The Tourism Industry in Italy during the Great Recession (2008-12): What Data Show and Suggest

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THE ECONOMIC RESILIENCE OF TOURISM INDUSTRY IN ITALY: WHAT THE 'GREAT RECESSION' DATA SHOW *

by

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Abstract – The purpose of this article is to describe the evolution of the tourism industry in Italy during the recent years of the so-called 'Great recession' (2008-12). We highlight the most prominent features of the changes occurred in both the demand and the supply side of the tourism industry, over these years, focusing on the differences across regions, kinds of destination, and categories of accommodation. The issue of "resilience" is used to explain the different degrees of success in responding to the national adverse shock hitting the industry. We compute an index to capture the economic resilience of tourism sector in the Italian regions, and propose an exploratory analysis to understand its relation with structural characteristics and strategies across regions. Our interpretation is that deep structural changes in the demand and supply sides of the tourism industry, rather than specific adjustments, have occurred in these years of recession.

Keywords: Tourism, Structural changes, Regions, Resilience, Great Recession

JEL Classification: L83, R39.

Bullet points:

- the tourism industry in Italy during the 'Great recession' (2008-12) is analyzed
- the issue of economic resilience is used to analyze the different reactions
- resilience indices of tourism sectors for the Italian regions are computed
- possible reasons for the different reactions across regions are suggested

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THE ECONOMIC RESILIENCE OF TOURISM INDUSTRY IN ITALY: WHAT THE 'GREAT RECESSION' DATA SHOW

1. Introduction

This study inscribes into the strand of economic literature which analyses the effect of economic recessionary shock on tourism markets. The interest in this problem has flourished, as a consequence of the world economic contraction in 2009; in that single year, the World per capita GDP decreased by about 3.4%; tourist arrivals in the world declined by about 3.8%, and tourism receipts are estimated to have declined by 9.4% (UN WTO, 2011). In several (Western) countries, the 2009 GDP performance was even worse; and in some countries the recession has lasted more than one year. These impressive numbers have stimulated a significant research effort to analyze what has happened to the tourism industry as a whole, and to specific case studies. Rightly, just few years ago, Sheldon and Dwyer (2010) complained about a lack of information on tourist behavior during economic crises.[1] This lack has been largely filled over the last years: several articles deal with the changes of tourism demand, following the global recession started in 2008. Furthermore, several articles analyze the supply side, and deal with the reactions of countries and specific destinations to the recent economic contraction (e.g., Richtie et al., 2010, Smeral, 2010, Browne and Moore, 2012; furthermore, Eugenio-Martin and Campos-Sorias, 2014, and Alegre and Sard, 2015, who offer also up-dated reviews).

The present study focuses on Italy. We believe that it is particularly worth investigating the Italian case, for two main reasons.

[1] There are several studies on how tourism reacts to crisis of different types, such as terrorism; natural disasters; health dangers; political crises and social unrest (see, e.g., the review of Hall, 2010); the body of research about tourism reaction to economic crisis was much more limited -at least until the recent global crisis started in 2007-2008; we can mention Frechtling (1982); Henderson (1999); Okumus at al. (2005) on previous specific economic crises.

First, the recessionary shock in Italy has been particularly long and severe. The aggregate GDP in Italy, between 2008 and 2012, has decreased by around 8%, in real terms. Industrial production has decreased by around 20%. The employment rate, which was among the lowest within the G20 group in 2008, has further decreased over this crisis period, by about 2 percentage points. Investments have dropped by about 15% (all data are from Istat, the Italian Statistic Office, and Eurostat). Thus, the label of 'Great recession' –commonly used to denote what has happened in the world over the years following the 2007 American financial crisis– is particularly appropriate for Italy.

Second, the tourism industry in Italy is particularly relevant. The tourist sector represents a share above 10% of the Italian GDP, and a share above 11% of employment (Istat, 2014); both variables steadily display larger values than the world and the European average data. In Italy, the domestic segment of tourism is around 66%, as measured by total overstays.[2]

However, the dimension of the recessionary shock on the tourism industry is markedly different, if compared to aggregate economic data: specifically, the impact of the recessionary shock on the tourism sector is definitely softer than in many other industrial and service sectors. Moreover, the way in which different segments of the tourism industry in Italy have reacted to the crisis is deeply different. Under this perspective, the concept of '*resilience*' can be helpful in analyzing the dynamics in the tourism industry. Resilience is a concept firstly introduced in physics and soon transferred to biology and ecology and –later– to social sciences, such as psychology, sociology, and even business administration and economics; it describes the way in which complex entities respond to adverse shocks. A body of studies in business administration aim to understand why different enterprises react differently to the same exogenous shock, and which features or strategies are most suited to minimize the impact of adverse shock and to obtain quick recovery. Resilience is considered also with reference to groups of enterprises, economic sectors, and territories, like regions or cities.

[2] Recent analyses on the pattern of tourism industry in Italy include Borowiecki and Castiglione, 2014; Massidda and Mattana, 2013; Accardo, 2012, Marrocu and Paci, 2014 and Lorenzini et al. 2014, just to mention a few.

The specific point of the present study is to evaluate how different segments of the tourism industry in Italy have reacted to the Great recession, and to evaluate the resilience degree of tourism sector in the Italian regions.

It is worth underlining that here we are concerned on the *economic resilience* of different regional tourist systems. However, in tourism economics, resilience can be also interpreted as the different reactions of the carrying capacity of tourist destinations to tourism flows' shock (see, for instance, Ioannides and Alebaki, 2014, on the case of Greece). The tourism impact on the natural resources and their carrying capacity, affects the tourism sustainability, and hence the short- and the long- run economic performance. Of course, such an issue is interesting and has also to do also with economic resilience, but this analysis perspective is far from our present interest.

Here we take into consideration the data on arrivals and stays in tourist destinations, and we focus on the accommodation structures in the supply side of the tourism industry, in order to understand how different subjects in the Italian tourism market have reacted to the Great recession. We are aware that tourism is a complex phenomenon, and a bundle of several complement goods and services contribute to the tourism product. However, data on accommodation structures, and arrivals and stays, are very representative for the tourism as a whole, and they are more ready available and reliable than other data on different specific goods pertaining to tourism.

Basing on the patterns of tourist overstays, we build a synthetic index to measure the economic resilience of the tourist sector across the Italian regions. This index captures a specific dimension of economic resilience of tourism; thus, we are aware that our present measure is unable to capture all the multi-faceted aspects of economic resilience. Though exploratory in nature, however, our investigation can highlight some characteristics and tendencies in the tourism industry. Generally speaking, our guess is that the Great recession has contributed to modify consumers' preference structure: specific attributes of the tourist products have being gaining importance, and some others have been losing; however, such change has simply led to an acceleration of the structural variations that were already affecting the tourism sector. Also during the Great recession years, data show that the segments of the tourism industry which are more ready to innovate, and to react to shock (that is, that are more 'resilient') are able to reach satisfactory outcomes.

