Financial dynamics of lodging companies during ten years: a comparison between hotels and other lodging companies

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Abstract

The global financial crisis has affected all countries during the period 2008-2014. Lodging companies play a strategic role in the economy of a country. The performances of lodging companies, and in particular hotels and other lodging companies, was analysed in this paper, referring to the period of the crisis 2008-2017. The aim of this paper was to analyse financial dynamics of the aforementioned lodging companies, to check whether they have suffered the effects of the global crisis. To this end, data from the AIDA database relating to Italian companies in the sector were used. The financial dynamics of these companies was analysed using the main financial ratios, quick ratio and debt/equity ratio. An analysis of the trends and ANOVA of these ratios was carried out for the period 2008-2017. Thus, the ten years during and after the crisis, i.e. 2008-2017 was considered. The sample was made up of Italian lodging companies. The researcher verified the number of such companies for which data was available for the indexes considered in the 10 years under investigation. Successively, different groups were identified using two discriminating factors, the geographic area and the business market. In this way, it has been verified whether the global crisis has affected financial dynamics of lodging companies in Italy. The results demonstrate that the crisis has had different effects for the two business markets, hotels and other lodging companies.

Keywords: Tourism, hotel, crisis, finance, performance, ratio, Italy

Introduction

This paper highlights the situation in Italy with specific reference to tourist companies, hotels and lodging companies. In particular, its objective was to analyse the financial dynamics of Italian tourist companies, about the two above tourist markets, hotels and lodging companies and looking to the three Italian geographic areas. Those financial structures have been highlighted for ten years, from 2008 to 2017, that is during the global financial crisis. Tourism is one of the most important entry points for Italy. In fact, tourism makes up 5% of the GDP and 6% of the employed. Over the years there has been a contraction in international tourism spending due to globalization (Banca d'Italia, 2018a). However, in 2017 Italy recorded a revenue rate for tourism equal to 7.7%, equal to double that at international level. From 2016, tourists from abroad grow in all Italian regions, especially those in Central and Southern Italy.

The most common types of holiday among foreigners are those towards the cities of art and in general cultural, but also towards the seaside resorts (Banca D'Italia, 2018b). In fact, since 2008, in five years, the contraction in tourism consumption has been about %. Tourist consumption towards the restaurant and hospitality sector from 2008 to 2012 remained substantially stable
(they represent around 46.6% of total expenditure). Spending on manufacturing industry is the one that is most affected by the crisis with around -31.5%, accounting for around 17% of spending. A slight decrease (about -5%) also for spending on recreational activities that have a weight similar to that of the manufacturing industry on total spending. A decidedly positive incidence is recorded through spending on agri-food companies with a result equal to +43 in the five years (Istituto Nazionale Ricerche Turistiche-Unioncamere, 2012).

The most part of tourism scholars have focused their attention mainly on the management characteristics of this sector. Instead, the studies on the financial aspects and performance of these types of companies are very few.

Thus this paper has tried to understand the trends of two main financial indices of two types of tourism companies during a ten-years period. The main reason is to verify if the global financial crisis has affected on those tourism markets and the various geographic areas.

To this end, two basis questions have been asked:

1) What have the trends been in the last ten years in the two business markets and in the three Italian geographic areas?
2) Are there differences between the geographic areas or these two tourism markets?
3) Are those differences significant?

The hypothesises are that (H₁) the financial crisis did not significantly affect the financial dynamics of hotel and lodging companies, by virtue of their resilience (Biggs et al. 2012; Cochrane, 2010; Iovino & Migliaccio, 2018a; Iovino & Migliaccio, 2018b; Iovino & Migliaccio, 2019a; Luthe & Wyss, 2014); (H₂) there are differences between groups belonging to different markets or geographic areas; (H₃) these differences are statistically significant.

For this aim, the financial structure was evaluated using two ratios: debt/equity ratio and quick ratio; the period considered is the ten years from 2008 to 2017; trend analysis and ANOVA has been used.

In the following sections, a review of literature on tourist companies is presented. Thereafter the methodology, results, conclusions and implications, are discussed.

**Literature Review**

Different authors have been interested in the issue of tourism companies and the effects of the crisis on their general trend. Ersan et al. (2019) analysed the effects of European political uncertainty on the stock returns of tourist companies listed on the STOXX Europe 600 Travel & Leisure Price Index. The analysis was performed by analysing the data for a period of 20 years. The results of the survey showed a negative effect on the stock returns of tourism businesses due to the uncertainty of European as well as global policy. Furthermore, the assessment of political uncertainty has a greater predictive power than that deriving from the use of other macroeconomic variables.
Kubickova et al. (2019) analysed the effects of the 9/11 terrorist attack and the 2008 global financial crisis on hotel room demand. Their focus was on Costa Rica and Honduras. The analysis showed that the two crises have a different impact in each country and it is more negative in Costa Rica. The 2008 crisis has indeed a greater impact on the hotel industry in both countries. Furthermore, many other factors also have an effect on this market. Among them, the transport system, the level of development of the segment, the institutional development shows that they have an effect on how the hotel market is able to respond to a crisis.

