantees a minimum number of answers in each stratum, while on the other it is problematic for at least two reasons:

1. There are different answering mechanisms according to the change in the kind of interview (by mail or direct), in the sense that the probability of the answer depends on the presence or absence of the interviewer, in addition to the particular characteristics of the respondents;

2. It is not easy to forecast the meaning and the intensity of the divergence in answers in the two cases: generally the presence of the interviewer should improve the quality of the answers (in the specific case obtaining economic data less underestimated in comparison with true data), even if such hypotheses should be tested. The direct interview could then have heterogenous effects according to the changes in the localization and the quality of the hotel and in addition could depend on the ability of the interviewer to transmit the instructions for filling in the questionnaire without biasedness.

The main stage of the stratification consists probably in fixing the threshold that, in every stratum, shares the local units between self-representative and not. Such a threshold could be too sensitive to the presence or absence in the stratum of large size units, so that it is possible that the number of self-representative units is highly variable from stratum to stratum, above all if the grill given by region and kind of locality is not very meaningful. It follows that in two structurally similar strata, hotels with a very different number of bed places (and different structural characteristics) could be considered self-representative and so both subjected to a census.

A second essential aspect is then connected to the dynamic of the falls in numbers of answers: if the effective sample very closely approximates the theoretical sample as far as regards the self representative units (in the Italian case the rate of effective/theoretical is about 68%) while the percentage of answers is too low for the non-self-representative units, very probably all the dimensional data of the sample, starting with the number of bed places, will be over-estimated with respect to the universe. In the Italian case, even if the rate between effective sample and theoretical sample is 53% for units under the threshold, the average number of bed places for the hotel sample is about 87 in contrast with 48 for the universe. In the some way, the share of the universe effectively surveyed equals 8.2% in terms of number of local units and a 15% in terms of bed places. This divergence can lead to problems in the phase of choosing the variable to use for the extrapolation to the universe, given that the factors of expansion (rates between units in the universe and in the sample) are very different choosing the number of businesses instead of bed places for the estimate. An over-estimate for the universe data is therefore probable if the respondents of each stratum are on the average made up of the biggest or most efficient units. In practice in the Italian case it has been noted that if the estimation for the universe is carried out using the number of bed places, the variables are about 30% under-estimated with respect to the estimate obtainable by using the number of local units. The latter estimate was considered more reliable for these reasons:

1. it's more in line with some comparable universe-data known, when possible, by other sources;

2. the variable given by number of bed places, even if it is a size indicator intuitively more efficient than the simple number of local units is not strictly correlated with main economic data (turnover, investments, number of employees): in other words the link between turnover and bed places exists but is discontinuous and highly influenced by the kind of locality and by qualitative variables independent of the accommodation capacity.

A valid tool to verify the quality of the real sample results was the post-stratification of the effective sample and of the universe obtainable by substituting the kind of locality with the number of stars (the classes of stars considered were 1+2, 3 and 4+5), deducible from an universe-archive different from that used for the extraction of the sample, and from which other information, such as for example, the presence or absence of a restaurant, was deduced.

Comparing the results obtained with the amounts estimated for the universe based on the original stratification (region, kind of locality and number of bed places) and on the post-stratification (region and number of stars) this substantial difference raised strongly: in the first case the variability of the average values among strata does not seem interpretable as a function of well defined territorial models of developement while in the second, with few exceptions, a growth in the category of hotels on the average corresponds to a growt in economic performance, and the regions that enjoy largest economies of scale are, at least in part, easily identified. In other words the strata based on the number of stars seem more homogeneous within when compared to those based on kind of locality, insofar as in these there are units with characteristics too highly diversified. Only an estimate of the universe data able to take into consideration also the subdivision among self-representative and not self representative units seems to improve the global reliability of the data.

Briefly, it would seem that the optimal stratification must be based on regional variables, kind of locality, number of stars and number of bed places, on the condition of not using little populated strata in the sample and in the universe.

In the case of unsatisfactory global or stratum rates of coverage, it should be remembered that the empirical evidence suggests that the marginal utility (in terms of quality of data) given by the random recovering of 100 models is often lower than the added informative contribution of about 20 models recovered ad hoc within the strata containing units with the biggest sizes or, in any case, not well represented in the effective sample. It therefore seems to be indispensable to foresee, at the planning stage, two distinct moments in the survey: a first uniform, probably by mail, survey and a second stage only for some key units drawn from non respondent units.

In conclusion it appears essential to underline this aspect: it is necessary to clarify the main goal of the research already in the preparation stage of the sample. If in fact the primary objective is to estimate large economic aggregates referred to the universe (in the view, for example, of a wide use in regional or national economic accounts) the choice of a sample strongly oriented toward large units whose coverage should be almost totally guaranteed could be sufficient. If, instead, the primary goal is that of identifying and quantifying possible rules in behaviour, interdependence and correlations among variables, models of types of accommodation structures by locality, it is indespensable to consider the sample design with extreme caution, evaluating the reliability and informative completeness of the universe, and finally the correspondence between the effective sample and the theoretical model.

As an interpretive note for the attached tables, it should be clarified that in the tables "UNIVERSE 2e" and "TABLE 2e" the quotas effectively surveyed with respect to the universe are slightly different, in that they refer to two universes of different origin: in the first case one refers to an Enit archive containing the details on the numer of stars; in the second case an Istat archive organized by region, kind of locality and with distinction between self-representative units and not, was used.