Our present analysis on Italia data permits to confirm some points already made by available analyses concerning different case studies, while other points do not receive clear support from the case of Italy. However, the main message, in our own reading of the reported evidence, is that different tourism segments have displayed markedly different reactions to shock, and the aggregation into a general class of "tourism industry" needs a great deal of caution.

The outline of the article is as follows. Section 2 describes what has happened to tourist arrivals and stays in Italy over the crisis period 2008-12. Section 3 deals with the supply side and describes some data concerning the accommodation structures in Italy; it also deals with the evidence on prices. Section 4 proposes an analysis of the economic resilience of tourism sector across the Italian regions. Section 5 sketches a similar analysis with reference to different types of tourism destinations Section 6 offers a theoretical interpretation for what has happened during the years of the Great recession in the Italian tourist industry, and in the hotel sector more specifically; furthermore, it puts forwards some indications for private subjects and policymakers, along with concluding remarks.

2. Basic facts: data concerning the demand side

Basic data concerning arrivals, overnights and average stays of tourists in Italy are provided by Table 1. The Table clearly displays the occurrence and the dimension of the domestic economic crisis: the total tourist arrivals and overstays in Italy have increased, but the positive trend of arrivals, and especially of overstays, is substantially due to the foreigner tourists: the arrivals of domestic tourists have only very slightly increased, while domestic overstays display a decrease. However, the dimension of the contraction in overnight stays of domestic tourists (-5.4% over the years of the Great depression, that is, in 2012 with respect to 2008) is quite limited, if compared to the contraction of the domestic economy (with the real GDP shrinking above 8%). The tourism industry as a whole was able to compensate this adverse domestic shock, by gaining numbers of international tourists. Note also that arrivals have increased at a larger speed than overstays, consistently with a shortening of the average stay of

tourists: this trend, common to domestic and foreign tourism, is of long-run nature, rather than specific to the crisis years (average stay of tourists in Italy is steadily shrinking, though mildly, over the two last decades); furthermore, the shortening of average stay is common to most countries (see Barros and Machado, 2010; Wang et al., 2012, among others).

Table 1 – Arrivals, Overnights and Average stays: total data

The performances of tourist arrival and stays in Italy strongly differ across different types of accommodation: the performance of hotels is worse than the performance of extra-hotel structures; within the hotel structures, the best performance pertains to the high quality hotels. Detailed data in Appendix Table A1 show that 5 and 4 star hotels experienced an increase of both arrivals and overnight stays, and this holds for both the foreign and the domestic tourist flows (however, in line with the difficulties of the domestic demand, the increase of the domestic segment is more limited than the foreign segment). A slight shortening of the average stays regards both the Italian and the foreign tourists. In 3 star hotels a contraction of the domestic segment has occurred, which is in a large part counterbalanced by foreign tourists; at the end, the total contraction in arrivals is around 1% and the contraction of overnight stays is about 5%. A sharp decrease of both arrivals and stays has occurred for 1 and 2 star hotels; the decrease is clearly larger for the domestic part of the demand.

Thus, we can state that the economic crisis in Italy exerted its largest effect on the low-quality accommodation hotel structures. This fact can be partly explained by the modification of income distribution: the richest classes have been affected by the Great recession in a more limited way than average- or low- income classes (see also Bernini and Cracolici,2014) . An additional explanation can be represented by a modification of consumers' preferences: to have a vacation is a “must”, and its income elasticity is lower when income shrinks (as the stability of domestic arrivals shows) as compared to the case of income increase. The fact that that asymmetry in income elasticity of tourism demand does exist in front of positive or negative income variation, is already documented by some empirical analyses on different case studies –see Smeral

and Song (2013). Possibly, the vacation is shorter, if budget constraints are more severe as a consequence of a negative economic shock (see Bronner and de Hoog, 2012, on the possible strategies of families, in order to of economize on specific attributes of holiday).

Thus, what has happened to tourist arrivals and stays in Italy is consistent with the combination of different facts: - domestic tourism demand has a lower income elasticity than international tourism demand;[3] - the income elasticity of domestic tourism demand is in any case limited, when income shrinks; - families prefer to economize through the average stay reduction rather than giving up the holiday altogether. Moreover, the fact that the crisis has exerted its largest negative effects on the low-quality hotels is also consistent with the strategies adopted by large tour operators, as documented, for instance, in Alegre and Sard (2015) among others: to a sensible extent, the offered packages have substituted 4-5 star hotels to lower category accommodations, especially to capture the tourism segment which has appeared to be less sensitive to economic crisis.

Notice that the contraction of average stays appear to regard both the domestic and the foreign tourism, but its dimension is quite different: -7.69% and -4.25%, respectively. Thus, we can say that the Great recession has amplified, in Italy, the contraction of average stay, that is a structural tendency of the tourism demand at the world level, as already mentioned (Barros and Machado, 2010).

2.1 The situation across Italian regions

Table A2 in Appendix provides the detailed data about regional destinations. In particular, it reports the percentage variation rates of total arrivals and stays between 2008 and 2012, considering all structures. The regions are ordered according to the success in varying the arrivals and overnight stays. If we limit ourselves to observe the total overnight stays, we should conclude that Lombardia, Puglia and Piemonte had the best performance, and Molise, Sardegna and Liguria the worst. However, the performances are strongly determined by the contraction of domestic demand. Thus, it is interesting to study how the regions react to the drop in domestic demand, by serving

foreign tourists. To this end, the evidence of Table A2 is re-arranged in Table 2 in text, which classifies the regions (as tourism destinations), according to the fact that they have a better or worse performance than the national Italian data. Thus, it is possible to say that the behavior of the worst performers according to the aggregate data (Molise, Sardegna, Liguria, Marche, Abruzzo) is very different, in terms of reaction to negative domestic demand shock. In fact, in Abruzzo the domestic shock was not so adverse as in other regions, and the "bad" performance is due to a very poor result in the international tourism segment. In the other four regions, the domestic shock was severe, but Marche and Molise were not able to provide a significant answer in the international tourism segment, while Liguria and especially Sardegna were able to provide a significant positive answer in the international segment of tourism market. In particular, the data concerning Sardegna are impressive: the contraction in domestic arrivals and overnight stays was -20.3% and -23.4%, respectively, but the increase in foreign arrivals (+9.0%) and stays (+13.4%) notably out-performed the national data.

Table 2 – Italian regions classified as better or worse performer as compared to the national data in domestic and foreign stays

Before moving to analyze the performance of regions according to the interpretation key of resilience, in the next Section we summarize the main features of what has happened in the supply side of the Italian tourism market, and more specifically in the accommodation sector, during the Great recession.