Brown et al. (2019) performed a quantitative analysis of hotel resilience in the face of natural crises. Data was obtained through interviews with managers from two tourist destinations in New Zealand. These authors took into consideration several factors with respect to which the resilience of hotels is implemented with respect to natural disasters. Attention was focused on Wellington and Hawke Bay. The factors evaluated were not only economic, but also cultural, social, human, psychological and natural. Particular attention was paid to the role of workers. The analysis showed how hotels have a good resilience and highlights areas of future research including research on budgeting activities.

Moradi and Paulet (2019) analysed the effects of the euro crisis on a sample of companies belonging to 6 different European countries and 4 different sectors including tourism. The authors showed that some factors including growth, profitability, taxation and the euro crisis are negatively correlated. Instead, other factors including size (Iovino & Migliaccio, 2019b), tangibility of assets and volatility of earnings are positively correlated. In particular, the tourism sector has a greater impact from the euro crisis than other sectors under investigation.

Podhorodecka (2018) checked the effects of the global financial crisis on tourism in 17 islands whose economy is based on tourism. The study verified that the territories react differently, in particular with regard to tourism spending, employment in tourism and the overall flow of tourists.

Mecca et al. (2018) verified the effects of the Brazilian economic crisis on tourism considering a particular tourist destination. The analysed destination was a consolidated destination, i.e. Gramado. The analysis was aimed at checking whether there has been a reduction in tourism in the period 2014-2017. There were various data collected in reference to this location, among them the flow of tourists, the occupation declared in tourism, the average number of visitors, revenues from the sale of local events. The survey showed that the locality does not suffer the general negative effects of the economic crisis. On the other hand, an increase in tourism was recorded, proving that a consolidated destination has not been affected by the serious economic crisis in the country.

Ivanov and Stavrinoudis (2018) investigated the effects of the 2015 refugee crisis on the tourism of 4 Greek islands. Their study found that the refugee crisis has had a very negative impact on the tourism of these islands. In fact, the image of the hotels on the islands has deteriorated considerably. The reaction of the entrepreneurs in the sector was thus to focus on cutting prices and costs and on numerous marketing activities rather than reducing the number of people employed.

As is evident, therefore, it has not sufficiently developed an analysis of the effects of the financial crisis in the tourism sector, using a perspective that mainly takes into account the financial
performance of these companies. For this reason, it was decided to investigate the performance of some financial indicators to verify if there were significant effects on the financial situation of the companies, or if the firm management was able to face the detrition in the economic situation maintaining the financial balance of tourism companies also using the new tools including those offered by digital transformation (Iovino, 2014; Iovino & Migliaccio, 2016; Iovino & Migliaccio, in press).

Research methodology

Data collection and sample characteristics

To our objectives, secondary data on AIDA database has been used. To analyse the financial situation, two ratios, debt/equity ratio and quick ratio have been chosen. The ten years during and after the crisis, i.e. 2008-2017 had been considered. The companies are classified according to the ATECO code. Hotels and other lodging services, that is 6620 companies operating as lodging service, ie 551 - Hotels and similar establishments, hotels and other side 552 - Vacation rentals and other facilities for short stays, 553 - Areas of camping and areas equipped for campers and caravans, 559 This is the maximum number of companies available. Then we verified the number of such companies for the purpose of the ratios considered in the 10 years under investigation. The sample consists of 1070 companies, of which 904 are hotels and other similar structures and 166 are those related to the ATECO code: 552 - Holiday accommodation and other facilities for short stays, 553 - Camping areas and areas equipped for campers and caravans, 559 - Other lodgings.

Successively, different groups have been identified using two discriminating factors, the geographic area and the business market. About the first one three clusters have been identified: north, centre and south according to conventional classification of Italian regions. The geographic distribution of the sample was the next: 51% in the North group, 34% in the Centre and 15% in the South ones (figure 1). To identify the belonging market a specific section was assigned to each tourist firms according to the statistical classification of economic activities in Italy (ATECO), and they were grouped in two groups: hotels and other lodging.

![Geographic distribution](image)

Figure 1. Source: our elaboration - geographic distribution of Italian tourist companies
According to the second discriminating factor, the sample consisted of 84% Hotels and similar accommodation and 16% other accommodation (figure 2).