The following tables outline the hotel of the universe by means of a stratification based on qualitative level (star categories broken down to form three groups) and on territorial distribution (Italian regions).

It must be pointed out the prevalence of hotels with restaurant (70.6%) as opposed to those without restaurant, and the prevalence of low category businesses (67.7%); three star hotels make up 26%, and four or five star hotels account for 6.1%.

The lower categories comprise only 44% of universe bed places. This is due to their still limited accommodation capacity.

Sample data agree with those of the universe: 62% of the hotels have a restaurant; 52.6% belong to the one and two star categories; 31.5% to the three star category and 15.8% to the top categories.

In terms of regional distribution, we note a particular concentration of hotels in Trentino Alto-Adige, Emilia Romagna, Veneto and Lombardy: this situation is typical both in of universe and of sample.

3.8 - Conclusions

The survey of hotels in Italy, as well known, was inserted in the wider Community activity of pilot surveys with the aim to observe a subset of variables able to better analyze the different sectors that compose the area of services. In any case, this survey was planned with the intent of providing results useful at the national level to fill the gaps that the sector of hotel businesses has been suffering for some time on the front of statistical information. The Italian experience has thus taken the form of a real and full investigation that certainly can be improved during the time, and it's planned on the methodological and organizational level also to take on connotations of scientific validity for all purposes. Taking in consideration the high economic cost of the operation concerning a sample of more than five thousand local units, the survey can be considered both a tool to pick up information on the performance in the hotel industry obtainable from economic-financial data of the business, and a way to analyze the structure and potentials of the tourist accomodation system of the country derivable from data on the physical characteristics and the level of quality of the single working units. From the first elements gathered it seems possible to affirm, in conclusion, that the procedures adopted are valid and the initial expectations will be satisfied.

TABLE 1a - DISTRIBUTION OF HOTELS BY REGIONS AND NUMBER OF STARS - ABSOLUTE SAMPLE DATA

REGION/STARS	HOTELS WITHOUT RESTAURANT				HOTELS WITH RESTAURANT				TOTAL HOTELS			
	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL
PIEDMONT	10	7	3	20	50	30	23	103	60	37	26	123
VALLE D'AOSTA	4	3	1	8	15	2	2	19	19	5	3	27
LOMBARDY	33	23	13	69	69	34	41	144	102	57	54	213
TRENTINO A.A.	145	49	10	204	100	79	26	205	245	128	36	409
VENETO	64	30	15	109	130	50	36	216	194	80	51	325
FRIULI V.G.	15	5	3	23	22	14	6	42	37	19	9	65
LIGURIA	28	13	1	42	58	39	33	130	86	52	34	172
EMILIA R.	187	89	20	296	152	61	46	259	339	150	66	555
TUSCANY	58	27	2	87	55	46	46	147	113	73	48	234
UMBRIA	5	3	1	9	17	6	5	28	22	9	6	37
THE MARCHE	15	12	4	31	29	34	12	75	44	46	16	106
LATIUM	28	27	3	58	19	25	19	63	47	52	22	121
ABRUZZI	2	0	0	2	19	30	6	55	21	30	6	57
MOLISE	1	1	0	2	5	1	1	7	6	2	1	9
CAMPANIA	18	13	6	37	21	28	25	74	39	41	31	111
APULIA	7	4	3	14	7	17	12	36	14	21	15	50
BASILICATA	2	0	0	2	9	3	2	14	11	3	2	16
CALABRIA	0	2	0	2	17	15	4	36	17	17	4	38
SICILY	18	5	1	24	20	20	7	47	38	25	8	71
SARDINIA	7	11	1	19	12	24	4	40	19	35	5	59
TOTAL ITALY	647	324	87	1058	826	558	356	1740	1473	882	443	2798