3. Basic facts: data concerning the supply side

During the years of the Great recession, the number of hotels in Italy has slightly decreased (-1.25%), but the bed-places (beds, in what follows) have increased, consistent with an enlargement of the average size of hotels (a tendency started in the 1980s, which only partially is covering the gap between Italy and its main European

[3] This is documented by a large body of literature: see Crouch (1994, 1995), Seddighi and Shearing (1997) Garin and Munez (2009), among many others; Candela and Figini, 2012, and Bernini and Cracolici, 2014, for general review.

competitors). This is also consistent with a structural change in the industry, documented in Table A3, which shows a significant increase of the 4 and 5 star hotels, and a decrease of the number of 1 and 2 star hotels; since 4 and 5 star hotels have typically a larger size than the 1 and 2 star ones, it is unsurprising to observe the increase in the average size of hotels. The number of extra-hotel structures have significantly increased (in particular, the largest increase pertains to the number of B&B). Also these two tendencies, that is, the increase in the number of high-level hotels (and their share within the hotel sector) and the increase of the number and share of B&B, have been starting in Italy thirty years ago, so that we can say that such facts are in line with long-term trends, rather than the outcome of the domestic economic crisis.

As the distribution of the accommodation structures across the Italian regions, the number of extra-hotel structures has increased in all regions (see Tables A4 and A5 in Appendix); their largest percentage increases pertain to Campania, Molise and Lombardia (interestingly, these three regions belong to Southern, Central and Northern Italy – supporting the point that the tendency is general). The share of the hotel structure (on the population of accommodation structures) has decreased in all regions, and particularly in Campania and Lombardia.

As to the hotel structures, generally speaking, the number of hotels has decreased in the Northern regions, while it has increased in the Southern regions. However, in all regions the share of 1-2 star hotels has decreased, and the share of the 4-5 star hotels has increased. A (rough) index of variation in the structural composition of the hotel population according to the star level is computed, as the sum of the absolute variation in the share of 4-5 star hotels and in 1-2 star hotels, occurred between 2008 and 2012. According to such an index, the largest changes, in all, have occurred in Sicilia, Puglia and Marche, while Lazio and Emilia R. are the regions with the smallest structural changes in the quality composition of the hotel population.

3.1 Pricing behaviour

As far as the pricing behavior of hotels, we consider two different sets of data (see Table A6). The first source is Unioncamere (2013), an Italian public (governmental) subject that publishes an Annual Report, based on a wide sample of hotels which provide their prices; the sample is representative of the hotel distribution, according to

location and category. The second source is the Hotel Price Index provided by Hotels.com, the popular website for hotel reservation, that builds its index on the paid prices through the website services. The absolute data are quite different in size, but this discrepancy is understandable, since Unioncamere considers all hotels while the hotels that are present in Hotels.com is not representative of all hotel population (e.g., 1 star hotels typically do not use Hotels.com service; hotels in superstar destinations are over-represented in Hotels.com, and so on). Apart from the difference in price *levels* across the samples of Unioncamere and Hotels.com, however, the price *dynamics* are very similar: accommodation prices in Italian hotels have decreased at the beginning of the crisis (the variation in 2009 with respect to 2008 is equal to -8.8% or -11.8% according to Unioncamere or Hotels.com, respectively) and then have been slowly recovering over the subsequent years. Specifically, between 2009 and 2012, the hotel sector has increased prices by 3.4% (included between +3.6% for 1-2 star hotels and +0.09 for 4-5 star hotels), according to Unioncamere, and by 3.8% according to Hotels.com. Extra-hotel accommodation has increased the unit price by about 3.2% (reference price is a one-night double-room). In all cases, the price increases between 2009 and 2012 are lower than the consumption price index growth (+7.4% in the same three-year period). In other words, the accommodation sector has limited its nominal price increases at a lower level than inflation, that means a reduction of price in real terms. Nominal (and real) price are still below the levels of 2008. This could help explain the (relatively) good performance of overstays over the crisis years. However, the (nominal and real) revenues have been likely shrinking, as the result of these price and quantity movements.

Note also that, within the hotels, the most limited price increase pertains to high level hotels, while nominal price has increased at the largest pace in 1-2 star hotel, where the performance is the worst. However, the price changes are in all cases pretty limited, over the three-year period, and across the different segments of accommodation; thus, they do not permit to associate any specific effect in the market performance to price behavior. A similar inconclusive outcome emerges as far as a cross-regional evaluation is concerned. Hotels.com provides data on specific destinations, which are not reported here for the sake of brevity. However, if one considers (non super-star) destinations across different Italian regions, the pieces of

evidence are very similar: generally speaking, in all available regions, average prices have decreased in 2009 with respect to 2008, but have then been slightly increasing in the subsequent years; however, the pre-crisis price levels are not yet recovered again.

Thus, structural factors in the demand and supply side, rather than (modest) price changes, seem to be the reason of the different performances across different regions. In other words, price strategies do not seem to be a key part of a more or less resilient behavior in the accommodation industry in Italy. Moreover, it is appropriate to recall that, though tourism is generally recognized to be an ordinary good, the sensitivity of its demand to price seems to be very limited, according to several studies (e.g., Morrison, 1996; see also the discussion in Nicolau and Mas, 2006).

This story on prices is also important, in our investigation, since the consideration of data concerning prices, joint with the data concerning overstays, permit to compute a first estimation of gross revenues for hotels. In nominal terms, the revenues are estimated to move from 23,569 million Euro in 2008 to 22,911 million in 2012, with a drop around 2.5% (which means a drop above 11% in real terms). The percentage drop is the largest for 1-2 star hotels (whose nominal revenues move from 1,805 to 1,427 million Euro), is rather modest for 3 star hotels (9,611 to 8,297), while the revenues for 4-5 star hotels have increased (12,152 to 13,186). Once again, the estimated contraction of revenues for the hotel sector in Italy is far from being negligible, but it is softer than the corresponding data for several other economic sectors.

4. Measuring resilience and interpreting resilience measures

As already mentioned, economic resilience is a multifaceted concept; it involves the ability of subjects (cities, regions or countries) to resist to the impact consequences of a negative shock, and the ability to recover from the adverse consequences of the shock. Recovering may mean the ability to re-gain the pre-crisis level or growth performance, or even the ability to find new, better, growth paths. The length of time necessary to recover is a possible way to look at the economic resilience. The relation between the size of the negative impact and the size of the subsequent recovery can be an alternative way for measuring the resilience skills. Several indices have been proposed to measure

resilience, resorting to both parametric and no-parametric analysis approaches - also depending on the time period under investigation and the data availability. We inspire here from the following index: $r = (1 + g_{rec}) / (1 + g_{imp})$,where g_{imp} is the variation rate (of the variable under scrutiny, typically the income per capita, in the case of general economic resilience of cities/regions/countries) in the year(s) when the negative shock occurs (so that, g_{imp} is negative), while g_{rec} is the variation rate in a subsequent (fixed-length) period of time. Such a measure capture the ability of subjects to recover, in front of a given negative shock: the larger the ability to recover, the higher the index.

Basing on the fact that the adverse shock in the Italian tourism market was the decrease (2008-12) in domestic overstays, and the response has been given in the international inbound tourism flows, we propose to measure the tourism regional resilience, by applying the formula reported above to the Italian regions, and interpreting g_{imp} as the variation rate (2012 to 2008) of domestic overstays, and g_{rec} as the variation rate (2012 to 2008) of international overstays. So, our present measure of regional resilience, as applied to the tourism sector, does not take into account the ability in subsequent years to respond to an adverse (past) shock: we do not have data for carrying out such an exercise now. Rather, we measure the ability of regions of substituting international to domestic tourism during the (long) period of time in which the adverse shock has taken place.