![Pie chart showing business distribution](image)

Figure 2. Source: our elaboration - business distribution of Italian tourist companies

In addition, the hotels are in the north for 52%, in the center for 33% and in the south for 15% (figure 3). The other accommodations are in the north for 42%, in the center for 41% and in the south for 17% (figure 4).

![Pie chart showing geographic distribution](image)

Figure 3. Source: our elaboration - geographic distribution of Italian hotels
Method
First of all we analysed data’s trend in the period 2008/2017 for each ratio and group. Then by the analysis of variance (ANOVA) we assessed the differences of means between the different geographic areas and the response variable means at the different factor levels. The null hypothesis states that all population means (factor level means) are equal while the alternative hypothesis states that at least one is different. In our case, the independent variables were the geographic localization and the business market while the dependent variables were the ratios. We chose ANOVA one-way type, because two variables were analysed e separately.

Results and discussion

Trend analysis and analysis of variance
the debt/equity ratio is a variation of the financial leverage ratio and highlights that the main part of asset financing is being done through debt. Investors analyse several financial ratios to understand a company’s financial health. It’ll be preferred to increase debts if it’s cheaper than to issue new shares. The ten-year mean ranges between -4.99 and 8.87, if we consider the geographic localization as discriminating factor, and between 0.86 and 9.01, if we consider the belonging market. A balanced situation requires a value at most equal to 1. Figures 5 and 6 show that the mean over the ten years deviate far from this value. However, in 2010 southern companies recorded a high negative value at the beginning of the crisis, which signaled an excess of liquidity with respect to debts and in 2011 northern companies had a very high debt ratio of 8.86. Only in certain years, for example 2010 and 2014 centre companies are substantially close to the equilibrium value.
In all geographical areas, companies in the north are heavily indebted, while lower values are found in companies in the south. However, the level of indebtedness tends to decrease over time in all geographical areas since 2012. Companies therefore face considerable risk for a possible increase in interest rates by third party lenders. However, companies are also levered or fully exploit the multiplication of their own profitability as a result of recourse to third party capital.

Referring to the business, hotels are less in debt approaching the equilibrium value in 2010 and 2016. Furthermore, both businesses reduce their debt starting from 2012, similarly to what happens in geographical areas.
The trend therefore appears to be quite varied for debt equity and in relation to the geographical areas, these companies are affected by the crisis with some delay, i.e. after a certain number of years since 2008. Starting from 2014 there is a marked recovery in all areas with the reduction of this index. This trend is also partly confirmed by referring to the distinction between the two businesses. The smaller housing companies are more affected by the crisis and immediately, while hotels are increasing after a few years since the beginning of the crisis, i.e. 2008. Both businesses have recorded a recovery starting from 2013.

![Quick ratio according business](image1)

Figure 7. Trend of *quick ratio* according to market

![Quick ratio according geographic area](image2)

Figure 8. Trend of *quick ratio* according to geographic localization
The quick ratio or acid test ratio is a liquidity ratio which shows the company's ability to meet current payables only with current liquidity, not considering the stock that can hardly be disposed of. The quick ratio therefore considers only the most liquid assets of the company. An its just value is equal to 1. Considering groups discriminated by geographic area, trend analysis describes a situation of good liquidity (fig. 8). In fact values, higher unit throughout the ten years, prove that hotels and lodging companies have been able to face with quietly short term liabilities. Except for a slight decrease in 2011 for center and south companies the trend is quite stable with an increasing from 2013. Trend analysis highlights a situation of good liquidity (fig. 7-8) both according to geographic localization and according to market. While if we consider the classification by business market (fig. 8), the trend is overall stable and positive with a slight decrease in 2010 for lodging companies and in 2011 for hotels, but only of 0.08 and 0.06. Liquidity therefore stands above the equilibrium value or slightly below. The best performances are recorded by other inns and businesses in the south. Instead they seem to suffer, but only slightly hotels and businesses in the north. The trend of the quick ratio does not therefore appear to be conditioned by the crisis unlike debt / equity.

The companies therefore appear to be affected by the crisis in terms of recourse to debt, while liquidity remains substantially good even during this period. Therefore the hypothesis H1 is partially verified. Compared to the H2 hypothesis in practice at the quick ratio there are no substantial differences either for geographical areas or for business, while for the debt equity ratio there is a difference both from the business and geographical point of view in the central crisis years, i.e. 2009-2011. The companies in the north and in the centre and the other types of housing are, for this reason, more influenced by the crisis. Also then the hypothesis H2 is partially verified. The crisis has therefore affected the tourist companies analysed and in some geographical areas, but in relation to the use of third-party capital and not instead to liquidity, which instead remained substantially unchanged.