TABLE 1b - DISTRIBUTION OF HOTELS BY REGIONS AND NUMBER OF STARS - % SAMPLE DATA BY REGIONS

REGION/STARS	HOTELS WITHOUT RESTAURANT				HOTELS WITH RESTAURANT				TOTAL HOTELS			
	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL
PIEDMONT	8,1%	5,7%	2,4%	16,3%	40,7%	24,4%	18,7%	83,7%	48,8%	30,1%	21,1%	100,0%
VALLE D'AOSTA	14,8%	11,1%	3,7%	29,6%	55,6%	7,4%	7,4%	70,4%	70,4%	18,5%	11,1%	100,0%
LOMBARDY	15,5%	10,8%	6,1%	32,4%	32,4%	16,0%	19,2%	67,6%	47,9%	26,8%	25,4%	100,0%
TRENTINO A.A.	35,5%	12,0%	2,4%	49,9%	24,4%	19,3%	6,4%	50,1%	59,9%	31,3%	8,8%	100,0%
VENETO	19,7%	9,2%	4,6%	33,5%	40,0%	15,4%	11,1%	66,5%	59,7%	24,6%	15,7%	100,0%
FRIULI V.G.	23,1%	7,7%	4,6%	35,4%	33,8%	21,5%	9,2%	64,6%	56,9%	29,2%	13,8%	100,0%
LIGURIA	16,3%	7,6%	0,6%	24,4%	33,7%	22,7%	19,2%	75,6%	50,0%	30,2%	19,8%	100,0%
EMILIA R.	33,7%	16,0%	3,6%	53,3%	27,4%	11,0%	8,3%	46,7%	61,1%	27,0%	11,9%	100,0%
TUSCANY	24,8%	11,5%	0,9%	37,2%	23,5%	19,7%	19,7%	62,8%	48,3%	31,2%	20,5%	100,0%
UMBRIA	13,5%	8,1%	2,7%	24,3%	45,9%	16,2%	13,5%	75,7%	59,5%	24,3%	16,2%	100,0%
THE MARCHE	14,2%	11,3%	3,8%	29,2%	27,4%	32,1%	11,3%	70,8%	41,5%	43,4%	15,1%	100,0%
LATIUM	23,1%	22,3%	2,5%	47,9%	15,7%	20,7%	15,7%	52,1%	38,8%	43,0%	18,2%	100,0%
ABRUZZI	3,5%	0,0%	0,0%	3,5%	33,3%	52,6%	10,5%	96,5%	36,8%	52,6%	10,5%	100,0%
MOLISE	11,1%	11,1%	0,0%	22,2%	55,6%	11,1%	11,1%	77,8%	66,7%	22,2%	11,1%	100,0%
CAMPANIA	16,2%	11,7%	5,4%	33,3%	18,9%	25,2%	22,5%	66,7%	35,1%	36,9%	27,9%	100,0%
APULIA	14,0%	8,0%	6,0%	28,0%	14,0%	34,0%	24,0%	72,0%	28,0%	42,0%	30,0%	100,0%
BASILICATA	12,5%	0,0%	0,0%	12,5%	56,3%	18,8%	12,5%	87,5%	68,8%	18,8%	12,5%	100,0%
CALABRIA	0,0%	5,3%	0,0%	5,3%	44,7%	39,5%	10,5%	94,7%	44,7%	44,7%	10,5%	100,0%
SICILY	25,4%	7,0%	1,4%	33,8%	28,2%	28,2%	9,9%	66,2%	53,5%	35,2%	11,3%	100,0%
SARDINIA	11,9%	18,6%	1,7%	32,2%	20,3%	40,7%	6,8%	67,8%	32,2%	59,3%	8,5%	100,0%
TOTAL ITALY	23,1%	11,6%	3,1%	37,8%	29,5%	19,9%	12,7%	62,2%	52,6%	31,5%	15,8%	100,0%

TABLE 2a - DISTRIBUTION OF BED PLACES BY REGIONS AND NUMBER OF STARS - ABSOLUTE SAMPLE DATA

REGION/STARS	HOTELS WITHOUT RESTAURANT 1+2	3	4+5	TOTAL	HOTELS WITH RESTAURANT 1+2	3	4+5	TOTAL	TOTAL HOTELS 1+2	3	4+5	TOTAL
PIEDMONT	442	743	343	1528	2267	2840	5151	10258	2709	3583	5494	11786
VALLE D'AOSTA	120	128	82	330	513	125	108	746	633	253	190	1076
LOMBARDY	1008	2167	6115	9290	1828	3182	13231	18241	2836	5349	19346	27531
TRENTINO A.A.	4122	3508	1187	8817	3923	7480	3846	15249	8045	10988	5033	24066
VENETO	3683	4150	2807	10640	5679	6326	8746	20751	9362	10476	11553	31391
FRIULI V.G.	603	526	561	1690	861	1665	1064	3590	1464	2191	1625	5280
LIGURIA	959	898	80	1937	1814	2679	5354	9847	2773	3577	5434	11784
EMILIA R.	8130	8799	3437	20366	5922	5826	8159	19907	14052	14625	11596	40273
TUSCANY	1901	1995	314	4210	1691	5445	9188	16324	3592	7440	9502	20534
UMBRIA	111	309	262	682	1331	791	628	2750	1442	1100	890	3432
THE MARCHE	677	1275	377	2329	1251	3343	1729	6323	1928	4618	2106	8652
LATIUM	930	2113	899	3942	1016	2407	7555	10978	1946	4520	8454	14920
ABRUZZI	114	0	0	114	733	3765	2528	7026	847	3765	2528	7140
MOLISE	14	50	0	64	269	104	82	455	283	154	82	519
CAMPANIA	729	779	1128	2636	985	3243	5741	9969	1714	4022	6869	12605
APULIA	275	246	468	989	237	2190	2249	4676	512	2436	2717	5665
BASILICATA	81	0	0	81	339	373	213	925	420	373	213	1006
CALABRIA	0	118	0	118	818	1322	1533	3673	818	1440	1533	3791
SICILY	649	702	310	1661	625	4800	893	6318	1274	5502	1203	7979
SARDINIA	441	912	75	1428	410	3590	808	4808	851	4502	883	6236
TOTAL ITALY	24989	29418	18445	72852	32512	61496	78806	172814	57501	90914	97251	245666