The computation results of the resilience index is provided in Table 3. Preliminarily, one may note that three regions show a positive value for g_{imp} . These regions, namely Lombardia, Puglia and Basilicata, can be labeled as ‘resistant’, as long as they are characterized by a positive performance in the variable which defines the adverse event. At the opposite end, three regions show negative values for g_{rec} , and can be labeled as ‘unable to recover’: these regions are Lazio, Molise and Basilicata. In fact, we can say that only Lazio and Molise are unable to recover, since Basilicata did not suffer from the shock at all (and also the aggregate performance of total overstays, domestic and international, is positive, so that it is definitely correct to consider Basilicata as a resistant region). The remaining 15 regions behave in the expected way: they reacted to the negative shock in domestic overstays, replying with a positive performance in the international segment. Notice, in particular, that Sardegna shows the largest resilience index: this region suffered from the largest negative g_{imp} and was able

to give an excellent response, in terms of g_{exp}. Piemonte and Ligura follow as the second and third most resilient regions in tourism, according to this index. At the opposite end, Basilicata, Lazio and Molise show the worst values of this resilience index. The list or regions, ordered according to the *r* index, is provided in Colum [RR1] of Table 3. A different "qualitative", ordinal, list may be provided (Column [RR2]), giving the highest grade (equal to 3) to the resistant regions, then grade 2 (very resilient) to the resilient regions with a *r* index larger than the median value, grade 1 to the resilient regions which display a *r* index lower than the median value, and grade 0 to the regions that have shown to be unable to recover.

Table 3 – Resilience index for Italian regions

In what follows we present an investigation on the relation between the resilience ordering of regions, as it emerges from Table 3, and a set of structural characteristics of regions, or variables describing specific strategies adopted by the tourism sector. These variables have been examined in previous sections of the present article, or have been analyzed by recent studies on the Italian tourism sector.[4] The aim of the analysis is clear: we aim to understand which characteristics are associated to the resilience skills of regions. Our exercise has an exploratory nature, and we prefer to conduct this investigation by means of simple correlation analysis, rather than employing multiple regression tools. This is also due to the fact that we do not suggest that causal links exist, and we prefer to observe the possible existence of correlation links. Even if we have conducted this analysis with reference of both the *r* index, and the ordinal index reported in RR2, we provide here only the results obtained for the *r* index, which reveal clearer correlation links with the variables under investigation.

Table 4 presents the results of the correlation analysis. A clear conclusion emerges: the *r* index is positively and significantly correlated with the region dimension: not only the correlation of the *r* index with regional surface is positive and significant, but all the correlations with variables related to the regional dimension; the correlation becomes less significant if the variables are normalized by population or

[4] Notably, some variables, whose correlation with the resilience index is under scrutiny here, are borrowed from Cellini and Torrisi (2013) and Cuccia et al. (2014).

surface. It seems correct to state that the larger the region is, the higher the resilience of its tourism sector. The infrastructure endowment (airport, port, rail, roads) is positively (and in some cases significantly) correlated with the resilience capacity when it is considered in absolute terms, while its significance vanishes if it is considered in normalized terms. The endowment of cultural activities (as measured by the number of sites included in the UNESCO World Heritage List, but also by the number of cinema and theaters) shows a positive correlation with the capacity of being resilient, but the link is far from being statistically significant. The same holds for the index of social capital, as provided by Putnam (we consider the same Putnam index as in Cellini and Torrisi, 2013). The share of 4 and 5 star hotel is positively linked to the resilience index, while the share of 1-2 star is negatively linked; these correlations, however, are not statistically significant.

Table 4 – Simple Correlation between *r* index and a set of potentially linked variables

5. A look at the performances across different types of destination

Here we articulate Italian tourism destinations according to their types; Table A5 reports arrivals and stays in 2012 (and its percentage change with respect to 2008) for types of destinations. A caveat note is necessary to this regard. Indeed, Istat, the Italian Statistics Office, has adopted a classification of destinations (generally considering the municipalities as the reference units) which is debatable.[5] In any case, it is clear that the seaside destinations continued to play the largest role, in terms of overnights, even if the historical and artistic cities have led in terms of arrivals. This piece of evidence is consistent with the fact that the average stay is much longer in sea-side destinations (5.2) than in artistic and historical cities (2.6); both data concerning the average stays are lower than the data of 2008 (5.6 and less than 2.8, respectively), in line with the already mentioned tendency to shorter stays. The sharpest decrease of average stay is associated to mountain destinations, where arrivals have increased by 7.7%, and

overnight stays have decreased by 2%. The sea-side destinations are the type of destination in which the increase of arrivals was the most limited; the largest increase in arrivals pertains to the historical and artistic cities, while the largest increase in overstays pertains to lake and thermal destinations (followed by historical and artistic cities).

The articulation of data according to the domestic or international provenience of tourists confirms what we already noted. The general contraction of domestic stays was counterbalanced by international stays. It is of interest, however, to note that the only destination type where domestic overstays have increased is represented by historical and artistic cities. Sea-side and mountain, for different reasons, show the worse performance, while artistic and historical destinations are the best performers in a long-term perspective. However, from the classification provided by Table 5 (which re-arranges the same information as provide by Table A5), it is clear that seaside and mountain destinations showed a worse performance (as compared to national data) in overnight stays, in both the domestic and in the international segment; historical cities and hills showed a better performance in both segments; while lake and thermal sites were able to have a better-than-the-average performance in the foreign tourism segment, in front of a worse performance in the domestic segment.

Table 5 – Italian destination types classified as better or worse performer as compared to the national data in domestic and foreign overstays

The same procedure for defining and measuring the resilience degree can be easily applied to the different types of destination, as classified in Table 5 (or A5 in Appendix). Following such a procedure, we can define historical city destinations as 'resistant' subjects (the domestic overstays did not drop during the crisis), while seaside, mountain, lake and hill destinations are 'resilient'. The highest *r* index emerges to be associated with lake destinations (*r*=1.299) while seaside, mountain and hill destinations are characterized by very similar resilience indices (with *r* ranging from 1.18 to 1.19).

[5] For instance, cities like Trento or Bolzano are classified as "mountain destination" (while it could be tenable that these cities have an historical and cultural interest); much more debatable is the fact that cities like L'Aquila or even Matera (the European capital of culture 2019!) are not included by Istat in the list of cultural destinations.

6. Theoretical interpretations and concluding remarks

The "Great recession" is an aggregate shock hitting the entire world economy, starting in 2008. As far as Italy is concerned, the drop in the GDP has been particularly severe and long-lasting: real GDP has dropped in Italy by about 8% between 2008 and 2012. This article has investigated what has happened in the Italian tourism industry in these years.