Analysis of variance
About debt/Equity ratio, Table 1 shows the results of the analysis, assuming the geographic area as independent variable. There is a statistically significant difference between groups ($F(2,27) = 7.34, p = 0.0028383$), in fact $F > F_{crit}$ (p value < 0.05).

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>SQ</th>
<th>gdl</th>
<th>MQ</th>
<th>F</th>
<th>p</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>97,74572</td>
<td>2</td>
<td>48,87286</td>
<td>7.34681551</td>
<td>0.002838375</td>
<td>3.354131</td>
</tr>
<tr>
<td>Within groups</td>
<td>179,663</td>
<td>27</td>
<td>6,654184</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>277,4087</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significance level $p > 0.05$

Table 1. Debt/Equity ratio – Analysis of variance with geographical location as an independent variable

The null hypothesis must be rejected and the alternative ones must be accepted.
While if the business market is considered as independent variable the results, set out in Table 2, indicate a no statistically significant difference between groups \((F(1, 18) = 3.334794, \ p = 0.084463828)\), in fact \(F < F_{crit}\) (p value > 0.05).

Instead there is a statistically significant difference for geographical areas (table 3) and for business (table 4) in the case of the quick ratio.

The answers to our research questions are as follows:
R1: the evolution of debt / equity was substantially affected by the crisis in the various geographical areas and in the various businesses analysed; the evolution of the quick ratio does not appear to be substantially conditioned.
R2: companies that have overcome the crisis that are those analysed and this represents a limitation of research, because the strongest, after the crisis have improved the financial structure
R3: statistically significant is the difference both from a geographical and business point of view for the quick ratio, while it is geographically speaking for the debt / equity ratio.
From this first analysis then the geographic factor from the statistical point of view seems to be the prevailing one and not the one belonging to the two different businesses.

**Conclusion and implications**

The tourism sector in recent years has significantly changed due to the various phenomena of globalization. In fact, theses have led to a significant reduction in tourist inflows to Italy since 2008 (Banca D'Italia, 2018). Moreover, the tools of digitalization have introduced new methods of competition with a greater implementation also through these tools of the relationship marketing paradigm (Iovino, 2012, 2015). The tourist has become an increasingly active customer and more involved with the tour operator. The latter aims to arouse in the client who has become co-producer of the tourist service an engagement (Iovino, 2012) able to link it to the company through lock-in mechanisms. In this general framework which has seen a profound change in the tourist service during the last few years, also influenced by migratory phenomena, our analysis of two financial indicators of the companies analysed showed a certain influence of the crisis in some respects.

The debt / equity ratio is substantially conditioned by the crisis both in terms of geographical areas and in relation to the two businesses analysed. In fact, the index has shrunk just at the years when the effects of the deterioration of the global economic situation have become more evident. The reduction of this index necessarily implies a scarce and reduced recourse by firms to third party capital with respect to equity capital. This is a clear manifestation of an attitude of general financial difficulty for these companies to access credit, but also a limited willingness to carry out further investments in a general climate of global financial compromise. However, the differences at the business level are not statistically significant. On the contrary, they are such from a geographical point of view.

However, the quick ratio of hotels and smaller accommodation companies is not affected by the crisis. This shows that the companies under investigation were able, despite everything, to maintain good liquidity and therefore be able to cope with current expenses by their own means. However, there is a statisticaally significant difference both in the business and in the various geographical areas. In fact, the areas of the South of the country have recorded over time, as also evidenced by the trend analysis of the results substantially better than the others in the country. They are those in which there is the greatest presence of tourist sites. This highlights how an adequate management of tourist sites and destinations, but also the natural wealth of the same is crucial to obtain satisfactory financial results. In fact, the quick ratio takes on higher values, while debt / equity is lower than in the northern and central regions. In this way the third party's assets are used, but not excessively so as to put at risk the survival of the business itself.

The smaller houses have better performances than the hotels for the quick ratio, probably due to a lower structural rigidity of the investments made and made necessary by the characteristics of their business. The values of the debt / equity ratio, on the other hand, are more risky for the other types of housing, while also promoting the development of the business. The present study has some limitations deriving primarily from the analysis of only two financial type indices. Furthermore, only the companies with all the values for the years under investigation were analysed. These are therefore the strongest companies that have therefore managed to survive over time. In this way, the companies with the best financial results were analyzed. Future
research guidelines will certainly be aimed at taking into account several indices, including those of an income type, as well as other types of tourism enterprises. Furthermore, an analysis extended to more than one European country may also be carried out, followed by comparative analyses with respect to countries of other continents, including the United States of America and those from Latin America. In this way, also possible influences of the culture of the country where the sites are located and also the tourist enterprises on the financial results of these companies can be highlighted.

References