TABLE 2b - DISTRIBUTION OF BED PLACES BY REGIONS AND NUMBER OF STARS - % SAMPLE DATA BY REGIONS

REGION/STARS	HOTELS WITHOUT RESTAURANT 1+2	3	4+5	TOTAL	HOTELS WITH RESTAURANT 1+2	3	4+5	TOTAL	TOTAL HOTELS 1+2	3	4+5	TOTAL
PIEDMONT	3,8%	6,3%	2,9%	13,0%	19,2%	24,1%	43,7%	87,0%	23,0%	30,4%	46,6%	100,0%
VALLE D'AOSTA	11,2%	11,9%	7,6%	30,7%	47,7%	11,6%	10,0%	69,3%	58,8%	23,5%	17,7%	100,0%
LOMBARDY	3,7%	7,9%	22,2%	33,7%	6,6%	11,6%	48,1%	66,3%	10,3%	19,4%	70,3%	100,0%
TRENTINO A.A.	17,1%	14,6%	4,9%	36,6%	16,3%	31,1%	16,0%	63,4%	33,4%	45,7%	20,9%	100,0%
VENETO	11,7%	13,2%	8,9%	33,9%	18,1%	20,2%	27,9%	66,1%	29,8%	33,4%	36,8%	100,0%
FRIULI V.G.	11,4%	10,0%	10,6%	32,0%	16,3%	31,5%	20,2%	68,0%	27,7%	41,5%	30,8%	100,0%
LIGURIA	8,1%	7,6%	0,7%	16,4%	15,4%	22,7%	45,4%	83,6%	23,5%	30,4%	46,1%	100,0%
EMILIA R.	20,2%	21,8%	8,5%	50,6%	14,7%	14,5%	20,3%	49,4%	34,9%	36,3%	28,8%	100,0%
TUSCANY	9,3%	9,7%	1,5%	20,5%	8,2%	26,5%	44,7%	79,5%	17,5%	36,2%	46,3%	100,0%
UMBRIA	3,2%	9,0%	7,6%	19,9%	38,8%	23,0%	18,3%	80,1%	42,0%	32,1%	25,9%	100,0%
THE MARCHE	7,8%	14,7%	4,4%	26,9%	14,5%	38,6%	20,0%	73,1%	22,3%	53,4%	24,3%	100,0%
LATIUM	6,2%	14,2%	6,0%	26,4%	6,8%	16,1%	50,6%	73,6%	13,0%	30,3%	56,7%	100,0%
ABRUZZI	1,6%	0,0%	0,0%	1,6%	10,3%	52,7%	35,4%	98,4%	11,9%	52,7%	35,4%	100,0%
MOLISE	2,7%	9,6%	0,0%	12,3%	51,8%	20,0%	15,8%	87,7%	54,5%	29,7%	15,8%	100,0%
CAMPANIA	5,8%	6,2%	8,9%	20,9%	7,8%	25,7%	45,5%	79,1%	13,6%	31,9%	54,5%	100,0%
APULIA	4,9%	4,3%	8,3%	17,5%	4,2%	38,7%	39,7%	82,5%	9,0%	43,0%	48,0%	100,0%
BASILICATA	8,1%	0,0%	0,0%	8,1%	33,7%	37,1%	21,2%	91,9%	41,7%	37,1%	21,2%	100,0%
CALABRIA	0,0%	3,1%	0,0%	3,1%	21,6%	34,9%	40,4%	96,9%	21,6%	38,0%	40,4%	100,0%
SICILY	8,1%	8,8%	3,9%	20,8%	7,8%	60,2%	11,2%	79,2%	16,0%	69,0%	15,1%	100,0%
SARDINIA	7,1%	14,6%	1,2%	22,9%	6,6%	57,6%	13,0%	77,1%	13,6%	72,2%	14,2%	100,0%
TOTAL ITALY	10,2%	12,0%	7,5%	29,7%	13,2%	25,0%	32,1%	70,3%	23,4%	37,0%	39,6%	100,0%

TABLE 2d - AVERAGE NUMBER OF BED PLACES PER HOTEL, BY REGIONS AND NUMBER OF STARS - ABSOLUTE SAMPLE DATA

	HOTELS WITHOUT RESTAURANT				HOTELS WITH RESTAURANT				TOTAL HOTELS			
REGION/STARS	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL
PIEDMONT	44	106	114	76	45	95	224	100	45	97	211	96
VALLE D'AOSTA	30	43	82	41	34	63	54	39	33	51	63	40
LOMBARDY	31	94	470	135	26	94	323	127	28	94	358	129
TRENTINO A.A.	28	72	119	43	39	95	148	74	33	86	140	59
VENETO	58	138	187	98	44	127	243	96	48	131	227	97
FRIULI V.G.	40	105	187	73	39	119	177	85	40	115	181	81
LIGURIA	34	69	80	46	31	69	162	76	32	69	160	69
EMILIA R.	43	99	172	69	39	96	177	77	41	98	176	73
TUSCANY	33	74	157	48	31	118	200	111	32	102	198	88
UMBRIA	22	103	262	76	78	132	126	98	66	122	148	93
THE MARCHE	45	106	94	75	43	98	144	84	44	100	132	82
LATIUM	33	78	300	68	53	96	398	174	41	87	384	123
ABRUZZI	57			57	39	126	421	128	40	126	421	125
MOLISE	14	50		32	54	104	82	65	47	77	82	58
CAMPANIA	41	60	188	71	47	116	230	135	44	98	222	114
APULIA	39	62	156	71	34	129	187	130	37	116	181	113
BASILICATA	41			41	38	124	107	66	38	124	107	63
CALABRIA		59		59	48	88	383	102	48	85	383	100
SICILY	36	140	310	69	31	240	128	134	34	220	150	112
SARDINIA	63	83	75	75	34	150	202	120	45	129	177	106
TOTAL ITALY	39	91	212	69	39	110	221	99	39	103	220	88