The first point of the present investigation is that, *the tourism industry as a whole has been more resilient to economic crisis than other industries.* For instance, manufacture has shrunk about 20% over the four year period under consideration, in terms of real value-added. The service sector has faced a more limited contraction. According to our estimation, the contraction of revenues for hotel is around 2,5% in nominal terms, and 11% in real terms, in 2012 as compared to 2008. How much bad is this datum? The case study of Italy shows that the tourism industry has been able to substitute domestic demand with foreign demand, thus limiting the negative effect of a very severe domestic crisis. These pieces of evidence testify also that open sectors are more resilient than closed sectors: the possibility of substitution between different geographic sources of demand represents a way to counteract the negative consequences of aggregate shocks; this channel can be added to the other causes already listed by Smeral (2010, p. 36) to explain why crisis in tourism has been softer than in other sectors.

However, the aggregate dimension of analysis about the shock impacts on tourism is very partial, since the dimension of the adverse shock has not been the same across different destinations and different segments of the Italian tourist industry. This is due to the fact that the demand has been structurally changing. Lower-level hotels have faced a deeper negative shock than higher-level accommodation structures. Regions in which the sea-side tourism was more relevant have faced deeper adverse shock. If we interpret the resilience as the ability of providers to change their orientation and specialization in front of a negative shock, we have to state that *different Italian regions have shown markedly different degrees of economic resilience*. In part, this depends on the "structural endowment" of the regions: clearly, not all regions have the

same possibility, say, of "substituting" sea-side product with cultural products. In our present case-study, central Adriatic regions in Italy have shown great difficulties in substituting sea-side tourism with other tourist products. Such a substitution has been easier and more successful in regions like Veneto, Toscana and Sicilia. We have underlined that the regional dimension does matter, in resilience ability; Moreover, the ability of specific hotels to up-grade, is a variable able to explain different degrees of resilience: the demand contraction was particularly severe for lower-level accommodation structures; even if hotel up-grading is a common tendency for the whole country, not all destinations have shown the same intensity in this up-grading process.

A final consideration is worth developing about the market structure of tourism. The tourist market can be interpreted as a differentiated oligopoly market. It is an oligopoly because there are clear interdependency links between the behavior of different suppliers; it is differentiated because the products are clearly differentiated.[6] Our present analysis suggests that at least three directions of differentiation can be considered: a geographical differentiation (regions are different); a typological differentiation (sea-side tourism, cultural tourism, etc.); a quality differentiation of accommodation (trivially, 4-5 star hotel *vs* lower level accommodation); the first and the second dimensions of differentiation represent horizontal differentiation, while the third one captures an element of vertical differentiation.

Here we suggest that the importance of these dimensions has changed in the consumers' preference over the years of the Great recession. The fact that recessionary conditions modifies consumer preference –and the resource distribution across sectors– has been suggested by several scholars for different fields; see, e.g., Fisman et al. (2014); Margalit (2014); Foster et al. (2013). These contributions, among others, suggest that the recessionary condition intensifies the consumer efficiency orientation in the resource distribution across consumption goods and services. These general trends hold also in the tourism sector. However, tourism is an experience good, and its relational content is of primary importance. Also for these reasons, we have no surprise

[6] See Candela and Cellini (2006) or Candela and Figini (2012, Chps 10 and 14) for models in which the tourism market is represented in terms of differentiated oligopoly; see also Marrocu and Paci (2013).

in front of the fact that the behavior of the Italian domestic tourists in the years of the Great Recession appears to fit with the principle that "to go is more important than to stay". This holds for the tourism as a whole (remember that total domestic arrivals have increased, even if domestic overstays have decreased), and holds for specific tourism segments in a very clear way –let us think, for instance, of cultural tourism. Cultural tourism (which is likely perceived as 'more demonstrative' than sea-side tourism) and experiential tourism have increased; in these cases, the type of accommodation plays a less important role in consumer choice. Domestic trips to sea-side, on the opposite, decrease, as far as their demonstrative content is less important, and people have been cutting this type of expenses in recession years.

Our present analysis provides a support for the point made by Alegre and Sard (2015, p. 377), among many others: "the effect of an economic crisis is more complex than that captured by a laconic income effect. Households modify their consumption and travel plans […] household strategies can range from foregoing a holiday to economizing on some of its characteristics". Bronner and de Hoog (2012) have shown (with reference to a large sample of Dutch families) that families in different economic conditions and different types of tourists have different "intentions" on how to economize for tourism, and also different real subsequent behaviors. Just to give an example, 'consistent economizers' are under-represented in the segment of cultural tourists.

Over the last years of economic crisis in Italy, we have guessed that market size has enlarged for high-level accommodation structures, and, in general, for 'elite' tourism destinations like cultural destinations, while it has decreased for mass-tourism destinations, like, generally speaking, sea-side destinations, and lower level accommodation structures. Differentiation has been gaining importance; this means that the market structure is now nearer to monopolistic competition than homogeneous oligopoly. Although the sensitivity of demanded quantity to its own and other prices is out of the goal of the present research, what we have seen in our preliminary analysis of price behavior, indeed, is the fact that price behaviors do not seem to play an important role in explaining the recent history of the tourism industry in Italy. Real prices of accommodation have fallen, but it is hard to see a relevant space for successful price competition in this industry, in the years under scrutiny. Rather, the ability of adapting

to changing consumer behavior seems to be the most important competitive factor, even in the years of the Great recession.

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APPENDIX

Table A1 – Absolute data (and percentage variation w.r.t. 2008) of Arrival and Overnights in different types of accommodation, 2012.

Table A2 –Arrival and Overnights across Italian regions: percentage variation rates, 2008-12.

Table A3– Accommodation structures

Table A4 – Structure distribution across regions

Table A5 – Hotel distribution across regions

Table A6 – Prices for accommodation in Italy according to different sources

Table A7 – Absolute data (and percentage variation w.r.t. 2008) of Arrival and Overnights in selected types of destinations, 2012; average stay and its absolute variation.

TABLES

Table 1 – Arrival, Overnights and Average stay: total data

	In all accommodation structures			In hotels		
	2008	2012	%Var	2008	2012	%Var
TOTAL						
Arrival	95,546,086	103,733,157	8.57	77,164,740	82,644,781	7.10
Overnights	373,666,712	380,711,483	1.88	251,678,307	255,610,143	1.56
Av stay	3.91	3.67	-6.15	3.26	3.09	-5.17
FOREIGN						
Arrival	41,796,724	48,738,575	16.61	33,666,586	38,867,517	15.44
Overnights	161,797,434	180,594,988	11.62	110,491,709	122,700,343	11.04
Av stay	3.87	3.70	-4.28	3.28	3.16	-3.81
DOMESTIC						
Arrival	53,749,362	54,994,582	2.32	43,498,154	43,777,264	0.64
Overnights	211,869,278	200,116,495	-5.55	141,186,598	132,909,800	-5.86
Av stay	3.94	3.64	-7.68	3.24	3.04	-6.46

Note. Source: Istat (2014).