TABLE UNIVERSE 1a - DISTRIBUTION OF HOTELS BY REGIONS AND NUMBER OF STARS - ABSOLUTE DATA

REGION/STARS	HOTELS WITHOUT RESTAURANT				HOTELS WITH RESTAURANT				TOTAL HOTELS			
	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL
PIEDMONT	182	90	18	290	923	262	71	1256	1105	352	89	1546
VALLE D'AOSTA	70	19	2	91	281	91	19	391	351	110	21	482
LOMBARDY	429	198	69	696	1607	494	194	2295	2036	692	263	2991
TRENTINO A.A.	1056	169	10	1235	3357	1215	183	4755	4413	1384	193	5990
VENETO	536	145	31	712	1913	574	204	2691	2449	719	235	3403
FRIULI V.G.	161	40	2	203	487	122	30	639	648	162	32	842
LIGURIA	415	95	13	523	1091	494	86	1671	1506	589	99	2194
EMILIA R.	973	211	27	1211	3169	1057	169	4395	4142	1268	196	5606
TUSCANY	725	283	52	1060	1109	598	194	1901	1834	881	246	2961
UMBRIA	91	27	7	125	208	92	38	338	299	119	45	463
THE MARCHE	67	24	4	95	509	394	59	962	576	418	63	1057
LATIUM	517	180	28	725	545	321	108	974	1062	501	136	1699
ABRUZZI	283	188	18	489	141	98	7	246	424	286	25	735
MOLISE	48	33	8	89	1	1	5	7	49	34	13	96
CAMPANIA	672	352	119	1143	21	39	78	138	693	391	197	1281
APULIA	282	243	68	593	4	33	31	68	286	276	99	661
BASILICATA	109	35	3	147	6	7	4	17	115	42	7	164
CALABRIA	203	108	8	319	168	126	24	318	371	234	32	637
SICILY	206	26	3	235	328	217	50	595	534	243	53	830
SARDINIA	40	28	3	71	212	201	53	466	252	229	56	537
TOTAL ITALY	7065	2494	493	10052	16080	6436	1607	24123	23145	8930	2100	34175

TABLE UNIVERSE 1b - DISTRIBUTION OF HOTELS BY REGIONS AND NUMBER OF STARS - % DATA BY REGIONS

REGION/STARS	HOTELS WITHOUT RESTAURANT				HOTELS WITH RESTAURANT				TOTAL HOTELS			
	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL
PIEDMONT	11,8%	5,8%	1,2%	18,8%	59,7%	16,9%	4,6%	81,2%	71,5%	22,8%	5,8%	100,0%
VALLE D'AOSTA	14,5%	3,9%	0,4%	18,9%	58,3%	18,9%	3,9%	81,1%	72,8%	22,8%	4,4%	100,0%
LOMBARDY	14,3%	6,6%	2,3%	23,3%	53,7%	16,5%	6,5%	76,7%	68,1%	23,1%	8,8%	100,0%
TRENTINO A.A.	17,6%	2,8%	0,2%	20,6%	56,0%	20,3%	3,1%	79,4%	73,7%	23,1%	3,2%	100,0%
VENETO	15,8%	4,3%	0,9%	20,9%	56,2%	16,9%	6,0%	79,1%	72,0%	21,1%	6,9%	100,0%
FRIULI V.G.	19,1%	4,8%	0,2%	24,1%	57,8%	14,5%	3,6%	75,9%	77,0%	19,2%	3,8%	100,0%
LIGURIA	18,9%	4,3%	0,6%	23,8%	49,7%	22,5%	3,9%	76,2%	68,6%	26,8%	4,5%	100,0%
EMILIA R.	17,4%	3,8%	0,5%	21,6%	56,5%	18,9%	3,0%	78,4%	73,9%	22,6%	3,5%	100,0%
TUSCANY	24,5%	9,6%	1,8%	35,8%	37,5%	20,2%	6,6%	64,2%	61,9%	29,8%	8,3%	100,0%
UMBRIA	19,7%	5,8%	1,5%	27,0%	44,9%	19,9%	8,2%	73,0%	64,6%	25,7%	9,7%	100,0%
THE MARCHE	6,3%	2,3%	0,4%	9,0%	48,2%	37,3%	5,6%	91,0%	54,5%	39,5%	6,0%	100,0%
LATIUM	30,4%	10,6%	1,6%	42,7%	32,1%	18,9%	6,4%	57,3%	62,5%	29,5%	8,0%	100,0%
ABRUZZI	38,5%	25,6%	2,4%	66,5%	19,2%	13,3%	1,0%	33,5%	57,7%	38,9%	3,4%	100,0%
MOLISE	50,0%	34,4%	8,3%	92,7%	1,0%	1,0%	5,2%	7,3%	51,0%	35,4%	13,5%	100,0%
CAMPANIA	52,5%	27,5%	9,3%	89,2%	1,6%	3,0%	6,1%	10,8%	54,1%	30,5%	15,4%	100,0%
APULIA	42,7%	36,8%	10,3%	89,7%	0,6%	5,0%	4,7%	10,3%	43,3%	41,8%	15,0%	100,0%
BASILICATA	66,5%	21,3%	1,8%	89,6%	3,7%	4,3%	2,4%	10,4%	70,1%	25,6%	4,3%	100,0%
CALABRIA	31,9%	17,0%	1,3%	50,1%	26,4%	19,8%	3,8%	49,9%	58,2%	36,7%	5,0%	100,0%
SICILY	24,8%	3,1%	0,4%	28,3%	39,5%	26,1%	6,0%	71,7%	64,3%	29,3%	6,4%	100,0%
SARDINIA	7,4%	5,2%	0,6%	13,2%	39,5%	37,4%	9,9%	86,8%	46,9%	42,6%	10,4%	100,0%
TOTAL ITALY	20,7%	7,3%	1,4%	29,4%	47,1%	18,8%	4,7%	70,6%	67,7%	26,1%	6,1%	100,0%

TABLE UNIVERSE 2a - DISTRIBUTION OF BED PLACES BY REGIONS AND NUMBER OF STARS - ABSOLUTE DATA

REGION/STARS	HOTELS WITHOUT RESTAURANT 1+2	3	4+5	TOTAL	HOTELS WITH RESTAURANT 1+2	3	4+5	TOTAL	TOTAL HOTELS 1+2	3	4+5	TOTAL
PIEDMONT	5090	5329	1577	11996	24821	13602	9679	48102	29911	18931	11256	60098
VALLE D'AOSTA	1655	931	132	2718	8745	4820	2791	16356	10400	5751	2923	19074
LOMBARDY	11695	13188	7213	32096	40507	28442	30861	99810	52202	41630	38074	131906
TRENTINO A.A.	26083	8832	962	35877	96189	69656	15773	181618	122272	78488	16735	217495
VENETO	15915	8431	2856	27202	73138	48308	30317	151763	89053	56739	33173	178965
FRIULI V.G.	4640	2456	441	7537	14915	9123	3829	27867	19555	11579	4270	35404
LIGURIA	10901	4963	1056	16920	29905	27275	10142	67322	40806	32238	11198	84242
EMILIA R.	32577	13592	2544	48713	115786	71430	22575	209791	148363	85022	25119	258504
TUSCANY	17372	13689	4730	35791	32028	36697	23491	92216	49400	50386	28221	128007
UMBRIA	2183	1497	370	4050	6890	6430	3381	16701	9073	7927	3751	20751
THE MARCHE	1927	1130	176	3233	19248	29388	5945	54581	21175	30518	6121	57814
LATIUM	13815	12829	4247	30891	18340	26138	26442	70920	32155	38967	30689	101811
ABRUZZI	9351	15029	3959	28339	4366	9416	986	14768	13717	24445	4945	43107
MOLISE	1062	2051	644	3757	25	104	471	600	1087	2155	1115	4357
CAMPANIA	22990	25395	14787	63172	843	3101	11641	15585	23833	28496	26428	78757
APULIA	8163	19920	8670	36753	123	2639	5603	8365	8286	22559	14273	45118
BASILICATA	2993	2729	323	6045	150	302	788	1240	3143	3031	1111	7285
CALABRIA	7516	12363	1710	21589	9954	14585	4948	29487	17470	26948	6658	51076
SICILY	5630	1691	194	7515	12944	35102	9737	57783	18574	36793	9931	65298
SARDINIA	994	1961	291	3246	7803	22927	9411	40141	8797	24888	9702	43387
TOTAL ITALY	202552	168006	56882	427440	516720	459485	228811	1205016	719272	627491	285693	1632456