Table 2 – Italian regions classified as better or worse performer as compared to the national data in domestic and foreign stays

		Foreign	
		Better	Worse
Domestic	Better	PUG, LOM, PIE, SIC, TOS, CAL	TAA, EMR VDA, ABR, UMB, LAZ, BAS
	Worse	SAR, VEN, FVG, LIG	MAR, MOL, CAM

Note. Regional codes are: Piemonte=*PIE;* Valdaosta=*VDA;* Liguria=*LIG;* Lombardia=*LOM;* Trentino Alto Adige=*TAA;* Veneto=*VEN;* Friuli Venezia Giulia=*FVG;* Emilia Romagna=*EMR;* Toscana=*TOS;* Umbria=*UMB;* Marche=*MAR;* Lazio=*LAZ;* Abruzzo=*ABR;* Molise=*MOL;* Campania=*CAM;* Puglia=*PUG;* Basilicata=*BAS;* Calabria=*CAL;* Sicilia=*SIC;* Sardegna=*SAR*

Table 3 – Resilience index for Italian regions

	g_{imp}	g_{rec}	Region nature		[RR1] Order according r index			[RR2] Order according Nature classif	
PIE	-0.0244	0.2543	resilient		SAR	1.480		LOM	3
VDA	-0.0040	0.0571	resilient		LIG	1.288		PUG	3
LIG	-0.1255	0.1264	resilient		PIE	1.286		BAS	3
LOM	0.0607	0.2863	RESISTANT		VEN	1.285		SAR	2
TAA	-0.0164	0.1141	resilient		FVG	1.271		LIG	2
VEN	-0.1189	0.1320	resilient		PUG	1.269		PIE	2
FVG	-0.1110	0.1300	resilient		LOM	1.213		VEN	2
EMR	-0.0536	0.0657	resilient		MAR	1.199		FVG	2
TOS	-0.0550	0.1304	resilient		TOS	1.196		MAR	2
UMB	-0.0432	-0.0075	UNABLE		SIC	1.195		TOS	2
MAR	-0.0750	0.1094	Resilient		CAL	1.172		SIC	1
LAZ	-0.0373	-0.0285	UNABLE		TAA	1.133		CAL	1
ABR	-0.0486	0.0099	resilient		EMR	1.126		TAA	1
MOL	-0.1826	-0.1579	resilient		CAM	1.117		EMR	1
CAM	-0.0612	0.0484	resilient		ABR	1.062		CAM	1
PUG	0.0512	0.3343	RESISTANT		VDA	1.061		ABR	1
BAS	0.0313	-0.1832	RESISTANT		UMB	1.037		VDA	1
CAL	-0.0444	0.1203	resilient		MOL	1.030		MOL	1
SIC	-0.0499	0.1356	resilient		LAZ	1.009		UMB	0
SAR	-0.2342	0.1337	resilient		BAS	0.792		LAZ	0

Table 4 – Simple Correlation between *r* index and a set of potentially linked variables

Territorial surface of region	0.455**
Km of coasts	0.487**
Number of accommodation structures	0.263
Number of hotels	0.150
Share of hotels in accommodation structures	-0.273
Share of 4-5 star hotels in hotels	0.114
Share of 1-2 star hotels in hotels	-0.151
Share of stays in historical cities	-0.112
Share of stays in seaside destinations	0.334
Km of electrified railroads	0.390*
Km of roads	0.294
Km of highways	0.224
Number of ports	0.287
Number of airports	0.441**
Rail per Km squared	0.081
Road per Km squared	-0.343
Highway per Km squared	0.157
Number of airports per Km squared	0.314
Number of theatres	0.242
Number of cinema	0.204
Theaters per inhabitants	0.196
Cinema per inhabitants	0.210
Number of sites in UNESCO World Heritage List	0.192
Public expenditure for tourism in current account (a)	0.247
Public expenditure for tourism in current account divided by surface	0.130
Public capital for tourism (b)	0.510**
Public capital for tourism divided by surface	0.136
Putnam index for social capital	0.027
Theft index	0.193

Notes. All variables are referred to 2008, when not-otherwise indicated; (a) this variable derives from Cellini and Torrisi (2013): it is the average value of public spending in current account for tourism, as it is provided by the Regional public account (average value 1996 to 2007); (c) this variable derives from Cellini and Torrisi (2013): it is an estimate of the stock of public capital for tourism in 2007, as built through the permanent inventory technique on the basis of public spending for tourism in capital account.

Table 5 – Italian destination types classified as better or worse performer as compared to the national data in domestic and foreign overstays

		Foreign	
		Better	Worse
Domestic	Better	Historical and artistic cities Hills	
	Worse	Lake and thermal sites	Seaside Mountain

(Tables in Appendix)

Table A1 – Absolute data (and percentage variation w.r.t. 2008) of Arrival and Overnights in different types of accommodation, 2012.

	ALL		FOREIGN		DOMESTIC	
	ARRIVAL	OVERSTAYS	ARRIVAL	OVERSTAYS	ARRIVAL	OVERSTAYS
Total	103,733,157	380,711,483	48,738,575	180,594,988	54,994,582	200,116,495
	(+8.57%)	(+1.88%)	(+16.61%)	(+11.62%)	(+2.32%)	(-5.55%)
In Hotel	82,644,781	255,610,143	38,867,517	122,700,343	43,777,264	132,909,800
	(+7.10%)	(+1.56%)	(+15.45%)	(+11.05%)	(+0.64%)	(-5.86%)
5 and 4 star	39,238,237	106,001,160	20,723,340	59,268,783	18,514,897	46,732,377
	(+20.33%)	(+16.53%)	(+27.40%)	(+22.85%)	(+13.30%)	(+9.39%)
3 star	33517973	108176970	14041253	46235897	19476720	61941073
	(-1.35%)	(-5.35%)	(5.95%)	(4.13%)	(-6.02%)	(-11.37%)
2 and 1 star	7193584	23831962	3010333	10124179	4183251	13707783
	(-13.14%)	(-19.34%)	(-7.87%)	(-12.31%)	(-16.57%)	(-23.85%)
In Extra-hotel	21,088,376	12,510,1340	9,871,058	57,894,645	11,217,318	67,206,695
	(+14.73%)	(+2.55%)	(+21.41%)	(+12.84%)	(+9.42%)	(-4.92%)
Camp	9,057,423	64,598,025	4,390,434	29,914,157	4,666,989	34,683,868
	(+4.93%)	(-0.96%)	(+10.61%)	(+8.08%)	(+0.10%)	(-7.62%)
House	5,485,883	33,488,493	2,964,612	17,280,529	2,521,271	16,207,964
	(+23.17%)	(+0.19%)	(+32.68%)	(+14.73%)	(+13.60%)	(-11.73%)
Agr	2,413,476	10,475,299	987,876	5,658,123	1,425,600	4,817,176
	(+28.48%)	(+19.23%)	(+39.33%)	(+27.54%)	(+21.90%)	(+10.75%)
B&B and other	4131594	16539523	1528136	5041836	2603458	11497687
	(+20.89%)	(+13.63%)	(+25.53%)	(+22.11%)	(+18.33%)	(+10.27%)

Note. Source: ISTAT (2014); the Hotel group includes also Residential structures in hotel, beyond 1 to 5 star hotels.