TABLE UNIVERSE 2b - DISTRIBUTION OF BED PLACES BY REGIONS AND NUMBER OF STARS - % DATA BY REGIONS

REGION/STARS	HOTELS WITHOUT RESTAURANT 1+2	3	4+5	TOTAL	HOTELS WITH RESTAURANT 1+2	3	4+5	TOTAL	TOTAL HOTELS 1+2	3	4+5	TOTAL
PIEDMONT	8,5%	8,9%	2,6%	20,0%	41,3%	22,6%	16,1%	80,0%	49,8%	31,5%	18,7%	100,0%
VALLE D'AOSTA	8,7%	4,9%	0,7%	14,2%	45,8%	25,3%	14,6%	85,8%	54,5%	30,2%	15,3%	100,0%
LOMBARDY	8,9%	10,0%	5,5%	24,3%	30,7%	21,6%	23,4%	75,7%	39,6%	31,6%	28,9%	100,0%
TRENTINO A.A.	12,0%	4,1%	0,4%	16,5%	44,2%	32,0%	7,3%	83,5%	56,2%	36,1%	7,7%	100,0%
VENETO	8,9%	4,7%	1,6%	15,2%	40,9%	27,0%	16,9%	84,8%	49,8%	31,7%	18,5%	100,0%
FRIULI V.G.	13,1%	6,9%	1,2%	21,3%	42,1%	25,8%	10,8%	78,7%	55,2%	32,7%	12,1%	100,0%
LIGURIA	12,9%	5,9%	1,3%	20,1%	35,5%	32,4%	12,0%	79,9%	48,4%	38,3%	13,3%	100,0%
EMILIA R.	12,6%	5,3%	1,0%	18,8%	44,8%	27,6%	8,7%	81,2%	57,4%	32,9%	9,7%	100,0%
TUSCANY	13,6%	10,7%	3,7%	28,0%	25,0%	28,7%	18,4%	72,0%	38,6%	39,4%	22,0%	100,0%
UMBRIA	10,5%	7,2%	1,8%	19,5%	33,2%	31,0%	16,3%	80,5%	43,7%	38,2%	18,1%	100,0%
THE MARCHE	3,3%	2,0%	0,3%	5,6%	33,3%	50,8%	10,3%	94,4%	36,6%	52,8%	10,6%	100,0%
LATIUM	13,6%	12,6%	4,2%	30,3%	18,0%	25,7%	26,0%	69,7%	31,6%	38,3%	30,1%	100,0%
ABRUZZI	21,7%	34,9%	9,2%	65,7%	10,1%	21,8%	2,3%	34,3%	31,8%	56,7%	11,5%	100,0%
MOLISE	24,4%	47,1%	14,8%	86,2%	0,6%	2,4%	10,8%	13,8%	24,9%	49,5%	25,6%	100,0%
CAMPANIA	29,2%	32,2%	18,8%	80,2%	1,1%	3,9%	14,8%	19,8%	30,3%	36,2%	33,6%	100,0%
APULIA	18,1%	44,2%	19,2%	81,5%	0,3%	5,8%	12,4%	18,5%	18,4%	50,0%	31,6%	100,0%
BASILICATA	41,1%	37,5%	4,4%	83,0%	2,1%	4,1%	10,8%	17,0%	43,1%	41,6%	15,3%	100,0%
CALABRIA	14,7%	24,2%	3,3%	42,3%	19,5%	28,6%	9,7%	57,7%	34,2%	52,8%	13,0%	100,0%
SICILY	8,6%	2,6%	0,3%	11,5%	19,8%	53,8%	14,9%	88,5%	28,4%	56,3%	15,2%	100,0%
SARDINIA	2,3%	4,5%	0,7%	7,5%	18,0%	52,8%	21,7%	92,5%	20,3%	57,4%	22,4%	100,0%
TOTAL ITALY	12,4%	10,3%	3,5%	26,2%	31,7%	28,1%	14,0%	73,8%	44,1%	38,4%	17,5%	100,0%

TABLE UNIVERSE 2d - AVERAGE NUMBER OF BED PLACES PER HOTEL, BY REGIONS AND NUMBER OF STARS - ABSOLUTE DATA

REGION/STARS	HOTELS WITHOUT RESTAURANT				HOTELS WITH RESTAURANT				TOTAL HOTELS			
	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL
PIEDMONT	28	59	88	41	27	52	136	38	27	54	126	39
VALLE D'AOSTA	24	49	66	30	31	53	147	42	30	52	139	40
LOMBARDY	27	67	105	46	25	58	159	43	26	60	145	44
TRENTINO A.A.	25	52	96	29	29	57	86	38	28	57	87	36
VENETO	30	58	92	38	38	84	149	56	36	79	141	53
FRIULI V.G.	29	61	221	37	31	75	128	44	30	71	133	42
LIGURIA	26	52	81	32	27	55	118	40	27	55	113	38
EMILIA R.	33	64	94	40	37	68	134	48	36	67	128	46
TUSCANY	24	48	91	34	29	61	121	49	27	57	115	43
UMBRIA	24	55	53	32	33	70	89	49	30	67	83	45
THE MARCHE	29	47	44	34	38	75	101	57	37	73	97	55
LATIUM	27	71	152	43	34	81	245	73	30	78	226	60
ABRUZZI	33	80	220	58	31	96	141	60	32	85	198	59
MOLISE	22	62	81	42	25	104	94	86	22	63	86	45
CAMPANIA	34	72	124	55	40	80	149	113	34	73	134	61
APULIA	29	82	128	62	31	80	181	123	29	82	144	68
BASILICATA	27	78	108	41	25	43	197	73	27	72	159	44
CALABRIA	37	114	214	68	59	116	206	93	47	115	208	80
SICILY	27	65	65	32	39	162	195	97	35	151	187	79
SARDINIA	25	70	97	46	37	114	178	86	35	109	173	81
TOTAL ITALY	29	67	115	43	32	71	142	50	31	70	136	48

TABLE UNIVERSE 2e - RATES SAMPLE/UNIVERSE FOR NUMBER OF HOTELS AND NUMBER OF BED PLACES BY REGIONS AND NUMBER OF STARS

	TOTAL HOTELS		NUMBER OF HOTELS		TOTAL HOTELS		NUMBER OF BED PLACES	
REGION/STARS	1+2	3	4+5	TOTAL	1+2	3	4+5	TOTAL
PIEDMONT	5,4%	10,5%	29,2%	8,0%	9,1%	18,9%	48,8%	19,6%
VALLE D'AOSTA	5,4%	4,5%	14,3%	5,6%	6,1%	4,4%	6,5%	5,6%
LOMBARDY	5,0%	8,2%	20,5%	7,1%	5,4%	12,8%	50,8%	20,9%
TRENTINO A.A.	5,6%	9,2%	18,7%	6,8%	6,6%	14,0%	30,1%	11,1%
VENETO	7,9%	11,1%	21,7%	9,6%	10,5%	18,5%	34,8%	17,5%
FRIULI V.G.	5,7%	11,7%	28,1%	7,7%	7,5%	18,9%	38,1%	14,9%
LIGURIA	5,7%	8,8%	34,3%	7,8%	6,8%	11,1%	48,5%	14,0%
EMILIA R.	8,2%	11,8%	33,7%	9,9%	9,5%	17,2%	46,2%	15,6%
TUSCANY	6,2%	8,3%	19,5%	7,9%	7,3%	14,8%	33,7%	16,0%
UMBRIA	7,4%	7,6%	13,3%	8,0%	15,9%	13,9%	23,7%	16,5%
THE MARCHE	7,6%	11,0%	25,4%	10,0%	9,1%	15,1%	34,4%	15,0%
LATIUM	4,4%	10,4%	16,2%	7,1%	6,1%	11,6%	27,5%	14,7%
ABRUZZI	5,0%	10,5%	24,0%	7,8%	6,2%	15,4%	51,1%	16,6%
MOLISE	12,2%	5,9%	7,7%	9,4%	26,0%	7,1%	7,4%	11,9%
CAMPANIA	5,6%	10,5%	15,7%	8,7%	7,2%	14,1%	26,0%	16,0%
APULIA	4,9%	7,6%	15,2%	7,6%	6,2%	10,8%	19,0%	12,6%
BASILICATA	9,6%	7,1%	28,6%	9,8%	13,4%	12,3%	19,2%	13,8%
CALABRIA	4,6%	7,3%	12,5%	6,0%	4,7%	5,3%	23,0%	7,4%
SICILY	7,1%	10,3%	15,1%	8,6%	6,9%	15,0%	12,1%	12,2%
SARDINIA	7,5%	15,3%	8,9%	11,0%	9,7%	18,1%	9,1%	14,4%
TOTAL ITALY	6,4%	9,9%	21,1%	8,2%	8,0%	14,5%	34,0%	15,0%

TABLE 2e - RATES (REAL SAMPLE)/UNIVERSE - (THEORIC SAMPLE)/UNIVERSE - (THEORIC SAMPLE)/(REAL SAMPLE) - BY REGIONS

REGION	(REAL SAMPLE)/UNIVERSE			(THEORIC SAMPLE)/UNIVERSE			(REAL SAMPLE)/(THEORIC SAMPLE)		
	HOTELS OVER THE THRESHOLD	HOTELS UNDER THE THRESHOLD	TOTAL HOTELS	HOTELS OVER THE THRESHOLD	HOTELS UNDER THE THRESHOLD	TOTAL HOTELS	HOTELS OVER THE THRESHOLD	HOTELS UNDER THE THRESHOLD	TOTAL HOTELS
PIEDMONT	84,0%	4,3%	6,4%	100,0%	8,5%	10,8%	84,0%	50,9%	58,9%
VALLE D'AOSTA	0,0%	5,3%	5,3%	100,0%	11,1%	11,6%	0,0%	48,2%	45,8%
LOMBARDY	84,8%	5,5%	7,2%	100,0%	9,8%	11,8%	84,8%	55,9%	61,4%
TRENTINO A.A.	58,9%	4,9%	6,1%	100,0%	9,2%	11,2%	58,9%	53,6%	54,7%
VENETO	69,9%	7,2%	9,0%	100,0%	11,8%	14,3%	69,9%	61,3%	63,0%
FRIULI V.G.	70,4%	5,5%	7,5%	100,0%	10,1%	12,9%	70,4%	54,1%	58,0%
LIGURIA	65,6%	5,6%	7,2%	100,0%	10,4%	12,6%	65,6%	54,3%	56,6%
EMILIA R.	69,9%	7,3%	9,4%	100,0%	11,6%	14,6%	69,9%	63,0%	64,5%
TUSCANY	72,2%	5,4%	7,5%	100,0%	10,5%	13,3%	72,2%	51,7%	56,5%
UMBRIA	77,8%	5,8%	8,9%	100,0%	9,8%	13,7%	77,8%	59,0%	64,9%
THE MARCHE	68,2%	7,1%	9,5%	100,0%	13,1%	16,5%	68,2%	53,9%	57,3%
LATIUM	54,0%	5,6%	7,0%	100,0%	12,6%	15,1%	54,0%	44,3%	46,2%
ABRUZZI	72,2%	6,1%	7,7%	100,0%	14,7%	16,8%	72,2%	41,5%	46,0%
MOLISE	0,0%	11,0%	10,8%	100,0%	17,1%	18,1%	0,0%	64,3%	60,0%
CAMPANIA	67,7%	7,0%	8,4%	100,0%	13,5%	15,5%	67,7%	51,4%	53,9%
APULIA	64,3%	7,2%	8,5%	100,0%	16,1%	18,1%	64,3%	44,6%	47,2%
BASILICATA	100,0%	8,6%	11,1%	100,0%	16,4%	18,8%	100,0%	52,2%	59,3%
CALABRIA	22,2%	6,1%	6,3%	100,0%	19,0%	20,2%	22,2%	31,9%	31,1%
SICILY	30,0%	8,6%	8,8%	100,0%	29,3%	30,1%	30,0%	29,3%	29,3%
SARDINIA	50,0%	11,0%	11,5%	100,0%	21,3%	22,2%	50,0%	51,9%	51,8%
TOTAL ITALY	67,9%	6,1%	7,8%	100,0%	11,6%	14,0%	67,9%	52,8%	55,6%

The threshold is based on the number of beds coverage in the same region and kind of locality (omitted)