Table A2 –Arrival and Overnights across Italian regions: percentage variation rates, 2008-12.

Total					Foreign					Domestic			
Arrivals		Overnight stays			Arrivals		Overnight stays			Arrivals		Overnight stays	
LOM	26.14	LOM	17.89		LOM	37.52	PUG	33.43		VDA	17.46	LOM	6.07
PIE	23.06	PUG	9.35		PUG	36.64	LOM	28.63		PIE	16.59	PUG	5.12
VDA	17.69	PIE	7.41		PIE	35.98	PIE	25.43		LOM	16.27	BAS	3.13
TAA	11.96	TAA	5.44		FVG	21.32	SIC	13.56		BAS	10.31	VDA	-0.40
VEN	11.95	TOS	3.37		VEN	19.83	SAR	13.37		MAR	6.69	TAA	-1.64
BAS	11.07	VEN	2.88		LIG	18.73	VEN	13.20		TAA	6.42	PIE	-2.44
PUG	10.39	SIC	2.41		VDA	18.15	TOS	13.04		PUG	5.95	LAZ	-3.73
TOS	9.86	VDA	1.70		BAS	17.19	Fvg	13.00		TOS	1.32	UMB	-4.32
MAR	7.29	BAS	1.04		TAA	16.98	LIG	12.64		UMB	0.95	CAL	-4.44
FVG	7.11	FVG	-0.86		EMR	13.25	CAL	12.03		EMR	0.94	ABR	-4.86
EMR	3.85	CAL	-1.59		CAM	12.34	TAA	11.41		VEN	-0.07	SIC	-4.99
SIC	3.02	CAM	-1.67		TOS	10.85	MAR	10.94		SIC	-1.73	EMR	-5.36
CAM	2.61	EMR	-2.55		SIC	10.65	EMR	6.57		CAL	-2.52	TOS	-5.50
LIG	1.75	UMB	-3.08		MAR	10.42	VDA	5.71		CAM	-3.11	CAM	-6.12
UMB	1.74	LAZ	-3.14		SAR	9.00	CAM	4.84		ABR	-3.27	MAR	-7.50
CAL	-1.20	ABR	-4.07		CAL	6.27	ABR	0.99		FVG	-3.34	FVG	-11.10
ABR	-2.95	MAR	-4.81		UMB	3.77	UMB	-0.75		LAZ	-3.66	VEN	-11.89
LAZ	-3.31	LIG	-5.16		ABR	-0.56	LAZ	-2.85		LIG	-7.02	LIG	-12.55
MOL	-8.90	SAR	-11.80		LAZ	-3.12	MOL	-15.79		MOL	-8.71	MOL	-18.26
SAR	-10.37	MOL	-18.08		MOL	-11.18	BAS	-18.32		SAR	-20.28	SAR	-23.42

Note. Regional codes are reported in Table 2 in text.

Table A3 - Accommodation structures

	2008			2012		
	Structures	Beds	Average size	Structures	Beds	Average size
Hotel						
Total hotels	34155	2201838	64.46	33728 (-1.25%)	225070 (+2.21%)	66.73
5 star	315	56,208	178.45	393 (+24.76%)	64,106 (+14.05%)	163.12
4 star	4,623	635,901	137.55	5354 (+15.81%)	736,311 (+15.79%)	137.52
3 star	15,160	974,995	64.31	15,243 (+0.54%)	962,662 (-1.26%)	63.154
2 star	7,196	234,330	32.56	6,509 (-9.55%)	209,944 (-10.41%)	32.25
1 star	4,299	101,152	23.53	3,438 (-20.03%)	80,606 (-20.31%)	23.44
Extra-hotels						
Total extra-hotel	106108	2447212		123500 (+13.69%)	2511897 (+2.61%)	
B&B	18,189	93,544	5.17	25,241 (+38.77%)	129,035 (+37.93%)	5.11
Camping	2,595	1,360,935	524.44	2,670 (+2.89%)	1,358,044 (-0.14%)	508.63
Agritourism	15465	191099	12.36	17,228 (+13.40%)	226,538 (+18.52)	13.15

Note. Data are from Istat. The sum of the 1 to 5 star hotels does not give the total number of hotel structures, since the latter includes also hotel residence structures. Similarly, extra-hotel structures also includes other types of accommodation beyond the listed ones, like private houses for rent or holidays, youth-hostels, mountain-refuges.

Table A4 – Structure distribution across regions

	Total			Hotel			Extra-hotel			Share of hotel		
	2008	2012	%Var	2008	2012	%Var	2008	2012	%Var	2008	2012	%Var
PIE	4805	5536	15.21	1567	1540	-1.72	3238	3996	23.41	32.61	27.82	-4.79
VDA	977	1058	8.29	493	482	-2.23	484	576	19.01	50.46	45.56	-4.90
LIG	4024	4184	3.98	1604	1513	-5.67	2420	2671	10.37	39.86	36.16	-3.70
LOM	5670	7039	24.14	2958	2955	-0.10	2712	4084	50.59	52.17	41.98	-10.19
TAA	13025	13124	0.76	5862	5736	-2.15	7163	7388	3.14	45.01	43.71	-1.30
VEN	47741	56631	18.62	3248	3092	-4.80	44493	53539	20.33	6.80	5.46	-1.34
FVG	4633[a]	5089	9.84[a]	739	742	0.41	3894[a]	4347	11.63	15.95	14.58	-1.37
EMR	8397	8554	1.87	4618	4462	-3.38	3779	4092	8.28	55.00	52.16	-2.83
TOS	11369	12415	9.20	2949	2864	-2.88	8420	9551	13.43	25.94	23.07	-2.87
UMB	3553	3878	9.15	565	554	-1.95	2988	3324	11.24	15.90	14.29	-1.62
MAR	3094	3954	27.80	999	888	-11.11	2095	3066	46.35	32.29	22.46	-9.83
LAZ	7810	8506	8.91	1914	2002	4.60	5896	6504	10.31	24.51	23.54	-0.97
ABR	2035	2380	16.95	824	800	-2.91	1211	1580	30.47	40.49	33.61	-6.88
MOL	317	437	37.85	109	108	-0.92	208	329	58.17	34.38	24.71	-9.67
CAM	3863	7108	84.00	1626	1697	4.37	2237	5411	141.89	42.09	23.87	-18.22
PUG	3612	4807	33.08	924	1011	9.42	2688	3796	41.22	25.58	21.03	-4.55
BAS	610	705	15.57	233	238	2.15	377	467	23.87	38.20	33.76	-4.44
CAL	2178	2740	25.80	821	840	2.31	1357	1900	40.01	37.70	30.66	-7.04
SIC	4134	4979	20.44	1208	1291	6.87	2926	3688	26.04	29.22	25.93	-3.29
SAR	3476	4104	18.07	894	913	2.13	2582	3191	23.59	25.72	22.25	-3.47
Italy	140263	157228	12.10	34155	33728	-1.25	106108	123500	16.39	24.35	21.45	-2.90

Note: Source ISTAT. Our elaboration on original data. a: Due to a discontinuity in the definition used by Friuli V. G. for the data concerning private houses to rent for tourism purposes, the datum of 2008 has been replaced with the first datum available according the new definition; total data and percentage variations are adjusted accordingly.

Table A5 – Hotel distribution across regions

(1)	4-5 star			1-2 star			(8)
	(2)	(3)	(4)	(5)	(6)	(7)	
Region	2008 (share of 4-5* hotels among hotels)	2012 (%Var of the number of 4-5* hotels)	Variation of the share of 4-5* hotel among hotels	2008 (share of 1-2* hotels among hotels)	2012 (%Var of the number of 4-5* hotels)	Variation of the share of 1-2* hotel among hotels	Index of structural variation of quality
PIE	185 (11.81)	214 (+15.67%)	2.09	589 (37.59)	511 (-13.24%)	-4.41	6.50
VDA	44 (8.92)	49 (+11.36%)	1.24	188 (38.13)	163 (-13.29%)	-4.32	5.56
LIG	118 (7.36)	129 (+9.32%)	1.16	771 (48.07)	665 (-13.74%)	-4.11	5.27
LOM	543 (18.36)	615 (+13.25%)	2.45	1024 (34.61)	912 (-10.93%)	-3.75	6.2
TAA	480 (8.19)	585 (+21.87%)	2.01	2156 (36.78)	1856 (-13.91%)	-4.42	6.43
VEN	501 (15.42)	551 (+9.980%)	2.39	1242 (38.24)	1030 (-17.07%)	-4.92	7.31
FVG	82 (11.10)	99 (+20.73%)	2.24	304 (41.14)	262 (-13.82%)	-5.83	8.07
EMR	418 (9.05)	441 (+5.50%)	0.83	1501 (32.50)	1319 (-12.15%)	-2.94	3.77
TOS	467 (15.83)	505 (+8.13%)	1.79	884 (29.98)	764 (-13.57%)	-3.30	5.09
UMB	72 (12.74)	80 (+11.11%)	1.69	226 (40.00)	195 (-13.72%)	-4.80	6.49
MAR	94 (9-41)	116 (+23.40%)	3.65	323 (32.33)	232 (-28.17%)	-6.20	9.85
LAZ	399 (20.84)	444 (+11.27%)	1.33	673 (35.16)	677 (0.594%)	-1.34	2.67
ABR	99 (12.01)	109 (+10.10%)	1.61	273 (33.13)	231 (-15.32%)	-4.25	5.86
MOL	22 (20.18)	26 (+18.18%)	3.89	38 (34.86)	33 (-13.16%)	-4.30	8.19
CAM	419 (25.76)	509 (+21.47%)	4.22	398 (24.47)	327 (-17.83%)	-5.20	9.42
PUG	247 (26.73)	343 (+38.86%)	7.19	179 (19.37)	152 (-15.08%)	-4.33	11.52
BAS	41 (17.60)	53 (+29.26%)	4.67	72 (30.90)	62 (-13.89%)	-4.85	9.52
CAL	186 (22.66)	227 (+22.04%)	4.36	158 (19.24)	147 (-6.96%)	-1.74	6.10
SIC	287 (23.75)	379 (+32.05%)	5.59	325 (26.90)	266 (-18.15%)	-6.29	11.88
SAR	234 (26.17)	273 (+16.67%)	3.72	171 (19.13)	143 (-16.37%)	-3.46	7.18
Italy	*4938 (14.46)*	*5747 (+16.38%)*	*2.58*	*11495 (33.66)*	*9947 (-13.49%)*	*-4.17*	*6.75*

Source: ISTAT. The index of structural variation in Column (8) is computed as the sum of the absolute value of variations reported in Column (4) and (7).

Table A6 – Prices for accommodation in Italy according to different sources

	Source	2008	2009	2010	2011	2012	% Var 2009-12
Hotel	HPI	118	104	105	105	108	+3.8%
Hotel	UC	84.0	76.6	65.3	78.5	79.2	+3.4%
Extra-hotel	UC	na	60.3	58.6	56.6	62.3	+3.2%
1-2 star	UC	61.1	57.8	57.5	59.4	59.9	+3.6%
3-star	UC	84.1	74.6	74.1	75.3	76.7	+2.8%
4-5 star	UC	133.6	124.3	121.0	124.4	124.4	+0.1%

Note. Sources are: HPI - The Hotel Pirce Index by Hotels.com (issues 2008 to 2012, Tables 12 or 13 according to the different editions) - and UC Unioncamere (2013, p. 18). HPI source reports an index based on the average value of payment per night through Hotels.com; UC considers average price (in Euro) for a double room; the annual data are computed as average among the quarterly data provided by Unioncamere. See further discussion in text about the differences between the two sources.

Table A7 – Absolute data (and percentage variation w.r.t. 2008) of Arrival and Overnights in selected types of destinations, 2012; average stay and its absolute variation.

	ALL			FOREIGN			DOMESTIC		
	ARRIVAL	OVERSTAYS	AV STAY	ARRIVAL	OVERSTAYS	AV STAY	ARRIVAL	OVERSTAYS	AV STAY
Seaside	22,142,899	116,180,554	5.2	8,025,204	42,353,805	5.3	14,117,695	73,826,749	5.3
	(+3,26%)	*(-1,53%)*	*(-0.3)*	*(+14,38%)*	*(+10,11%)*	*(-0.1)*	*(-2,15%)*	*(-7,16%)*	*(-0.3)*
Mountain	10,553,869	47,925,330	4.6	4,246,504	20,584,521	4.9	6,307,365	27,340,809	4.3
	(+7,72%)	*(-2,02%)*	*(-0.4)*	*(+15,72%)*	*(+8,69%)*	*(-0.3)*	*(+2,93%)*	*(-8,78%)*	*(-0.8)*
Histor & artist Cities	37,001,817	98,040,546	2.6	2,200,7351	6,029,1761	2.7	14,994,466	37,748,785	2.5
	(+12,04%)	*(+7,6%)*	*(-0.1)*	*(+16,75%)*	*(+12,18%)*	*(-0.1)*	*(+5,77%)*	*(+1,07%)*	*(-0.1)*
Lake and thermal sites	9,824,532	41,730,557	4.2	5,950,506	28,203,420	4.8	3,874,026	13,527,357	3.6
	(+10,54%)	*(+8,06%)*	*(-0.1)*	*(+17,82%)*	*(+18,53%)*	*(-0.1)*	*(+0,96%)*	*(-8,74%)*	*(-0.1)*
Hills	4,131,339	14,719,489	3.6	1,970,409	9,044,260	4.7	2,160,930	5,675,229	2.7
	(+6,44%)	*(+6,74%)*	*(-0.0)*	*(+17,84%)*	*(+14,25%)*	*(-0.0)*	*(-2,20%)*	*(-3,39%)*	*(-0.0)*

Note. The Table reports the arrival and overnight stays in 2012, ant its percentage variation w.r.t. 2008; the table also report the average stay in 2012, and its absolute variation w.r.t. to 2008.